Appendix A16

Offset Management Plan

Offset Management Plan (EPBC 2023/09505)

New Beith Road Upgrade Project, Flagstone, Queensland

Prepared for PEET Flagstone City Pty Ltd and KFF2 Pty Ltd ATF KFF2 Sub Trust (KFF) as the Offset Provider

28 May 2026

Saunders Havill

PATHWAYS TO SUCCESS

KOALA FARMLAND FUND

PEET

Document Information

This Offset Management Plan (EPBC 2023/09505) has been prepared by Saunders Havill Pty Ltd on behalf of the proponent PEET Flagstone City Pty Ltd and implemented by KFF2 Pty Ltd ATF KFF2 Sub Trust (KFF), dated 28 May 2026.

Issue

Issue	Date	Prepared By	Checked By
Version A	29.01.2025	LF & IP	AD
Version B	06.02.2026	IP & JC	AD
Version C	16.04.2026	TC & JC	AD
Version D	28.05.2026	TC	JC / AD

Executive Summary

PEET Flagstone City Pty Ltd, the proponent, has engaged KFF2 Pty Ltd ATF KFF2 Sub Trust (KFF) as an Offset Provider to coordinate and deliver a biodiversity offset to compensate for significant impacts to Matters of National Environmental Significance (MNES) as part of the proposed New Beith Road Upgrade, Flagstone, Queensland (centred on – 27.76894, 152.93690, herein referred to as the Project). The Project was referred under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) (refer EPBC 2023/09505).

The purpose of this Offset Management Plan (OMP) is to provide the objectives, key commitments including milestones and measurables (performance targets) and completion criteria to compensate for significant residual impacts on the following MNES:

- *Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions* (Threatened Ecological Community – TEC)
- *Phascolarctos cinereus* (Koala);
- *Pteropus poliocephalus* (Grey-headed Flying-fox);
- *Petauroides volans* (Greater Glider);
- *Petaurus australis australis (*Yellow-bellied Glider*)*
- *Lathamus discolor* (Swift Parrot); and
- *Anthochaera phrygia* (Regent Honeyeater)

Habitat quality of the impact area and Offset Area were quantified utilising the respective Modified Habitat Quality Assessment (MHQA) methods for the TEC, Koala, Greater Glider and Yellow-bellied Glider, and features-based assessments for Swift Parrot and Regent Honeyeater, and the Grey-headed Flying-fox Foraging Habitat Assessment (FHA) method in addition to other baseline surveys including preliminary motion-triggered camera monitoring, weed mapping and foraging and habitat tree plotting. Baseline habitat quality metrics and scores for the Offset Area were established and they form the basis for proposed increases to be achieved as part of the offset delivery. These are summarised in **Table ES1** below.

Seven management actions are proposed to deliver the offset and proposed environmental outcomes over a 20-year period which includes proposed actions, completion criteria and monitoring actions. The management actions are:

1. Legally secure Offset Area
2. Non-Native Vertebrate Pest Management
3. Management of Weeds including Weeds of National Significance
4. Develop and implement Bushfire Management Plan
5. Habitat Creation and Regeneration
6. Fencing and signage
7. Hollow Monitoring and Management

Interim milestone targets have been created for proposed environmental outcomes for each MNES to provide an indication of the relative success of management measures. A monitoring and reporting schedule has been prepared to assist in achieving these outcomes. Additionally, an adaptive management framework and corrective action triggers are proposed whereby it is demonstrated that management measures are not effective in achieving results.

Overall, the proposed offset is considered suitable for the proposed residual impacts on MNES based on an offset suitability analysis, proposed management framework and scale of Offset Area. The proposed Offset Area achieves

- **722.21%** of the required offset for Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions TEC
- **255.10%** for Koala
- **342.44%** for Grey-headed Flying-fox
- **125.74% and 109.00%** for Greater Glider area and features (hollows), respectively
- **153.37% and 132.95%** for Yellow-bellied Glider area and features (hollows), respectively
- At least **130%** for Swift Parrot features (foraging trees)
- At least **130%** for Regent Honeyeater features (foraging trees)

Table ES1: Offset Area MNES habitat quality baseline and future scores – summary

AU	Area / Features	TEC Habitat Quality Score		Koala Habitat Quality Score		GHFF Habitat Quality Score		Greater Glider Habitat Quality Score		Yellow- bellied Glider Habitat Quality Score		Swift Parrot Habitat Quality Score*		Regent Honeyeater Habitat Quality Score*	
		Baseline	Future	Baseline	Future	Baseline	Future	Baseline	Future	Baseline	Future	Baseline	Future	Baseline	Future
1	57.1	-	-	7	8	6	6	5	7	5	7	NA	NA	NA	NA
2	40.8	-	-	6	8	5	6	5	7	5	7	-	-	-	-
3	10.8	6	8	7	8	6	7	6	7	6	7	-	-	-	-
4	58.8	-	-	5	8	4	7	4	7	4	7	-	-	-	-
5	27.1	-	-	7	8	5	7	4	7	4	7	-	-	-	-
6	10.4	6	8	6	8	4	7	5	7	5	7	-	-	-	-
7	25.2	-	-	4	8	3	7	3	7	3	7	-	-	-	-
8	20.9	-	-	5	8	4	7	3	7	3	7	-	-	-	-
9	2.9	4	8	4	8	3	7	3	7	3	7	-	-	-	-
10	11.6	5	8	5	8	3	7	3	7	3	7	-	-	-	-
	Features	NA	NA	NA	NA	NA	NA	79	531	79	531	357	1,566	289	503

*Counts are site-wide based on EMZ outcomes discussed in Sections 6.4 and 7.5. Baselines are based only on very large (> 500 m DSH) foraging trees.

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Acronyms

ACR	Annual Compliance Report
ATF	As Trustee For
AU	Assessment Unit
D	Number of detections
DAWE	Department of Agriculture, Water and Environment (Commonwealth, former)
DSH	Diameter at Standard Height
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Commonwealth)
DEHP	Department of Heritage and Protection (Qld, former)
EDL	Ecologically Dominant Layer
EMZ	Environmental Management Zone
EOP	EPBC Act Environmental Offset Policy (2012)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
FMP	Fauna Management Plan
FHA	Foraging Habitat Assessment
FMU	Fire Management Unit
GER	Great Eastern Ranges
GFPDA	Greater Flagstone Priority development Area
GG	Greater Glider
GHFF	Grey-headed Flying-fox
GHFF-FHA	Grey-headed Flying-fox foraging habitat assessment
GPS	Global Positioning System
ha	hectare
HMMP	Hollow Monitoring and Management Plan
HVR	High Value Regrowth
KFF	Koala Farmland Fund
km	kilometres
LGA	Local Government Area
m	metre
MHQA	Modified Habitat Quality Assessment
mm	millimetres
MNES	Matters of National Environmental Significance
NR	Non-remnant
OAAR	Offset Area Annual Report
OAG	Offset Assessment Guide
OMP	Offset Management Plan

OMU	Operational Management Unit
PD	Preliminary Documentation
R	Remnant
RAI	Relative Abundance Index
RE	Regional Ecosystem
RHE	Regent Honey-Eater
SAT	Spot Assessment Technique
SEQ	South East Queensland
SEFFW	Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions
SEQERF	Southeast Queensland Ecological Restoration Framework
SP	Swift Parrot
SRC	Somerset Regional Council
SSR	Species Stocking Rate
TEC	Threatened Ecological Community
TN	Trap Nights
VC&MP	Vegetation Clearing and Management Plan
VDEC	Voluntary Declaration
WONS	Weeds of National Significance
YBG	Yellow-bellied Glider

Definitions

Proponent – PEET Flagstone City Pty Ltd

Offset Provider – KFF2 Pty Ltd ATF KFF2 Sub Trust (KFF)

Impact area – The area where clearing will occur. This is located along the existing unsealed New Beith Road New Beith Road, Flagstone, Queensland and is centred on the coordinates – 27.76894, 152.93690

Milestone Report – A report prepared by a suitably qualified person before the end of Years 5, 10, 15 and 20 of the offset assessing against the interim milestone achievements and completion criteria.

Offset area – The 265.5 ha area within the offset property where the specific offset will be implemented and consists of ten assessment units.

Offset property – Means 'Willow Vale,' Esk Crow's Nest Road, Biarra, QLD, 4313

Year 1 of the offset: the 12 month period following legal securement of the offset area or as conditioned.

Years 2 to 20 of the offset – The 12-month period following each anniversary of the legal securement of the offset area or as conditioned.

Declaration of Accuracy

In making this declaration, I am aware that section 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (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 name	
Position	
Organisation	
Date	

Offset Provider Consent

The Offset Provider agrees to the offset being undertaken over the land identified in Section 6 of this Offset Management Plan, and in the manner outlined in Section 9.

Signed	
Full name	Rob Martyn
Position	Offset Provider
Organisation	KFF2 Pty Ltd ATF KFF2 Sub Trust (KFF)
Legal Entity	**Upscale Capital Pty Ltd as trustee for Koala Farmland Fund 2**
Date	

1. Introduction

1.1. Background

Saunders Havill (SH) have prepared this Offset Management Plan (OMP) on behalf of the proponent, PEET Flagstone City Pty Ltd, to be implemented by the Offset Provider, KFF2 Pty Ltd ATF KFF2 Sub Trust (KFF), in accordance with the Preliminary Documentation (PD) Request provided for EPBC Application 2023/09505. The OMP has been prepared to address the impacts associated with the road upgrade to the existing unsealed New Beith Road, Flagstone. The road upgrade was referred under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and subsequently declared a "Controlled Action" on the 2 August 2023 by the Department of Climate Change, Energy, the Environment and Water (DCCEEW), requiring assessment by "Preliminary Documentation" pursuant to section 18 and 18A (listed threatened species and communities) (EPBC 2024/09844).

The decision notice identified the relevant controlling provision as listed threatened species and communities, with the project considered likely to have a significant impact on two (2) Matters of National Environmental Significance (MNES)

- Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions – Endangered
- *Phascolarctos cinereus* (Koala – combined populations of Queensland, New South Wales and the Australian Capital Territory) (Koala)

Further, DCCEEW has determined that the project is also likely to have a significant impact on additional MNES species, being:

- Grey-headed Flying-fox (*Pteropus poliocephalus*) – Vulnerable
- Greater Glider (*Petauroides volans*) – Endangered
- Yellow-bellied Glider (*Petaurus australis australis*) – Vulnerable
- Swift Parrot *(Lathamus discolor*) – Critically endangered
- Regent Honeyeater (*Anthochaera phrygia*)- Critically Endangered

The Offset Provider will deliver the overall '*conservation gain*' for the above listed MNES values through a single site offset solution located at Esk Crows Nest Road, Biarra, QLD, 4313 comprised of Lots 140on CA31918, 213 on CA31970, 214 on CA311183, 2 on RP223480 and 42 on CA31692, (herein referred to as the Offset Area).

The referral area totals approximately 90.4 hectares (ha) and contains Matters of National Environmental Significance (MNES) as it intersects a Threatened Ecological Community (TEC) and provides critical habitat for MNES species as defined under the EPBC Act. The OMP includes the dedication and rehabilitation of a total of 265.5 ha of land. The offset area as proposed will acquit the required impacts and provide additional benefit for the species. Details of the offset area are provided in **Section 3.3.4.**

The referral area is considered to provide critical habitat for the survival of the Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions (TEC), Koala and potential foraging habitat for the Grey-headed Flying-fox (GHFF).

The referral area also contains critical habitat for the Greater Glider, Yellow-bellied glider, Swift Parrot and Regent Honeyeater. As such, the significant residual impact expected includes:

- Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions: Loss of 1.5 ha
- Koala: Loss of 23.3 ha of habitat critical to the survival of the Koala.
- Grey-headed Flying-fox: Loss of 18.9 ha of potential foraging habitat.
- Greater Glider: Loss of 75.3 ha of potential foraging habitat and 204 hollow features.
- Yellow-bellied Glider: Loss of 75.3 ha of potential foraging habitat and 204 hollow features.
- Swift Parrot: Loss of 187 foraging tree features.
- Regent Honeyeater: Loss of 33 foraging tree features.

MHQA analysis scored 4.91 (rounded to 5) for the TEC, 5.59 (rounded to 6) for the Koala, 5.06 (rounded to 5) for the Greater Glider and 5.34 (rounded to 5) for the Yellow-bellied Glider. The FHA scored 5.52 (rounded to 6) for the GHFF. The quantum impact for each species is therefore listed as:

- TEC: 0.75 hectares
- Koala: 13.98 hectares
- Grey-headed Flying-fox: 11.34 hectares
- Greater Glider: 37.65 hectares
- Yellow-bellied Glider: 37.65 hectares

The offset area has been selected to help acquit the impacts to MNES under EPBC 2023/09505 and provide benefits additional to that required for compensation of significant residual impacts. The suitability of the Offset Area considers the bioregional context of the site, ecological values, water resources and topography and existing habitat values for the TEC, Koala, GHFF, Greater Glider, Yellow-bellied Glider, Swift Parrot and Regent Honeyeater (refer following Sections and supporting Plans). The proposed Offset Area is located approximately 93 km north-west of the impact site and provides 265.5 hectares of land to contribute toward offsetting the potential significant impacts attributed to the New Beith Project.

1.2. Purpose of the Management Plan

The purpose of this OMP is to provide the objectives of the plan, key commitments including milestones and measurables (performance targets) and completion criteria to compensate for significant residual impacts on MNES. The plan must include (but not limited to):

i. the ecological outcomes of the Offset Area (including key milestones and baseline survey results);

ii. management measures proposed to achieve the ecological outcomes;

iii. for each management action and monitoring outcome, detail how and when performance will be quantified, measured and monitored;

iv. detail contingency measures to be implemented if some or all of the specified are not achieved.

1.3. Report Structure

This OMP contains the following sections:

- Section 2: Roles and Responsibilities
- Section 3: Overview of Impact area
- Section 4: Overview of Offset Area
- Section 5: Offset Area Suitability
- Section 6: Baseline Surveys
- Section 7: Environmental Outcomes
- Section 8: Monitoring and Reporting Schedule
- Section 9: Management Framework
- Section 10: Adaptive Management
- Section 11: References
- Section 12: Appendices
    - Appendix A – TEC MHQA Tables
    - Appendix B – Koala MHQA Tables
    - Appendix C – GHFF FHA Tables
    - Appendix D – Greater Glider MHQA Tables
    - Appendix E – Yellow-bellied Glider MHQA Tables
    - Appendix F – Field Survey Data
    - Appendix G – Milestone Framework
    - Appendix H – OAG Feature Reference Tables
    - Appendix I – OAG Tables
    - Appendix J – Risk Assessment

2. Roles and Responsibilities

Excluding the regulatory role completed by the Commonwealth Government for the assessment and approval of the offset and the Queensland Government for registering and declaring the Voluntary Declaration and the agreed permanent securing method, the following people and entities retain key responsibilities for the implementation of this OMP.

A list of key contacts for the project is contained in **Table 1.**

Table 1: Key personnel

Role	Nominated Person	Company / Entity	Contact details
Proponent/Approval Holder	Troy Thompson	PEET Flagstone City Ptd Ltd	Troy.Thompson@peet.com.au
Offset Provider	Rob Martyn	KFF2 Pty Ltd ATF KFF2 Sub Trust	rob.martyn@Koalafarmlandfund.com.au
Administering Authority	N/A	DCCEEW Compliance Monitoring Branch	EPBCMonitoring@dcceew.gov.au
Suitably qualified person/contractor	Appointed as required by either the proponent or the Offset Provider	Appointed as required by either the proponent or the Offset Provider	Appointed as required by either the proponent or the Offset Provider

3. Overview of Impact Area

3.1. Project and Site

The project at New Beith Road, Flagstone, Queensland, is located approximately 23 kilometres (km) west of Beenleigh. The project involves the upgrade and extension of the southern end of New Beith Road to deliver a transport corridor essential for servicing multiple GFPDA development projects and providing a critical link to northern Logan via Pub Lane and Greenbank Arterial Road, as well as connections to other major suburban centres such as Springfield. The site is situated within the GFPDA, mapped as an Arterial Road, with residential land use bordering the site to the east and west. The surrounding area comprises various developments, including existing EPBC Act approvals and others currently under assessment.

The impact area has been subject to substantial historical disturbance, including clearing for rural pursuits on land surrounding the road works extent. Clearing has also occurred within the footprint of the project for the existing road/track. The project involves upgrading the existing New Beith Road reserve for an approximate length of 3.2 kilometres (km). The referral area comprises the works extent, road alignment, batters and a construction buffer of 5 m from the road betters, including 4.4 ha of existing road and 18.9 ha of direct impact area. The referral area also incorporates a 100 m buffer on either side of the road works footprint, totalling 67.1 ha of balance area, resulting in a total referral area of 90.4 ha.

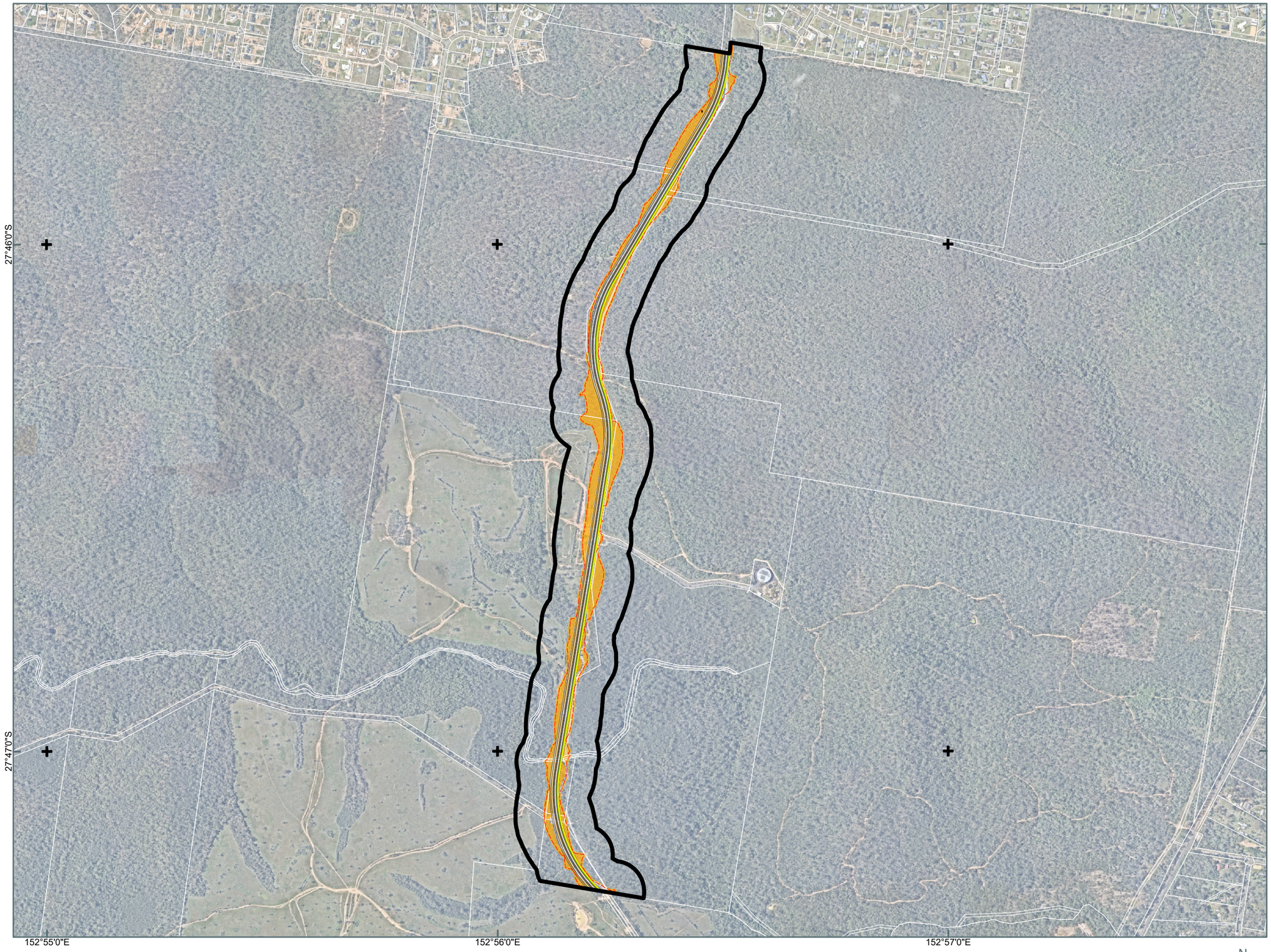
Direct impacts are expected within the development footprint, including batters and the 5 m construction buffer. While the site is currently utilised as an unsealed road and subject to noise, dust, light, and edge effects, the construction of the upgraded road will result in additional direct impacts during the construction phase, as well as ongoing and future impacts. **Table 2** provides details on the impact area.

Refer **Table 2** for details of impact area.

Table 2: Details of impact area

Address	**Olson Road, New Beith, Queensland**
Impact area	Refer to **Plan 1**

01. IMPACT SITE DEVELOPMENT FOOTPRINT



Notes:
The information on this plan is not suitable for any purpose other than the expressed use of the Client. Property dimensions, areas, numbers of lots and contours and other physical features may need verification if the development application is approved and development proceeds, and may change when a full survey is undertaken or in order to comply with development approval conditions. No reliance should be placed on the information on this plan for detailed design or for any financial dealings involving the land. Saunders Havill therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying a development application and which may be subject to alteration beyond the control of Saunders Havill.Unless a development approval states otherwise, this is not an approved plan.

Layer Sources
World Imagery: Earthstar Geographics
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Updated data available at
http://qldspatial.information.qld.gov.au/catalogue/
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LEGEND

- Qld DCDB
- Referral Area/Impact Site [90.4 ha]
- Direct impact area excluding existing cleared track [18.9 ha]

Engineering Detail

- Road Design
- Linemarking Design
- Cycleway Design
- Footpath Design
- Batters

Saunders Havill
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1300 123 744 | mail@saundershavill.com

PEET

WILLOW VALE OFFSET

0 100 200 300 m

N

Transverse Mercator 1:14,000
GDA 2020 | Zone 56 @ A3

Address / RPD: Biarra, QLD

23/01/2026

8418 E 01 OMP_Esk Impact A

3.2. Summary of Matters Requiring Offset

The OMP proposes land-based offsets for the following MNES species that will be subject to significant residual impacts due to the Project:

- Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions: Loss of 1.5 ha
- Koala: Loss of 23.3 ha of habitat critical to the survival of the Koala.
- Grey-headed Flying-fox: Loss of 18.9 ha of potential foraging habitat.
- Greater Glider: Loss of 75.3 ha of potential foraging habitat and 204 hollow features.
- Yellow-bellied Glider: Loss of 75.3 ha of potential foraging habitat and 204 hollow features.
- Swift Parrot: Loss of 187 foraging tree features.
- Regent Honeyeater: Loss of 33 foraging tree features.

Habitat for MNES proposed to be impacted for the project is summarised below.

3.2.1 Vegetation communities impacted

The habitat within the 90.4 impact area has been assessed through field surveys and mapping of Regional Ecosystems (REs) as assessment units (AUs) within the referral area. Vegetation across the site varies in condition and structure. Non-remnant cleared areas with scattered regrowth (AU1) provide limited habitat value for MNES species. Highly disturbed remnant vegetation (RE12.9-10.2; AU2) retains scattered mature eucalypts and provides moderate habitat value for certain MNES species such as Koala. Riparian areas associated with waterways (RE12.3.11/12.3.7; AU3) support *Melaleuca* and *Lophostemon* dominated vegetation and represent higher quality habitat for native fauna. Eucalypt-dominated remnant vegetation (RE12.9-10.7a) contains intact habitat within the impact area, with suitable forage and shelter for MNES species. The existing cleared track (AU5) contains minimal vegetation and habitat value.

The mapped and pre-clear vegetation communities located within the MNES impact area are described in **Table** 3. Full descriptions of the Regional Ecosystems within the site are provided in the Queensland Herbarium Regional Ecosystem Description Database (REDD), and mapped AU locations are shown in **Plan 2.**

Table 3: Mapped pre-clear and current regional ecosystems present within MNES impact area

RE Type	VMA Class	Description	Pre-clear RE Map	Current RE Map
12.3.7	Category B	*Narrow fringing woodland of Eucalyptus tereticornis, Casuarina cunninghamiana subsp. cunninghamiana +/- Melaleuca viminalis. Other species associated with this RE include Melaleuca bracteata, M. trichostachya, M. linariifolia. North of Brisbane Waterhousea floribunda commonly occurs and may at times dominate*	Yes	Yes

RE Type	VMA Class	Description	Pre-clear RE Map	Current RE Map
		this RE. Melaleuca fluviatilis occurs in this RE in the north of the bioregion. Lomandra hystrix often present in stream beds. Occurs on fringing levees and banks of rivers and drainage lines of alluvial plains throughout the region. Riverine. (BVG1M: 16a).		
12.3.11	Category B	*Eucalyptus tereticornis +/- E. siderophloia and Corymbia intermedia open forest to woodland. Corymbia tessellaris, Lophostemon suaveolens and Melaleuca quinquenervia frequently occur and often form a low tree layer. Other species present in scattered patches or low densities include Angophora leiocarpa, E. exserta, E. grandis, E. latisinensis, E. tindaliae, E. racemosa and Melaleuca sieberi. Corymbia trachyphloia and/or C. citriodora subsp. variegata may dominate on areas of Pleistocene alluvia. Eucalyptus seeana may be present south of Landsborough and Livistona decora may occur in scattered patches or low densities in the Glenbar SF and Wongi SF areas. Occurs on Quaternary alluvial plains and drainage lines along coastal lowlands. Rainfall usually exceeds 1000mm/y. Contains Palustrine. (BVG1M: 16c).*	Yes	Yes
12.9-10.2	Category B	*Corymbia citriodora subsp. variegata open forest or woodland usually with Eucalyptus crebra. Other species such as Eucalyptus tereticornis, E. moluccana, E. acmenoides and E. siderophloia may be present in scattered patches or in low densities. Understorey can be grassy or shrubby. Shrubby understorey of Lophostemon confertus (whipstick form) often present in northern parts of bioregion. Occurs on Cainozoic and Mesozoic sediments. Not a Wetland. (BVG1M: 10b).*	Yes	Yes
12.9-10.7	Category B Category C	*Eucalyptus tereticornis +/- E. siderophloia and Corymbia intermedia open forest to woodland. Corymbia tessellaris, Lophostemon*	Yes	Yes

RE Type	VMA Class	Description	Pre-clear RE Map	Current RE Map
		suaveolens and Melaleuca quinquenervia frequently occur and often form a low tree layer. Other species present in scattered patches or low densities include Angophora leiocarpa, E. exserta, E. grandis, E. latisinensis, E. tindaliae, E. racemosa and Melaleuca sieberi. Corymbia trachyphloia and/or C. citriodora subsp. variegata may dominate on areas of Pleistocene alluvia. Eucalyptus seeana may be present south of Landsborough and Livistona decora may occur in scattered patches or low densities in the Glenbar SF and Wongi SF areas. Occurs on Quaternary alluvial plains and drainage lines along coastal lowlands. Rainfall usually exceeds 1000mm/y. Contains Palustrine. (BVG1M: 16c).		
12.9-10.7a	N/A	*Eucalyptus siderophloia, Corymbia intermedia +/- E. tereticornis and Lophostemon confertus open forest. Occurs on Cainozoic and Mesozoic sediments in near coastal areas. Not a Wetland. (BVG1M: 12a).*	Yes	No
12.9-10.12	Category C	*Mixed woodland to open forest usually containing Corymbia intermedia, Angophora leiocarpa and at least a presence of Eucalyptus seeana. Other commonly associated species include E. siderophloia, E. tereticornis, E. racemosa subsp. Racemosa and C. citriodora subsp. Variegata. E. seeana and Lophostemon suaveolens are often present as sub-canopy or understorey trees. Occasional Melaleuca quinquenervia on lower slopes. Occurs on Cainozoic and Mesozoic sediments. Not a Wetland. (BVG1M: 9g).*	Yes	Yes
12.9-10.19	Category C	*Eucalyptus fibrosa subsp. fibrosa woodland +/- Corymbia citriodora subsp. variegata, E. acmenoides or E. portuensis, Angophora leiocarpa, E. major. Understorey often sparse. Localised occurrences of Eucalyptus sideroxylon. Occurs on*	Yes	Yes

RE Type	VMA Class	Description	Pre-clear RE Map	Current RE Map
		Cainozoic and Mesozoic sediments. Not a Wetland. (BVG1M: 12a).		
12.9-10.19a	N/A	*Corymbia henryi and/or Eucalyptus fibrosa subsp. fibrosa open forest. Other commonly associated species include, Corymbia citriodora subsp. variegata, E. carnea, E. siderophloia, E. crebra and E. major. Occurs in coastal areas on Cainozoic and Mesozoic sediments. Not a Wetland. (BVG1M: 10b).*	Yes	No

3.3. Habitat Quality Scoring Methods

3.3.1 Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and Southeast Queensland bioregions – Modified Habitat Quality Assessment methodology

To determine the quantum and quality of the TEC on-site, the vegetation has been assessed using a modified version of the Queensland State Governments "Guide to determining terrestrial habitat quality: A toolkit for assessing land based offsets under the Queensland Environmental Offsets Policy" Version 1.2 April 2017. This assessment approach utilises the Queensland BioCondition Assessment method combined with site context and species stocking rate assessments to determine the habitat quality of the project area.

The purpose of this guideline is to provide a methodology for proponents to determine the habitat quality of a site under the Queensland Environmental Offsets framework. The guideline is a step-by-step methodology explaining how to measure habitat quality for land-based offsets. This methodology has been adopted and tailored/modified to assess the impacts and offsets relating to Matters of National Environmental Significance (MNES). BioCondition: A Condition Assessment Framework for Terrestrial Biodiversity in Queensland V2.2 February 2015 provides the base methodology for the Guide to determining terrestrial habitat quality and in some cases the scoring and methods from BioCondition have been used within our Modified Habitat Quality Assessment Tool.

The Queensland State Governments *"Guide to determining terrestrial habitat quality: A toolkit for assessing land based offsets under the Queensland Environmental Offsets Policy"* Version 1.2 April 2017 methodology recognises the following three (3) key indicators:

1. site condition – a general condition assessment of vegetation compared to a benchmark;
2. site context – an analysis of the site in relation to the surrounding environment; and
3. species habitat index – the ability of the site to support a species.

The modified habitat quality assessment (MHQA) for the TEC uses Site Condition and Site Context attributes from the Queensland State Government guide with each being weighted 70% and 30% of the

final score, respectively. The higher weighting is attributed to Site Condition based largely on the attributes utilised to discern the condition categories, classes and thresholds under the relevant conservation advice.

The following section details the methodology utilised to assess the Site Condition and Site Context.

3.3.1.1 Site Condition (70%)

Assessing site condition is an integral step in determining specific quantification of impacts, while also determining whether an Offset Area is suitable to establish a desired capacity to support the prescribed environmental matters being offset. The on-site condition is a key element of habitat quality and has a direct influence on the biodiversity it supports. Site condition is assessed using a suite of attributes to describe the structure and function of the vegetation community and is benchmarked against the expected range for a relatively undisturbed community.
The site condition assessment under the MHQA is assessed using fifteen (15) condition characteristics being:

- recruitment of woody perennial species in EDL;
- native plant species richness – trees;
- native plant species richness – shrubs;
- native plant species richness – grasses;
- native plant species richness – forbs;
- tree canopy height;
- sub-canopy cover;
- tree canopy cover;
- native grass cover;
- organic litter;
- large trees;
- coarse woody debris;
- non-native plant cover;

Assessment of the above condition characteristics do not differ from the traditional habitat quality assessment. Scoring tables for the site condition attributes follows the scoring tables within the BioCondition manual (refer above).

A total of two (2) MHQA transects were completed within the TEC.

3.3.1.2 Site Context (30%)

The site context assessment deals with the site and its adjacent surroundings. Site context is measured using attributes to describe the location of the habitat within the surrounding landscape and the influence of its associated threats. Under this MHQA, site context is measured using the following six (6) characteristics considered relevant to a TEC but derived from the Koala context assessment, with the attributes typically applied to fauna (species mobility capacity) not utilised:

- size of patch;
- connectedness;
- context;
- role of site; and
- threats to species

Unlike the traditional habitat quality assessment methodology where site connectedness is assessed against the surrounding remnant vegetation only, the MHQA site connectedness is assessed against the surrounding MNES habitat. MNES habitat was determined using the combination of the Unsupervised Classification tool within ESRR's ArcGIS software and the most recently available aerial photograph from Nearmap.com. The Unsupervised Classification tool is able to determine vegetation areas through the near infrared (NIR) composite band of the Landsat 8 imagery available online. The tool is able to create a dataset of vegetation areas without the analyst's intervention providing a rapid method for mapping habitat critical to the survival of the Koala over large regions such as South East Queensland. Nearmap.com aerial image is used for calibration purposes, particularly when dealing with smaller scale EPBC assessment areas. The dataset created by the Unsupervised Classification tool is revised using the latest aerial imagery available from Nearmap.com at scale of 1:40,000 and provides a more accurate depiction of habitat for EPBC referrals.

Assessment methodology for the site context assessment is outlined below:

1. patch size – The calculation of the area of the patch size uses the method outlined in the BioCondition assessment manual v2.2 that considers the patch to be areas connected by corridors greater than 200 m wide within a 1 km radius of the site. This methodology includes use of a "segmentation" process that removes areas connected to the assessment area by narrow corridors.
2. connectedness – Connectivity relates to the connected attributes of the habitat through the landscape. The attribute is calculated using GIS by measuring the length of habitat that is along the boundary of the site.
3. context – The context score is calculated by GIS to quantify the amount of vegetation immediately surrounding the assessment site. The attribute is measure of the percentage of habitat within a 1 km buffer of the site.
4. ecological corridors – This attribute is as per the methods of the *Guide to determining terrestrial habitat quality V1.2* and is used to determine if a site is located within or shares a boundary with an ecological corridor that facilitates long term ecosystem function by connecting large patches of remnant vegetation with sufficient tract size (corridor width in relation to the fragmentation of the landscape) (EHP 2014). The ecological corridors have been mapped by the Queensland State Government under the 'CORR_TYPE' attribute table. The mapping can also be viewed on Queensland Globe in the 'Statewide Biodiversity Corridors' layer.
5. role of site location to species overall population in the state – This attribute is based on the observed role of the site in relation to the overall population of the species. The scoring table considers the effect damage to, or removal of the site would have to the likelihood of the species' overall population survival.
6. threats to species – Threats to the TEC are predominantly clearing, hydrological changes, fragmentation legacies, weed infestation, climate change, fie regimes, invasive fauna, disturbance, disease, livestock grazing, firewood harvesting and urban heat effects. Scoring methodology for threats to the TEC on site includes justification for a final score in line with **Table 4** of the *"Guide to determining terrestrial habitat quality: A toolkit for assessing land based offsets under the Queensland Environmental Offsets Policy"* Version 1.2 April 2017.

3.3.2 Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and Southeast Queensland bioregions Discussion

3.3.2.1 Site Condition (70%)

AU3 (Remnant RE12.3.11/12.3.7) achieved an average score for Site Condition of **3.81** out of **7**.

The transects generally scored poorly for grass, shrub and forb species richness, coarse woody debris and non-native plant cover.

3.3.2.2 Site Context (30%)

The patch size was determined to be 90 hectares. The percentage of boundary length of the impact was calculated at 6% and the percentage of habitat within 1 km of the impact site is 6%.

3.3.2.3 Size of patch

This attribute is a measure of the size of the patch of vegetation in which the assessment unit is located. The scoring reflects the importance of large patches in the landscape and is based on the size of the patch of habitat connected to the site in this instance. This attribute is scored such that is reflects the fact that larger patches are less susceptible to ecological edge effects and are more likely to sustain viable regional ecosystems. The size of patch attribute was calculated using GIS, and achieved a score of 5 out of 10 as the site of habitat patch was calculated to be 90 ha (between 26 and 100 ha as per the *Queensland BioCondition Assessment* methodology.

3.3.2.4 Connectedness

As a landscape level attribute, connectedness aims to assess the degree to which the assessment unit is connected with adjacent native vegetation. Connectedness relates to the relative connection between sustainable patches of habitat, and therefore has important implications for persistence. Connectedness was calculated using GIS, with the percentage of project area boundary length supporting habitat connection off and on-site was calculated at 6%, and consequently this attribute scored a 0 out of 5.

3.3.2.5 Context

The context attribute refers to the amount of habitat that is retained within a 1 km buffer of the site being assessed and is calculated using GIS. Retained habitat within a 1 km buffer of the site was calculated at 6%, and therefore the context attribute achieved a score of 0 out of 5.

3.3.2.6 Ecological Corridors

GIS mapping was utilised to identify the site's role in any ecological corridors on or adjacent to the site. The site does not form part of any mapped ecological corridors. Therefore, this attribute was scored 0 out of 6.

3.3.2.7 Role of site location to species overall population in the state

This attribute aims to quantify the geographical importance of the site for the TEC across the broader state. This attribute achieved a score of 5 out of 5 given the site contains habitat critical to the survival of the TEC.

3.3.2.8 Threats to the species

The threats to the species attribute aims to quantify the risk to survival of the TEC on-site. Key known threats to the survival of the TEC include clearing, hydrological changes, fragmentation legacies, weed infestation, climate change, fie regimes, invasive fauna, disturbance, disease, livestock grazing, firewood harvesting and urban heat effects. The TEC on-site has been subject to clearing for previous timber harvesting and pastoral uses that has also introduced weeds and is marginally fragmented by the existing fire trail and creek crossings. As such, threats to the TEC have been scored moderate at 7.

Table 4: TEC MHQA Impact Assessment

Assessment Unit - Regional Ecosystem - TEC	AU 3 - Cat B - Remnant vegetation associated with Flagstone Creek (RE12.3.11/12.3.7)					
	RE12.3.11 Benchmark	Transect 4	Transect 7	Average of Transect(s)	% Benchmark	Score
SITE CONDITION						
Recruitment of woody perennial species in EDL	**100**	100	0	**50**	50	**3**
Native plant species richness - trees	**7**	4	8	**6**	85.71	**2.5**
Native plant species richness - shrubs	**7**	3	4	**3.5**	50.00	**2.5**
Native plant species richness - grasses	**12**	2	2	**2**	16.67	**0**
Native plant species richness - forbs	**25**	6	11	**8.5**	34.00	**2.5**
Tree canopy height (Canopy)*	**23**	23	19	**21**	91.30	5
Tree canopy height (Sub-canopy)*	**8**	8	14	**11**	137.50	5
*Average tree canopy height						**5**
Tree canopy cover (Canopy)**	**56**	63.7	28.2	**45.95**	82.05	5
Tree canopy cover (Sub-canopy)**	**33**	52.3	79.5	**65.9**	199.70	5
**Average tree canopy cover						**5**
Shrub canopy cover	**20**	21.4	16.5	**18.95**	94.75	**5**
Native grass cover*	**44**	8	67	**37.5**	85.23	**3**
Organic litter*	**37**	57	6	**31.5**	85.14	**5**
Large trees (euc plus non-euc) (per ha)	**30**	14	8	**11**	36.67	**5**
Coarse woody debris (per ha)	**555**	289	178	**233.5**	42.07	**2**
Non-native plant cover	**0**	30	25	**27.5**	27.50	**3**
Site Condition Score (/100)						**43.5**
Overall Site Condition Score - out of 7						**3.81**
SITE CONTEXT						
Size of patch	**10**	5	5	5		**5**

Connectedness	**5**	0	0	0		**0**
Context	**5**	0	0	0		**0**
Ecological Corridors	**6**	0	0	0		**0**
Role of site location to species overall population in the state	**5**	5	5	5		**5**
Threats to the species	**15**	7	7	7		**7**
Site Context Score (/46)						**17**
Overall Site Context Score - out of 3						**1.11**
Overall Assessment Unit Score						**4.91**

3.3.3 Koala – Modified Habitat Quality Assessment methodology

The quantum and quality of habitat for the Koala within the impact area was assessed using a modified version of the Queensland State Governments *Guide to determining terrestrial habitat quality: A toolkit for assessing land based offsets under the Queensland Environmental Offsets Policy* Version 1.2 April 2017 (herein referred to as the 'Habitat Quality Guideline'). This assessment approach utilises the site condition assessment method framework established under the *BioCondition: A Condition Assessment Framework for Terrestrial Biodiversity in Queensland* Version 2.2 February 2015 combined with site context and species stocking rate assessments to determine the habitat quality of the impact area. The guideline is a step-by-step methodology explaining how to measure habitat quality for land-based offsets. This methodology has been adopted and tailored/modified to assess the impacts and offsets relating to MNES.

The traditional terrestrial habitat quality assessment assesses three (3) core indicators:

1. site condition – a general condition assessment of vegetation compared to a benchmark;
2. site context – an analysis of the site in relation to the surrounding environment; and
3. species habitat index – the ability of the site to support a species.

The MHQA for Koala combines the three (3) core indicators into two (2) (site condition and site context) with each attributed an equal weighting of 30% of the final score. The balance of the weighting (40%) has been attributed to the third indicator – species stocking rate (SSR) – which is independent of the traditional habitat quality assessment. The species stocking rate has been added to the MHQA to better incorporate MNES, and for the purpose of this project, the vulnerable-listed Koala MNES. The following subsections detail the methodology utilised to assess the site condition, site context and species stocking rate under the MHQA. The following section details the methodology utilised to assess the site condition, site context and species stocking rate under the MHQA.

3.3.3.1 Site Condition (30%)

Assessing site condition is an integral step in determining specific quantification of impacts, while also determining whether an Offset Area is suitable to establish a desired capacity to support the prescribed environmental matters being offset. The on-site condition is a key element of the MHQA method and has a direct influence on the biodiversity it supports. Site condition is assessed using a suite of attributes to describe the structure and function of the vegetation community and is benchmarked against the expected range for a relatively undisturbed community.

The site condition assessment under the MHQA is assessed using fifteen (15) condition characteristics being:

- recruitment of woody perennial species in the Ecologically Dominant Layer (EDL);
- native plant species richness – trees;
- native plant species richness – shrubs;
- native plant species richness – grasses;
- native plant species richness – forbs;
- tree canopy height;
- sub-canopy cover;

- tree canopy cover;
- native grass cover;
- organic litter;
- large trees;
- coarse woody debris;
- non-native plant cover;
- quality and availability of food and foraging habitat; and
- quality and availability of shelters.

Assessment methodology of the above condition characteristics does not differ from the traditional habitat quality assessment. In developing the MHQA to better incorporate MNES, two (2) species habitat index characteristics, being, (1) quality and availability of food and foraging habitat, and (2) quality and availability of shelter have been added to the site condition indicator. The two Koala habitat index attributes are based on the balance site condition attributes as listed, being species recruitment through to non-native plant cover, where the scores for each of these attribute are summed to provide a data driven condition attribute score out of 80. Scoring for quality and availability of food and shelter is then attributed as follows; the bottom 33% (or <27/80) scores 1, the middle 33% (or between 27/80 and 54/80) scores 5 and the top 33% (or >54/80) scores 10. Site condition drivers therefore determine the habitat quality indices of food and shelter in a repeatable metric.

Site condition within the impact area was assessed by delineating the impact area into assessment units (AUs) as required by the Queensland environmental offsets framework. The impact area was delineated into five (5) assessment unit based on ground-truthed VMA regional ecosystem mapping. This is summarised in **Table 5** and shown on **Plan 2**. Site condition was measured through the completion of habitat quality transects. Assessment at multiple locations per AU, except where the small size of an AU does not allow for multiple transects, is necessary to measure vegetation condition at representative locations across the spatial extent of the assessment unit. The locations of MHQA transects within the impact area are provided on **Plan 2**. Transect sites and assessment units are detailed in **Table 5.**

Table 5: Summary of assessment units and MHQA transects – impact area

Assessment unit	Vegetation community	Area (ha)	MHQA transect
AU1	Non-remnant RE Pre-clear composite 12.9-10.19a/12.9-10.12/12.9-10.7a	31.5 ha	Transects 2 & 3
AU2	Remnant 'Least Concern' RE12.9-10.2	44.1 ha	Transects 1 & 8
AU3	Remnant 'Of Concern' RE12.3.11 / 12.3.7	6.2 ha	Transects 4 & 7
AU4	Remnant 'Of Concern' RE12.9-10.7	4.2 ha	Transects 5 & 6
AU5	Cleared existing track	4.4 ha	N/A

3.3.3.2 Site context (30%)

The site context assessment deals with the site and its adjacent surroundings. Site context is measured using a suite of attributes to describe the location of the habitat within the surrounding landscape and the influence of its associated threats. This assessment also considers the influence of adjacent vegetated areas and ecological corridors. Under the MHQA, site context is measured using the following seven (7) characteristics:

- size of patch;
- connectedness;
- context;
- ecological corridors;
- role of site location to species overall population in the state;
- threats to the species; and
- species mobility capacity.

Unlike the traditional habitat quality assessment methodology where site connectedness is assessed against the surrounding remnant vegetation only, the MHQA site connectedness is assessed against the surrounding MNES habitat, in this instance, Koala habitat. Whilst remnant eucalypt forest vegetation is critical habitat for Koala, equally Koalas can utilise areas of non-remnant vegetation or high value regrowth vegetation that does not yet achieve remnant status. Therefore, site context under the MHQA accounts for surrounding Koala habitat rather than remnant vegetation.

Habitat critical to the survival of the Koala was determined using the combination of the Unsupervised Classification tool within ESRI's ArcGIS software and the most recently available aerial photograph from Nearmap.com. The Unsupervised Classification tool is able to determine vegetation areas through the near infrared (NIR) composite band of the Landsat 8 imagery available online. The tool is able to create a dataset of vegetation areas without the analyst's intervention providing a rapid method for mapping habitat critical to the survival of the Koala over large regions such as Southeast Queensland. Nearmap.com aerial image is used for calibration purposes, particularly when dealing with smaller scale EPBC assessment areas. The dataset created by the Unsupervised Classification tool is revised using the latest aerial imagery available from Nearmap.com at scale of 1:40,000 and provides a more accurate depiction of habitat critical to the survival of the Koala at the assessment scale.

Assessment methodology for site context assessment for Koala is outlined below:

1. patch size – The calculation of the area of the patch size uses the method outlined in the BioCondition assessment manual v2.2 that considers the patch to be areas connected by corridors greater than 200 m wide within a 1 km radius of the site. This methodology includes use of a "segmentation" process that removes areas connected to the assessment area by narrow corridors.
2. connectedness – Connectivity relates to the capacity that the species have to disperse through the landscape. The attribute is calculated using GIS by measuring the length of Koala habitat that is along the boundary of the site.
3. context – The context score is calculated by GIS to quantify the amount of vegetation immediately surrounding the assessment site. The attribute is measure of the percentage of Koala habitat within a 1 km buffer of the site.
4. ecological corridors – This attribute is as per the methods of the *Guide to determining terrestrial habitat quality V1.2* and is used to determine if a site is located within or shares a boundary with

an ecological corridor that facilitates long term ecosystem function by connecting large patches of remnant vegetation with sufficient tract size (corridor width in relation to the fragmentation of the landscape) (EHP 2014). These corridors support the habitat of MNES by providing opportunity for long term dispersal of habitat species following landscape level changes in climate. Although the ecological corridors allow for the dispersal of MNES themselves, for example, Koala, this is not their primary function when assessing the attribute. The ecological corridors have been mapped by the Queensland State Government under the 'CORR_TYPE' attribute table. The mapping can also be viewed on Queensland Globe in the 'Statewide Biodiversity Corridors' layer.

5. role of site location to species overall population in the state – This attribute is based on the observed role of the site in relation to the overall population of the species. The scoring table considers the effect damage to, or removal of the site would have to the likelihood of the species' overall population survival.
6. threats to species – Threats to Koala are predominantly, habitat loss, car strike, dog attack and disease. The highest threat level is given to a site if it isolated from other Koala habitat, or if major roads without exclusion measures, or residential encroachment is within 1500 m of the site boundary. A risk matrix relative to the conservation advice for the Koala was applied to determine threats to species:
    - Habitat loss is considered Very High Risk under the Koala conservation advice. Clearing and degradation of habitat is scored Low, Moderate and High and weighted according to risk factor relative to the expected threat score for each (summed vertically as 15 for Low, 7 for Moderate or 1 for High).
    - High intensity bushfire is considered Very High Risk under the Koala conservation advice. Inappropriate fire regimes is scored Low, Moderate and High relative to the implementation of an endorsed bushfire management plan and fuel load weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
    - Vehicle strike is considered Moderate Risk under the Koala conservation advice. Vehicle strike is scored Low, Moderate and High relative to the presence and severity of road use within 1 km of the site and weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
    - Dog attack is considered Moderate Risk under the Koala conservation advice. Dog attack is scored Low, Moderate and High relative to the presence of dogs and level of cover available and weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
7. species mobility capacity – This attribute is a measure of the presence and severity of factors that would contribute to a reduction in mobility of Koala and is scored on the presence of roads or large cleared areas bordering the site.

In developing the MHQA, three (3) species habitat index characteristics were nominated — role of site location to overall species population in the state, threats to the species and species mobility capacity. Scoring attributes extracted from the Habitat Quality Guideline are provided in **Extract 1**.

Table 3 - Site Context scoring sheet guide

1 Size of Patch*	**Score**	**0**	**2**	**5**	**7**	**10**
	Description	<5ha	5–25ha	26–100ha	101–200ha	>200ha
2 Connectedness*	Score	0	2	4		5
	Description	0–10%	>10%–<50%	50–75%		>75% or >500ha
3 Context*	Score	0	2	4		5
	Description	<10% remnant	>10–30% remnant	>30–75% remnant		>75% remnant
4 Distance to permanent watering point †	Score	0	2	5	10	20
	Description	0-500m	>500m–1km	>1–3km	>3–5km	>5km
5 Ecological corridors	Score	0	4		6	
	Description	Not within	Sharing a common boundary		Within (whole or part)	

*measured for fragmented bioregions only

†measured for intact bioregions only

Table 4 - Species habitat index scoring guide

1 Threats to species	**Score**	**1**		**7**	**15**
	Description	High threat level (i.e. likely to result in death, irreversible damage)		Moderate threat level	Low threat level (i.e. likely to survive)
2 Quality and availability of food and foraging habitat	Score	1		5	10
	Description	Poor		Moderate	High
3 Quality and availability of shelter	Score	1		5	10
	Description	Poor		Moderate	High
4 Species mobility capacity	Score	1	4	7	10
	Description	Severely restricted (76–100% reduction)	Highly restricted (51–75% reduction)	Moderately restricted (26–50% reduction)	Minor restriction (0–25% reduction)
5 Role of site location to species overall population in the state	Score	1		4	5
	Description	Not or unlikely to be critical to species' survival		Likely to be critical to species' survival	Critical to species survival

Extract 1: Tables 3 and 4 scoring sheet guide extracted from *Guide to determining terrestrial habitat quality: A toolkit for assessing land based offsets under the Queensland Environmental Offsets Policy* Version 1.2 April 2017.

3.3.3.3 Species stocking rate (40%)

The MHQA incorporates Species Stocking Rate (SSR) as an attribute not discussed under the traditional terrestrial habitat assessment methodology. Species stocking rates are estimates of the Koala carrying capacity of the site at the time survey. Given the discreet nature of the Koala and limited to no published literature on habitat carrying capacity of the species, the SSR scoring methodology has been derived through the collation of site-specific surveys and surrounding contextual habitat analysis. **Table 6** outlines the attributes utilised to assess SSR.

Table 6: SSR scoring

Species Stocking Rate Table	
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	/10
Species usage of the site (habitat type and evidenced usage)	/15
Approximate density (per ha)	/30
Role/importance of species population on site*	/15
Total Species Stocking Rate Score	**/70**
Species Stocking Rate Score – out of 4	**/4**

*SSR Supplementary Table – Total supplementary score 0 = 0, 5-15 = 5, 20-35 = 10, 40-45 = 15	
Key source population for breeding	/10
Key source population for dispersal	/5
Necessary for maintaining genetic diversity	/15
Near the limit of the species range	/15

Baseline Koala presence surveys for SSR

Koala presence and activity levels were determined through utilising the Spot Assessment Technique (SAT) (Phillips *et al.* 2011). The SAT method is an industry recognised technique for identifying presence/absence, density and habitat usage of Koala at a site and is specified as an appropriate survey method in the former *EPBC Act Referral Guidelines for the Vulnerable Koala*. Results from the SAT surveys are compared against current available published scientific literature to identify an estimated Koala carrying capacity (stocking rate) to be determined.

SAT survey results are interpreted using the broad population categories provided in the Australian Koala Foundation Koala activity level classification table. These categories being 'East Coast (low)', 'East Coast (med-high)' and 'Western (med-high)' are shown in **Table 7** and are used to estimate Koala activity within a given area. Depending on the population category applied, Koala activity is described as 'low', 'moderate', or 'high'. Population categories are assigned as follows:

- Sites considered to be suitable or have high suitability for Koalas are assigned the 'East Coast (med-high)' category;
- Sites considered to have low suitability are assigned the 'East Coast (low)' category; and

- The 'Western (med-high)' category does not apply to South East Queensland local government areas.

Table 7: Koala activity level classification (Phillips and Callaghan 2011)

Activity	East Coast (low)	East Coast (med-high)	Western (med-high)
Low	<3.33%	<22.5%	<35.8
Moderate	3.33-12.6%	22.5-32.8%	35.8-46.7
High	>12.6%	>32.8	>46.7

02. IMPACT SITE ASSESSMENT UNITS

Notes:
The information on this plan is not suitable for any purpose other than the expressed use of the Client. Property dimensions, areas, numbers of lots and contours and other physical features may need verification if the development application is approved and development proceeds, and may change when a full survey is undertaken or in order to comply with development approval conditions. No reliance should be placed on the information on this plan for detailed design or for any financial dealings involving the land. Saunders Havill therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying a development application and which may be subject to alteration beyond the control of Saunders Havill.Unless a development approval states otherwise, this is not an approved plan.

Layer Sources
World Imagery: Earthstar Geographics
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Updated data available at
http://qldspatial.information.qld.gov.au/catalogue/
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LEGEND

- Qld DCDB
- Referral Area/Impact Site [90.4 ha]
- SAT Survey Locations
- Meander – no scats recorded
- Habitat quality transects

Assessment Units

- *Assessment Unit 1:* Pre-clear RE 12.9-10.19a [31.5 ha]
- *Assessment Unit 2:* Pre-clear RE 12.9-10.2/12.9-10.7 [44.1 ha]
- *Assessment Unit 3:* Pre-clear RE 12.3.11/12.3.7 [6.2 ha]
- *Assessment Unit 4:* Pre-clear RE 12.9-10.7a [4.2 ha]
- *Assessment Unit 5:* Existing cleared track [4.4 ha]

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PEET

WILLOW VALE OFFSET

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3.3.4 Koala Discussion

3.3.4.1 Site Condition (30%)

AU1 (Non-remnant RE12.9-10.19a) achieved an average score for Site Condition of **1.76** out of 3. AU2 (Remnant RE12.9-10.2) achieved an average score for Site Condition of **2.27** out of 3. AU3 (Remnant RE12.3.11) achieved an average score for Site Condition of **1.61** out of 3. AU4 (Remnant RE12.9-10.7) achieved an average score for Site Condition of **1.88** out of 3. AU5 scored **0** out of 3 for Site Condition.

The transects generally scored poorly for large trees per ha, coarse woody debris, and non-native plant cover and scored moderately for species richness of shrubs, grasses and forbs. Quality and availability of food and foraging and shelter habitat were scored as per the MHQA for each assessment unit. Refer to **Table 8** for a summary of MQHA impact site Koala Scoring for each AU.

3.3.4.2 Site Context (30%)

Size of patch

This attribute is a measure of the size of the patch of vegetation in which the assessment unit is located. The scoring reflects the importance of large patches in the landscape and is based on the size of the patch of critical Koala habitat connected to the site in this instance. This attribute is scored such that is reflects the fact that larger patches are less susceptible to ecological edge effects and are more likely to sustain viable populations of native flora and fauna than smaller patches. The size of patch attribute was calculated using GIS, and achieved a score of **10** out of 10 as the site of critical Koala habitat patch was calculated to be >500 ha (greater than 200 ha as per the *Queensland BioCondition Assessment* methodology).

Connectedness

As a landscape level attribute, connectedness aims to assess the degree to which the assessment unit is connected to adjacent native vegetation. Connectedness relates to the capacity of the species to disperse through the landscape between sustainable patches of habitat, and therefore has important implications for species persistence. Connectedness was calculated using GIS, with the percentage of referral area boundary length supporting a Koala critical habitat connection off and on site was calculated at 85%, and consequently this attribute scored a **5** out of 5 as per the Queensland BioCondition Assessment methodology.

Context

The context attribute refers to the amount of critical Koala habitat that is retained within a 1 km buffer of the site being assessed and is calculated using GIS. Retained critical Koala habitat within a 1 km buffer of the site was calculated at 58%, and therefore the context attribute achieved a score of **4** out of 5 as per the Queensland BioCondition Assessment methodology.

Ecological Corridors

A score of zero was given to the Ecological Corridors component of Site Context. The site does not form part of any mapped ecological corridors.

Role of site location to species overall population in the State

This attribute aims to quantify the geographical importance of the referral area for Koala populations across the broader State. This attribute achieved a score of **5** out of 5 as the then DAWE determined that the referral area contains habitat critical to the survival of Koala.

Threats to the species

The threats to the species attribute aims to quantify the risk to survival of the Koala on-site. Key known threats to the survival of the Koala include the existing road and tracks due to the risk of motor vehicle strike (refer e.g. Queensland Habitat Quality Assessment Guideline 1.2), as well as predation by wild or domestic dogs. Notably, two Koala skulls were recorded within the assessment area, with one next to a splayed carcass indicative of dog attack.

The risk of motor vehicle strike to Koalas on or adjoining the site would be relatively high as the site is an existing road and track that is frequented by 4WD vehicles and provide access to the adjoining water tower, with residences and roads within the surrounding landscape. A review of the Koala Hospital Records show that two (2) Koala deaths have occurred nearby the site. Both are located towards the east of the site with one (1) is located approximately 1.3 km east and the other approximately 4.2 km east in association with Teviot Road.

It is noted that anticipated growth and planned residential development throughout Greater Flagstone will result in increased traffic flows. Multiple Koala deaths are noted in the surrounding landscape in association with major roads. Threats to Koala are anticipated to increase as a result of the development.

This attribute was scored a **2.2**, or a **1** out of 15 for threats.

Species mobility capacity

Species mobility capacity is used to quantify the ability of the species to move from the site and through the surrounding landscape to meet survival needs. Species mobility capacity is considered particularly important in response to rapid changes to the surrounding environment, such as the commencement of land clearing. Grey-headed Flying-fox and avi-fauna for example are considered highly mobile species due to their ability to fly quickly and over land barriers such as highly frequented roads or residential developments. Conversely, the Koala is considered a relatively immobile species due to it being a ground-dwelling species, moving relatively slowly and hence its vulnerability to threats on ground as outlined above.

In this instance, the species mobility capacity for the Koala on site was assigned the score of **10** out of 10 due to the absence of barriers. Additionally, currently vegetation properties to the west and east are approved for development and will limit connectivity in the future.

3.3.4.3 Species Stocking Rate (40%)

The final component of the MHQA technique is SSR. Species stocking rates are estimates of the Koala carrying capacity of the site at the time of undertaking the survey. **Table 6** outlines the attributes utilised to assess species stocking rate. Species stocking rate scores were calculated for each assessment unit due to the differing attributes of the vegetation and Koala presence based on detailed surveys.

A species stocking rate score of **40** out of 70 was attributed to AU1 to AU4 and **20** out of 70 to AU5. This was largely attributed to the fact that SAT surveys returned scores consistent with low or no Koala activity.

Summary

To summarise, the action is considered to impact on moderate quality Koala habitat, having a total impact of **5.59** out of 10. The vegetation on the site is part of a contiguous landscape of habitat by existing barriers and threats with future development scheduled for the adjoining eastern and western land parcels. Substantial management and mitigation measures are considered to result in a manageable impact on Koala habitat in the context of the Flagstone Area. It is considered that any potential impacts on any transient Koalas during clearing and operation can be appropriately managed through the proposed mitigation and management measures.

Table 8: Impact area – Koala MHQA results

MHQA Final Weighting	AU 1	AU 2	AU 3	AU 4	AU 5
Site Condition (/3)	1.76	2.27	1.61	1.88	0.00
Site Context (/3)	1.88	1.88	1.88	1.88	1.88
Species Stocking Rate (/4)	2.29	2.29	2.29	2.29	1.14
Assessment Unit Area (Impact) (ha)	5.90	10.30	1.20	1.50	4.40
Total Impact Area (ha)	23.30	23.30	23.30	23.30	23.30
Size Weighting	0.25	0.442	0.05	0.06	0.19
AU Weighted Score	1.50	2.84	0.30	0.39	0.57
Total Weighted Score	**5.59**				

3.3.5 Grey-headed Flying-fox – Foraging Habitat Assessment Tool

The impact area has been assessed using a GHFF Foraging Habitat Assessment (GHFF FHA) tool developed by the Saunders Havill Group (2019) which adopts characteristics of the Habitat Quality Guideline, while also integrating published scientific literature on GHFF foraging habitat.

The traditional terrestrial habitat quality assessment assesses three (3) core indicators—site condition, site context and species habitat index.

The GHFF FHA tool combines the aspects of the three (3) core indicators and published scientific literature into two (2) (site condition and site context) with site condition being weighted with 40% and site context weighted at 30% of the final score. The balance of the weighting (30%) has been attributed to the third indicator which is independent of the traditional habitat quality assessment, being species stocking rate. The species stocking rate assessment incorporated in the GHFF FHA tool is focussed on 'foraging habitat' for GHFF rather than GHFF stocking rates (presence/absence of the species). This assessment of 'foraging habitat' for species stocking rate has been incorporated in the GHFF FHA tool as Grey-headed Flying-fox roosting camp or species presence was not observed on-site, however, suitable foraging habitat for the species was evident. Therefore, the density of foraging habitat available on-site is considered an appropriate assessment benchmark for species stocking rate.

The following section details the methodology utilised to assess the site condition, site context and species stocking rate under the GHFF FHA.

3.3.5.1 Site Condition (40%)

Assessing site condition is an integral step in determining specific quantification of impacts, while also determining whether an offset property is suitable to establish a desired capacity to support the prescribed environmental matters being offset. The on-site condition is a key element of habitat quality and has a direct influence on the biodiversity it supports. Site condition is assessed using a suite of attributes to describe the structure and function of the vegetation community and is benchmarked against the expected range for a relatively undisturbed community.

The site condition assessment under the GHFF FHA is assessed using six (6) condition characteristics being:

- Vegetation condition;
- Species richness (canopy trees);
- Flower scores (average);
- Timing of biological shortages;
- Quality of foraging habitat (trees >0.65 wt p*r); and
- Non-native plant cover.

Site condition under the GHFF FHA was assessed at the habitat quality transect locations within the impact assessment units summarised in **Table 5**.

Assessment methodology of the above condition characteristics is outlined below:

- Vegetation condition – This condition characteristic is assessed using the Queensland *Vegetation Management Act 1999* vegetation community status definition, being Category B (remnant),

Category C (high-value regrowth) and Category X (non-remnant). This characteristic is scored from a desktop mapping perspective and verified on-ground during assessment. Refer to **Table 9**.

- Species richness (canopy trees) – This condition characteristic is assessed using a 100 m X 20 m plot following the contour of the land when possible. Within the plot, all canopy tree and subcanopy tree specimens are recorded. It should be noted that non-GHFF foraging species are also documented. Refer to **Table 10**.
- Flower scores (average) – This condition characteristic is assessed by analysing and cross-referencing the species recorded in the 'species richness (canopy trees)' characteristic with the published literature, specifically the information within *Ranking the feeding habitat of Grey-headed flying foxes for conservation management* (Eby and Law 2008) and the *National Recovery Plan for the Grey-headed Flying-fox* (DAWE, 2021) and determining the flower score of the recorded canopy species. The individual score for each flowering GHFF foraging tree is then divided by the number of species recorded (GHFF foraging and non-GHFF foraging trees) to produce an average. The benchmark values for this condition characteristic have been derived from the findings published by Eby and Law (2008) (Ranking the feeding habitat of Grey-headed flying foxes for conservation management). Refer to **Table 11**.
- Timing of biological shortages – This condition characteristic is assessed by analysing and cross referencing the species recorded in the 'species richness (canopy trees)' characteristic with the published literature, specifically the information within Ranking the feeding habitat of GHFFs for conservation management (Eby and Law 2008) and the *National Recovery Plan for the Grey-headed Flying-fox* (DAWE, 2021) and determining the ability of the canopy species in the vegetation community to produce foraging habitat during biological shortages (food shortages, pregnancy and birthing, lactation, mating and conception, migration paths and fruit industries). It should be noted that this condition characteristic is weighted and 'food shortages' has been weighted heavier than the balance of the characteristics which are equal, as 'food shortages' is recognised as a major issue. Refer to **Table 12.**
- Quality of foraging habitat – This condition characteristic is assessed by analysing and cross-referencing the species recorded in the 'species richness (canopy trees)' characteristic with the published literature, specifically the information within Ranking the feeding habitat of GHFFs for conservation management (Eby and Law 2008) and the *National Recovery Plan for the Grey-headed Flying-fox* (DAWE, 2021) and determining which canopy species recorded contain a flower score greater than 0.65 wt p*r and is recognised as a significant food plant by Eby and Law (2008). It should be noted that species recorded that are not prescribed a value by Eby and Law (2008) but are recognised as GHFF foraging trees, have been given an average weighted value of related species or, in the case of *Eucalyptus crebra* (Narrow-leaved Ironbark) been prescribed a value of 0.65 and classified as a significant food plant given its importance as a winter flowering species as acknowledged in the *National Recovery Plan for the Grey-headed Flying-fox* (DAWE, 2021). Refer to **Table 13**.
- Non-native plant cover – This condition characteristic is assessed using a 100 m X 20 m plot following the contour of the land when possible. All non-native plant cover was assessed by estimating the cover of exotic species over the 100 m X 20 m plot. Refer to **Table 14**.

It should be noted that for on-ground assessment purposes, the 100 m X 20 m plot utilised for the GHFF FHA overlaps with the on-ground condition characteristics of the Koala MHQA.

3.3.5.2 Site Context (30%)

The site context assessment deals with the site and its adjacent surroundings. Site context is measured using a suite of attributes to describe the location of the habitat within the surrounding landscape and the influence of its associated threats. This assessment also considers the influence of adjacent vegetated areas and ecological corridors. Under the GHFF FHA, site context is measured using the following six (6) characteristics:

- Size of patch;
- Connectedness (active GHFF roost camps in a 20 km radius);
- Context (percentage of GHFF foraging habitat in a 20 km radius);
- Ecological corridors;
- Role of site location to species overall population in the state (active GHFF national flying-fox monitoring viewer 'level 3' roost camps in a 20 km radius); and
- Threats to the species.

The assessment methodology of the above context characteristics is outlined below:

- Size of patch – This context characteristic is assessed using a modified version of the traditional habitat quality assessment with the directly connected patch of GHFF foraging habitat to site measured. This context characteristic is measured using GIS. The benchmark values for this context characteristic are those used in the traditional habitat quality assessment. Refer to **Table 15**.
- Connectedness – This context characteristic is assessed by analysing the number of active GHFF roost camps (over the past year of monitoring (2024-2025)) within a 20 km radius of the site. For consistency purposes this assessment is to utilise the data provided on the national flying-fox monitoring viewer (Australian Government). Refer to **Table 16.**
- Context – This context characteristic is assessed using a modified version of the traditional habitat quality assessment with the percentage of GHFF foraging habitat within a twenty (20) kilometre buffer of the site measured. This context characteristic is measured using GIS. Refer to **Table 17.**
- Ecological corridors – This context characteristic is assessed using the traditional habitat quality assessment methodology which involves determining the proximity of the site to state, bioregional, regional or sub-regional corridors. Refer to **Table 18.**
- Threats to species – This context characteristic is assessed by analysing the published scientific literature regarding threats to GHFF and determining the number and severity of the threatening processes observed at or adjacent to the site. Refer to **Table 19**.
- Role of site location to species overall population in the state (active GHFF national flying-fox monitoring viewer 'level 3' roost camps in a 20 km radius) – This context characteristic is assessed by analysing the number of active GHFF roost camps level 3 or greater (over the past year of monitoring (2024-2025)) within a 20 km radius of the site. For consistency purposes this assessment is to utilise the data provided on the national flying-fox monitoring viewer (Australian Government). Refer to **Table 20.**

3.3.5.3 Species Stocking Rate (30%)

The GHFF FHA incorporates SSR as an attribute not discussed under the traditional terrestrial habitat assessment methodology. As discussed above, SSR for GHFF associated with this project is related to the density of GHFF foraging habitat at the site at the time of undertaking the survey.

Baseline GHFF foraging tree surveys were undertaken by following the stem count methodology provided in the Methodology for surveying and mapping regional ecosystems and vegetation communities in Queensland (version 5.0) (Neldner et al. 2019).

This methodology involves assigning the strata for canopy (T1) and subcanopy (T2) and then counting the number of individual tree specimens within the 100 m X 20 m plot. A tree that branches into two or more stems above 30 cm above the ground is counted as one individual. The stem density of canopy species recorded within the 0.2 ha plot is multiplied by five (5) to produce a stem density per ha. This number is then compared to the benchmark stem density per ha based on the sum of the T1 stem density taken from the relevant regional ecosystem technical description as per the Technical Descriptions of Regional Ecosystems of Southeast Queensland (Ryan 2019). Refer to **Table 21** for benchmark scoring values for species stocking rate.

3.3.6 Grey-headed Flying-fox Discussion

Results of the impact site GHFF FHA using the above methodology are shown in **Table 22**. The impact site attained a score of **6** out of 10 (5.52 rounded to 6).

Table 9: GHFF FHA Vegetation Condition Scoring

Score	Description
5	Category X / non-remnant
10	Category C / regrowth
20	Category B / remnant

Table 10: GHFF FHA Species Richness Scoring

Score	Description
0	0 GHFF foraging species
5	1 – 3 GHFF foraging species
10	4 – 6 GHFF foraging species
20	> 6 GHFF foraging species

Table 11: GHFF FHA Flower Score (average) Scoring

Score	Description
2	0.01 – 0.25
5	0.26 – 0.50
8	0.51 – 0.75
10	0.76 – 1.00

Table 12: GHFF FHA Timing of Biological Shortages Scoring

Score	Description
2.5	Food shortages
1.5	Pregnancy and birthing
1.5	Lactation
1.5	Mating and conception
1.5	Migration paths
1.5	Fruit industries
Total (/10)	Combine total of above

Table 13: GHFF FHA Quality of Foraging Habitat (trees >0.65 wt p*r) Scoring

Score	Description
0	0 significant GHFF foraging tree species
5	1 – 3 significant GHFF foraging tree species
10	4 – 6 significant GHFF foraging tree species
20	> 6 significant GHFF foraging tree species

Table 14: GHFF FHA Non-Native Plant Cover Scoring

Score	Description
1	> 50 % non-native plant cover
5	25 – 50 % non-native plant cover
10	5 – 25 % non-native plant cover
20	< 5 % non-native plant cover

Table 15: GHFF FHA Size of Patch Scoring

Score	Description
0	< 5 hectares
2	5 – 25 hectares
5	26 – 100 hectares
7	101 – 200 hectares

Score	Description
10	> 200 hectares

Table 16: GHFF FHA Connectedness Scoring

Score	Description
0	< 1 active Grey-headed Flying-fox camp within a 20 km radius
3	1 – 3 active Grey-headed Flying-fox camp within a 20 km radius
6	4 – 6 active Grey-headed Flying-fox camp within a 20 km radius
10	> 6 active Grey-headed Flying-fox camp within a 20 km radius

Table 17: GHFF FHA Context Scoring

Score	Description
0	< 10 % Grey-headed Flying-fox foraging habitat within a 20 km radius
3	10 – 30 % Grey-headed Flying-fox foraging habitat within a 20 km radius
6	31 – 75 % Grey-headed Flying-fox foraging habitat within a 20 km radius
10	> 75 % Grey-headed Flying-fox foraging habitat within a 20 km radius

Table 18: GHFF FHA Ecological Corridors Scoring

Score	Description
0	Not within an ecological corridor
6	Sharing a common boundary with an ecological corridor
10	Within an ecological corridor

Table 19: GHFF FHA Threats to Species Scoring

Score	Description
1	High level threat to the species
5	Moderate level threat to the species
10	Low level threat to the species

Table 20: GHFF FHA Role of Site Location to Species Overall Population Scoring

Score	Description
1	1 – 2 active level 3 Grey-headed Flying-fox camp within a 20 km radius
6	2 – 4 active level 3 Grey-headed Flying-fox camp within a 20 km radius
10	> 4 active level 3 Grey-headed Flying-fox camp within a 20 km radius

Table 21: GHFF Species Stocking Rate Scoring

Score	RE12.9-10.19	RE.12.9-10.2	RE12.3.11	RE12.9-10.7
2	0-43	0-30	0-106	0-60
4	44-184	31-130	107-458	61-260
6	185-312	131-220	459-776	261-440
8	313-333	221-235	777-828	441-470
10	334-347	236-245	829-864	471-490
8	348-368	246-260	865-916	491-520
6	369-496	261-350	917-1234	521-700
4	497-638	351-450	1235-1586	701-900
2	>638	>450	>1586	>900

Table 22: Impact area Grey-headed Flying-fox – FHA assessment summary

MHQA Final Weighting - GHFF	AU 1	AU 2	AU 3	AU 4
Site Condition (/4)	2.12	2.20	2.40	2.40
Site Context (/3)	1.60	1.60	1.60	1.60
Species Stocking Rate (/3)	1.80	1.80	1.20	1.20
Assessment Unit Area (Impact) (ha)	5.90	10.30	1.20	1.50
Total Impact Area (ha)	18.9	18.9	18.9	18.9
Size Weighting	0.31	0.54	0.06	0.08
AU Weighted Score	1.72	3.05	0.33	0.41
Total Weighted Score	5.52			

3.3.7 Greater Glider – Modified Habitat Quality Assessment Methodology

All trees over 300 mm Diameter at Breast Height (DSH) were plotted throughout the impact area with a handheld GPS device (Trimble) to record locations (accuracy ±1 m), and the following parameters of each tree specimen were recorded:

- tree species, via a combination of observations of the gum nuts, buds, leaves, bark and growth form;
- diameter of the trunk of the tree measured using the standard method of Diameter at Breast Height (DSH);
- height of the tree estimated in metres from ground;
- canopy spread estimated in metres from ground;
- health assessment (canopy, trunk); and
- habitat values (for example, presence and/or number of hollows, nests, termites, scratches and scats).

The entire tree trunk and branches are visually surveyed from ground for habitat values including hollows. The spread of trees over 300 mm DSH was mapped to indicate foraging habitat for the species as per the conservation advice. Hollow bearing trees were plotted across the entire site as part of earlier assessments for this species.

Notably, retained corridors that were not tree plotted for trees over 300 mm DSH are considered functionally lost to the Greater Glider due to their susceptibility to disturbance that will arise as a result of the action. The proportion of foliage cover in impact portions of each assessment unit were therefore attributed to retained conservation areas to estimate total foraging habitat potentially impacted.

The subject site has been assessed using a modified version of the Guideline. The purpose of this guideline is to provide a methodology for proponents to determine the habitat quality of a site under the Queensland Environmental Offsets framework. The Guideline is a step-by-step methodology explaining how to measure habitat quality for land-based offsets. This methodology has been adopted and tailored/modified to assess the impacts and offsets relating to Matters of National Environmental Significance (MNES).

The traditional terrestrial habitat quality assessment assesses three (3) core indicators—site condition, site context and species habitat index.

For the spatial analysis, the modified habitat quality assessment (MHQA) combines the three (3) key indicators from the Queensland State Government guide into two (2) (site condition and site context) with each being weighted 30% of the final score. The balance of the weighting, 40%, has been attributed to the third indicator (species stocking rate), that is independent of the Queensland State Government habitat quality assessment. The species stocking rate has been added to the MHQA to better incorporate MNES, and specifically the endangered Greater Glider. The following subsections detail the methodology utilised to assess the site condition, site context and species stocking rate under the MHQA.

The features based assessment to cater for Greater Glider denning and breeding habitat relies on hollow counts plus an error margin of 20% for field surveys based on relevant literature.

3.3.7.1 Site Condition (30%)

The site condition assessment under the MHQA is assessed using 15 condition characteristics being: recruitment of woody perennial species in EDL;

- native plant species richness – trees;
- native plant species richness – shrubs;
- native plant species richness – grasses;
- native plant species richness – forbs;
- tree canopy height;
- sub-canopy cover;
- tree canopy cover;
- native grass cover;
- organic litter;
- large trees;
- coarse woody debris;
- non-native plant cover;
- quality and availability of food and foraging habitat; and
- quality and availability of shelters.

Assessment of the above condition characteristics do not differ from the traditional habitat quality assessment. Scoring tables for the site condition attributes follows the scoring tables within the BioCondition manual (refer above). In developing the MHQA to better incorporate MNES, two (2) species habitat index characteristics, being, (1) quality and availability of food and foraging habitat, and (2) quality and availability of shelter have been added to the site condition indicator. The quality and availability of food and foraging habitat index attributes are based on the site condition features that relate to the presence of canopy in the ecologically dominant layer where the species feeds scored as a proportion against the T1 tree canopy cover benchmark, where <33% of the expected benchmark scores 1, 33% to 66% scores 5, and >66% scores 10. The T1 canopy cover is considered a suitable metric for foraging habitat given the size class includes only the T1 dominant layer and all Regional Ecosystems contain Greater Glider foraging species within the ecologically dominant layer according to the relevant Regional Ecosystem technical descriptions. The quality and availability of shelter habitat index attributes are based on hollow counts per hectare plus an error margin of 20% based on relevant literature relative to conservation advice expectations (i.e. 2 to 4 hollows per 2 ha), where <1 hollow per ha scores 1, 1 to 2 hollows per ha scores 5, and greater than 2 hollows per ha scores 10.

As the Greater Glider is most reliant upon upper tree canopy for foraging and hollows for shelter than other ecosystem attributes, the overall Site Condition score has been additionally weighted 40% for the traditional condition attributes (species richness etc.), 20% for quality of foraging habitat and 40% for quality of shelter habitat.

3.3.7.2 Site Context (30%)

The site context assessment deals with the site and its adjacent surroundings. Site context is measured using a suite of attributes to describe the location of the habitat within the surrounding landscape and the influence of its associated threats. This assessment also considers the influence of adjacent vegetated areas and State mapped ecological corridors. Under the MHQA, site context is measured using the following seven characteristics:

- size of patch;
- connectedness;
- context;
- State mapped ecological corridors;
- role of site location to species overall population in the state;
- threats to the species; and
- species mobility capacity.

Unlike the traditional habitat quality assessment methodology where site connectedness is assessed against the surrounding remnant vegetation only, the MHQA site connectedness is assessed against the surrounding MNES habitat, in this instance, Greater Glider habitat as per Eyre et al. 2022.

Assessment methodology for site context assessment for Greater Glider is outlined below:

1. Patch size – The calculation of the area of the patch size uses the method outlined in the Biocondition assessment manual v2.2 that considers the patch to be areas connected by corridors greater than 200 m wide within a 1 km radius of the site. This methodology includes use of a "segmentation" process that removes areas connected to the assessment area by narrow corridors.
2. Connectedness – Connectedness relates to the capacity that the species have to disperse through the landscape. The attribute is calculated using GIS by measuring the length of habitat that is along the boundary of the site.
3. Context – The context score is calculated by GIS to quantify the amount of vegetation immediately surrounding the assessment site. The attribute is measure of the percentage of habitat within a 1 km buffer of the site.
4. State mapped ecological corridors – This attribute is as per the methods of the Guide to determining terrestrial habitat quality V1.2 and is used to determine if a site is located within or shares a boundary with an ecological corridor that facilitates long term ecosystem function by connecting large patches of remnant vegetation with sufficient tract size (corridor width in relation to the fragmentation of the landscape) (EHP 2014). These corridors support the habitat of MNES by providing opportunity for long term dispersal of habitat species following landscape level changes in climate. Although the ecological corridors allow for the dispersal of MNES themselves, this is not their primary function when assessing the attribute. The ecological corridors have been mapped by the Queensland State Government under the 'CORR_TYPE' attribute table. The mapping can also be viewed on Queensland Globe in the 'Statewide Biodiversity Corridors' layer.

5. Role of site location to species overall population in the state – This attribute is based on the observed role of the site in relation to the overall population of the species. The scoring table considers the species' use of the site – such as whether it is used for feeding and/or nesting and the effect that damage to or removal of the site would have to the likelihood of the species' overall population survival.
6. Threats to species – Threats to Greater Glider are predominantly habitat loss, feral predator attack, barbed wire and uncontrolled bushfire. Threats are scored as per the relevant State guideline. A risk matrix relative to the conservation advice for the Greater Glider was applied to determine threats to species:
    - Habitat loss is considered Very High Risk under the Greater Glider conservation advice. Clearing and fragmentation of habitat is scored Low, Moderate and High and weighted according to risk factor relative to the expected threat score for each (summed vertically as 15 for Low, 7 for Moderate or 1 for High).
    - High intensity bushfire is considered Very High Risk under the Greater Glider conservation advice. Inappropriate fire regimes is scored Low, Moderate and High relative to the implementation of an endorsed bushfire management plan and fuel load weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
    - Timber harvesting is considered Very High Risk under the Greater Glider conservation advice. Timber harvesting is scored Low, Moderate and High relative to the implementation and frequency of timber harvesting and weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
    - Feral Cat attack is considered Low Risk under the Greater Glider conservation advice. Feral Cat attack is scored Low, Moderate and High relative to the presence of Feral Cats and level of cover available and weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
    - Fox attack is considered Low Risk under the Greater Glider conservation advice. Fox attack is scored Low, Moderate and High relative to the presence of Foxes and level of cover available and weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
    - Barbed wire entanglement is considered Low Risk under the Greater Glider conservation advice. Barbed wire entanglement is scored Low, Moderate and High relative to the amount of barbed wire in and bordering the site and weighted according to risk factor relative to the expected threat score for each (summed vertically as 15, 7 or 1).
7. Species mobility capacity – This attribute is a measure of the presence and severity of factors that would contribute to a reduction in mobility of Greater Glider and is scored on the presence of roads or cleared areas.

In developing the MHQA, three (3) species habitat index characteristics were nominated — role of site location to overall species population in the state, threats to the species and species mobility capacity.

3.3.7.3 Species Stocking Rate (40%)

The MHQA incorporates species stocking rate as an attribute not discussed under the traditional terrestrial habitat assessment methodology. Species stocking rates are estimates of the Greater Glider carrying

capacity of the site at the time of undertaking the survey. Given the discreet nature of the Greater Glider and limited to no published literature on habitat carrying capacity of the species, the species stocking rate scoring methodology has been derived through the collation of site-specific surveys and surrounding contextual habitat analysis.

Species stocking rate is calculated using the following parameters:

- Species presence on or adjacent to the assessment unit – evidence of Greater Glider on or adjacent to the assessment unit.
- Species usage (habitat type and evidenced usage) – evidence of Greater Glider usage of the assessment unit.
- Approximate density of the species – evidence of Greater Glider records in the assessment unit.
- Role/importance of species population on site – considers whether the site is a key source population for breeding, dispersal, is necessary for maintaining genetic diversity or near the limit of the species' range.

3.3.8 Greater Glider Discussion

3.3.8.1 Site Condition (30%)

AU1 (Non-remnant RE12.9-10.19a) achieved an average score for Site Condition of **1.93** out of 3. AU2 (Remnant RE12.9-10.2) achieved an average score for Site Condition of **2.03** out of 3. AU3 (Remnant RE12.3.11) achieved an average score for Site Condition of **1.37** out of 3. AU4 (Remnant RE12.9-10.7) achieved an average score for Site Condition of **1.99** out of 3.

The transects generally scored poorly for large trees per ha, coarse woody debris, and non-native plant cover and scored moderately for species richness of shrubs, grasses and forbs. As per the recorded canopy cover, all assessment units scored a 10 for quality and availability of food and foraging habitat. Based on hollow counts, Assessment Units 1, 2 and 4 scored **5** and AU3 scored **1** for quality and availability of shelter habitat.

Refer to **Table 23** for a summary of the Greater Glider scoring for each assessment unit at the impact site.

3.3.8.2 Site Context (30%)

Size of Patch

This attribute is a measure of the size of the patch of vegetation in which the assessment unit is located. The scoring reflects the importance of large patches in the landscape and is based on the size of the patch of habitat connected to the site in this instance. This attribute is scored such that is reflects the fact that larger patches are less susceptible to ecological edge effects and are more likely to sustain viable populations of native flora and fauna than smaller patches. The size of patch at the impact site was calculated using GIS, and achieved a score of **10** out of 10 as the site was calculated to be >500 ha (greater than 200 ha as per the Queensland BioCondition Assessment methodology).

Connectedness

As a landscape level attribute, connectedness aims to assess the degree to which the assessment unit is connected with adjacent Greater Glider habitat. Connectedness relates to the capacity of the species to disperse through the landscape between sustainable patches of habitat, and therefore has important

implications for species persistence. Connectedness was calculated using GIS, with the percentage of project area boundary length supporting habitat connection off and on-site the impact area was calculated at 56%, and consequently this attribute scored a **4** out of 5.

Context

The context attribute refers to the amount of habitat that is retained within a 1 km buffer of the site being assessed and is calculated using GIS. Retained habitat within a 1 km buffer of the impact site was calculated at 48%, and therefore the context attribute achieved a score of **4** out of 5.

Ecological Corridors

The impact site area does not form part of any mapped ecological corridors. Therefore, this attribute was scored **0** out of 6.

Role of site location to species overall population in the state

This attribute aims to quantify the geographical importance of the site for Greater Glider populations across the broader state. At the impact site this attribute achieved a score of **5** out of 5 given the site contains potential habitat for the Greater Glider.

Threats to species

The threats to the species attribute aims to quantify the risk to survival of the Greater Glider on-site. Key known threats to the survival of the species include the existing roads and canopy breaks, as well as predation by feral animals and uncontrolled fire regimes.

The impact site is considered to have a high fuel load being unmanaged remnant and regrowth vegetation and multiple burnt out cars are present, including one dumped and set alight while field work was being undertaken. The site scores high for inappropriate fire regimes.

The impact site is zoned for development. No timber harvesting occurs on site. Foxes and Cats were not recorded on site. The entire road is flanked by barbed wire fencing to contain stock.

Analysis against the risk matrix indicated that the impact site scores **6.58**, or a **7** out of a possible 15 for threats.

Species Mobility Capacity

Species mobility capacity is used to quantify the ability of the species to move from the impact site and through the surrounding landscape in order to meet its needs for survival. Species mobility capacity is considered particularly important in response to rapid changes to the surrounding environment, such as the commencement of land clearing. Grey-headed Flying-fox and avi-fauna for example are considered highly mobile species due to their ability to fly quickly and over land barriers such as highways or residential developments. Conversely, the Greater Glider is considered a relatively immobile species due to its slow-moving nature and vulnerability to threats on ground as outlined above. Notably, species mobility is compromised where canopy gaps occur as presented by the existing road reserve and cleared tracks and fire trails In this instance, the species mobility capacity for the Greater Glider on-site was assigned the conservative moderate score of **7** out of 10.

3.3.8.3 Species Stocking Rate (40%)

Species stocking rates are estimates of the Greater Glider carrying capacity of each assessment unit at the time of undertaking the survey. A species stocking rate score of **20** out of 70 was attributed to all assessment units. This was largely attributed to the fact that evidence of Greater Glider does not occur onsite nor in the vicinity given their inability to disperse long distances, however, potential breeding habitat is present in the form of denning opportunities supported by foraging habitat.

Summary

The impact site maintains Greater Glider foraging habitat potentially lost due to the action that totals 75.3ha. To summarise, the action is considered to impact on potential habitat for the Greater Glider, having a total score of **5.06** out of 10 (refer Table 23).

For the features-based assessment, the impact site maintains a total of 204 hollows that will be directly or indirectly impacted. Applying a 20% margin to account for survey error, an estimate of 245 hollows will be impacted.

Refer **Table 23** for summary of the impact site Greater Glider MHQA results.

Table 23: Impact area Greater Glider MHQA results summary

MHQA Final Weighting	AU 1	AU 2	AU 3	AU 4
Site Condition (/3)	1.93	2.03	1.37	1.99
Site Context (/3)	1.98	1.98	1.98	1.98
Species Stocking Rate (/4)	1.14	1.14	1.14	1.14
Assessment Unit Area (Impact) (ha)	31.60	33.40	6.20	4.10
Total Impact Area (ha)	75.30	75.30	75.30	75.30
Size Weighting	0.42	0.444	0.08	0.05
AU Weighted Score	2.12	2.29	0.37	0.28
Total Weighted Score	5.06			

3.3.9 Yellow Bellied Glider – Modified Habitat Quality Assessment Methodology

All trees over 300 mm Diameter at Breast Height (DSH) were plotted throughout the impact area with a handheld GPS device (Trimble) to record locations (accuracy ±1 m), and the following parameters of each tree specimen were recorded:

- tree species, via a combination of observations of the gum nuts, buds, leaves, bark and growth form;
- diameter of the trunk of the tree measured using the standard method of Diameter at Breast Height (DSH);
- height of the tree estimated in metres from ground;
- canopy spread estimated in metres from ground;
- health assessment (canopy, trunk); and
- habitat values (for example, presence and/or number of hollows, nests, termites, scratches and scats).

The entire tree trunk and branches are visually surveyed from ground for habitat values including hollows. The spread of trees over 300 mm DSH was mapped to indicate foraging habitat for the species as per the conservation advice. Hollow bearing trees were plotted across the entire site as part of earlier assessments for this species.

Notably, retained corridors that were not tree plotted for trees over 300 mm DSH are considered functionally lost to the Greater Glider due to their susceptibility to disturbance that will arise as a result of the action. The proportion of foliage cover in impact portions of each assessment unit were therefore attributed to retained conservation areas to estimate total foraging habitat potentially impacted.

The subject site has been assessed using a modified version of the Guideline. The purpose of this guideline is to provide a methodology for proponents to determine the habitat quality of a site under the Queensland Environmental Offsets framework. The Guideline is a step-by-step methodology explaining how to measure habitat quality for land-based offsets. This methodology has been adopted and tailored/modified to assess the impacts and offsets relating to Matters of National Environmental Significance (MNES).

The traditional terrestrial habitat quality assessment assesses three (3) core indicators—site condition, site context and species habitat index.

For the spatial analysis, the modified habitat quality assessment (MHQA) combines the three (3) key indicators from the Queensland State Government guide into two (2) (site condition and site context) with each being weighted 30% of the final score. The balance of the weighting, 40%, has been attributed to the third indicator (species stocking rate), that is independent of the Queensland State Government habitat quality assessment. The species stocking rate has been added to the MHQA to better incorporate MNES, and specifically the endangered Greater Glider. The following subsections detail the methodology utilised to assess the site condition, site context and species stocking rate under the MHQA.

The features based assessment to cater for Yellow Bellied Glider denning and breeding habitat relies on hollow counts plus an error margin of 20% for field surveys based on relevant literature.

3.3.9.1 Site Condition (30%)

The site condition assessment under the MHQA is assessed using 15 condition characteristics being: recruitment of woody perennial species in EDL;

- native plant species richness – trees;
- native plant species richness – shrubs;
- native plant species richness – grasses;
- native plant species richness – forbs;
- tree canopy height;
- sub-canopy cover;
- tree canopy cover;
- native grass cover;
- organic litter;
- large trees;
- coarse woody debris;
- non-native plant cover;
- quality and availability of food and foraging habitat; and
- quality and availability of shelters.

Assessment of the above condition characteristics do not differ from the traditional habitat quality assessment. Scoring tables for the site condition attributes follows the scoring tables within the BioCondition manual (refer above). In developing the MHQA to better incorporate MNES, two (2) species habitat index characteristics, being, (1) quality and availability of food and foraging habitat, and (2) quality and availability of shelter have been added to the site condition indicator. The quality and availability of food and foraging habitat index attributes are based on the site condition features that relate to the presence of canopy in the ecologically dominant layer where the species feeds scored as a proportion against the T1 tree canopy cover benchmark, where <33% of the expected benchmark scores 1, 33% to 66% scores 5, and >66% scores 10. The T1 canopy cover is considered a suitable metric for foraging habitat given the size class includes only the T1 dominant layer and all Regional Ecosystems contain Yellow Bellied Glider foraging species within the ecologically dominant layer according to the relevant Regional Ecosystem technical descriptions. The quality and availability of shelter habitat index attributes are based on hollow counts per hectare plus an error margin of 20% based on relevant literature relative to conservation advice expectations (i.e. 2 to 4 hollows per 2 ha), where <1 hollow per ha scores 1, 1 to 2 hollows per ha scores 5, and greater than 2 hollows per ha scores 10.

As the Yellow Bellied Glider is most reliant upon upper tree canopy for foraging and hollows for shelter than other ecosystem attributes, the overall Site Condition score has been additionally weighted 40% for the traditional condition attributes (species richness etc.), 20% for quality of foraging habitat and 40% for quality of shelter habitat.

3.3.9.2 Site Context (30%)

The site context assessment deals with the site and its adjacent surroundings. Site context is measured using a suite of attributes to describe the location of the habitat within the surrounding landscape and the influence of its associated threats. This assessment also considers the influence of adjacent vegetated areas and State mapped ecological corridors. Under the MHQA, site context is measured using the following seven characteristics:

- size of patch;
- connectedness;
- context;
- State mapped ecological corridors;
- role of site location to species overall population in the state;
- threats to the species; and
- species mobility capacity.

Unlike the traditional habitat quality assessment methodology where site connectedness is assessed against the surrounding remnant vegetation only, the MHQA site connectedness is assessed against the surrounding MNES habitat, in this instance, Yellow Bellied Glider habitat as per Eyre et al. 2022.

Assessment methodology for site context assessment for Yellow Bellied Glider is outlined below:

1. Patch size – The calculation of the area of the patch size uses the method outlined in the Biocondition assessment manual v2.2 that considers the patch to be areas connected by corridors greater than 200 m wide within a 1 km radius of the site. This methodology includes use of a "segmentation" process that removes areas connected to the assessment area by narrow corridors.
2. Connectedness – Connectivity relates to the capacity that the species have to disperse through the landscape. The attribute is calculated using GIS by measuring the length of habitat that is along the boundary of the site.
3. Context – The context score is calculated by GIS to quantify the amount of vegetation immediately surrounding the assessment site. The attribute is measure of the percentage of habitat within a 1 km buffer of the site.
4. State mapped ecological corridors – This attribute is as per the methods of the Guide to determining terrestrial habitat quality V1.2 and is used to determine if a site is located within or shares a boundary with an ecological corridor that facilitates long term ecosystem function by connecting large patches of remnant vegetation with sufficient tract size (corridor width in relation to the fragmentation of the landscape) (EHP 2014). These corridors support the habitat of MNES by providing opportunity for long term dispersal of habitat species following landscape level changes in climate. Although the ecological corridors allow for the dispersal of MNES themselves, this is not their primary function when assessing the attribute. The ecological corridors have been mapped by the Queensland State Government under the 'CORR_TYPE' attribute table. The mapping can also be viewed on Queensland Globe in the 'Statewide Biodiversity Corridors' layer.
5. Role of site location to species overall population in the state – This attribute is based on the observed role of the site in relation to the overall population of the species. The scoring table considers the species' use of the site – such as whether it is used for feeding and/or nesting and

the effect that damage to or removal of the site would have to the likelihood of the species' overall population survival.

6. Threats to species – Threats to Yellow-bellied Glider are predominantly habitat loss, timber harvesting, feral predator attack, barbed wire and uncontrolled bushfire. A risk matrix relative to the conservation advice for the Greater Glider was applied to determine threats to species:
    - Habitat loss is considered Very High Risk under the Yellow-bellied Glider conservation advice. Clearing and fragmentation of habitat is scored Low, Moderate and High and weighted according to risk factor relative to the expected threat score for each (summed vertically as 15 for Low, 7 for Moderate or 1 for High).
    - High intensity bushfire is considered Very High Risk under the Yellow-bellied Glider conservation advice. Inappropriate fire regimes is scored Low, Moderate and High relative to the implementation of an endorsed bushfire management plan and fuel load weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
    - Timber harvesting is considered Very High Risk under the Yellow-bellied Glider conservation advice. Timber harvesting is scored Low, Moderate and High relative to the implementation and frequency of timber harvesting and weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
    - Feral Cat attack is considered Low Risk under the Yellow-bellied Glider conservation advice. Feral Cat attack is scored Low, Moderate and High relative to the presence of Feral Cats and level of cover available and weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
    - Fox attack is considered Low Risk under the Yellow-bellied Glider conservation advice. Fox attack is scored Low, Moderate and High relative to the presence of Foxes and level of cover available and weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
    - Barbed wire entanglement is considered Low Risk under the Yellow-bellied Glider conservation advice. Barbed wire entanglement is scored Low, Moderate and High relative to the amount of barbed wire in and bordering the site and weighted according to risk factor relative to the expected threat score for each (summed vertically as 15, 7 or 1).
    - Habitat degradation from feral Deer is considered Low Risk under the Yellow-bellied Glider conservation advice. Deer degradation is scored Low, Moderate and High relative to the presence of Deer and weighted according to risk factor relative to the expected threat score for each (15, 7 or 1).
8. Species mobility capacity – This attribute is a measure of the presence and severity of factors that would contribute to a reduction in mobility of Yellow-bellied Glider and is scored on the presence of roads or cleared areas.

In developing the MHQA, three (3) species habitat index characteristics were nominated — role of site location to overall species population in the state, threats to the species and species mobility capacity.

3.3.9.3 Species Stocking Rate (40%)

The MHQA incorporates species stocking rate as an attribute not discussed under the traditional terrestrial habitat assessment methodology. Species stocking rates are estimates of the Yellow-bellied Glider carrying capacity of the site at the time of undertaking the survey. Given the discreet nature of the Yellow-bellied Glider and limited to no published literature on habitat carrying capacity of the species, the species stocking rate scoring methodology has been derived through the collation of site-specific surveys and surrounding contextual habitat analysis.

Species stocking rate is calculated using the following parameters:

- Species presence on or adjacent to the assessment unit – evidence of Yellow-bellied Glider on or adjacent to the assessment unit.
- Species usage (habitat type and evidenced usage) – evidence of Yellow-bellied Glider usage of the assessment unit.
- Approximate density of the species – evidence of Yellow-bellied Glider records in the assessment unit.
- Role/importance of species population on site – considers whether the site is a key source population for breeding, dispersal, is necessary for maintaining genetic diversity or near the limit of the species' range.

3.3.10 Yellow-bellied Glider Discussion

3.3.10.1 Site Condition (30%)

AU1 (Non-remnant RE12.9-10.19a) achieved an average score for Site Condition of **1.93** out of 3. AU2 (Remnant RE12.9-10.2) achieved an average score for Site Condition of **2.03** out of 3. AU3 (Remnant RE12.3.11) achieved an average score for Site Condition of **1.37** out of 3. AU4 (Remnant RE12.9-10.7) achieved an average score for Site Condition of **1.99** out of 3.

The transects generally scored poorly for large trees per ha, coarse woody debris, and non-native plant cover and scored moderately for species richness of shrubs, grasses and forbs. As per the recorded canopy cover, all assessment units scored a **10** for quality and availability of food and foraging habitat. Based on hollow counts, Assessment Units 1, 2 and 4 scored **5** and AU3 scored **1** for quality and availability of shelter habitat.

3.3.10.2 Site Context (30%)

Size of Patch

This attribute is a measure of the size of the patch of vegetation in which the assessment unit is located. The scoring reflects the importance of large patches in the landscape and is based on the size of the patch of habitat connected to the site in this instance. This attribute is scored such that is reflects the fact that larger patches are less susceptible to ecological edge effects and are more likely to sustain viable populations of native flora and fauna than smaller patches. The size of patch attribute was calculated using GIS, and achieved a score of **10** out of 10 as the site was calculated to be >500 ha (greater than 200 ha as per the Queensland BioCondition Assessment methodology).

Connectedness

As a landscape level attribute, connectedness aims to assess the degree to which the assessment unit is connected with adjacent Yellow-bellied Glider habitat. Connectedness relates to the capacity of the species to disperse through the landscape between sustainable patches of habitat, and therefore has important implications for species persistence. Connectedness was calculated using GIS, with the percentage of project area boundary length supporting habitat connection off and on-site was calculated at 56%, and consequently this attribute scored a **4** out of 5.

Context

The context attribute refers to the amount of habitat that is retained within a 1 km buffer of the site being assessed and is calculated using GIS. Retained habitat within a 1 km buffer of the impact site was calculated at 48%, and therefore the context attribute achieved a score of **4** out of 5.

Ecological Corridors

The impact site area does not form part of any mapped ecological corridors. Therefore, this attribute was scored **0** out of 6.

Role of site location to species overall population in the state

This attribute aims to quantify the geographical importance of the site for Yellow-bellied Glider populations across the broader state. At the impact site this attribute achieved a score of **5** out of 5 given the site contains potential habitat for the Yellow-bellied Glider.

Threats to species

The threats to the species attribute aims to quantify the risk to survival of the Yellow-bellied Glider on-site. Key known threats to the survival of the species include the existing roads and canopy breaks, as well as predation by feral animals and uncontrolled fire regimes.

The impact site is considered to have a hire fuel load being unmanaged remnant and regrowth vegetation and multiple burnt out cars are present, including one dumped and set alight while field work was being undertaken. The site scores high for inappropriate fire regimes.

The site is zoned for development. No timber harvesting occurs on site. Foxes, Cats and Deer were not recorded on site. The entire road is flanked by barbed wire fencing to contain stock.

Analysis against the risk matrix suggests that the site scores **6.81**, or a **7** out of a possible 15 for threats.

3.3.10.3 Species Stocking Rate (40%)

Species stocking rates are estimates of the Yellow-bellied Glider carrying capacity of each assessment unit at the time of undertaking the survey. A species stocking rate score of **25** out of 70 was attributed to all assessment units. This was attributed to the fact that evidence of Yellow-bellied Glider has records in the vicinity and potential denning and foraging habitat is available on site.

Summary

Taking into account the Site Condition, Site Context and SSR scores, the impact site spatial MHQA scores a 5 (5.34) out of 10 for potential Yellow-bellied Glider habitat.

The impact site maintains a total of 204 hollows representing denning and breeding habitat (or shelter) that, taking into consideration the 20% error margin, suggests a total of 245 hollow features will potentially be lost to the species.

Refer **Table 24** for s summary of the impact site Yellow-bellied Glider MHQA results.

Table 24: Impact area Yellow-bellied Glider MHQA results summary

MHQA Final Weighting	AU 1	AU 2	AU 3	AU 4
Site Condition (/3)	1.93	2.03	1.37	1.99
Site Context (/3)	1.98	1.98	1.98	1.98
Species Stocking Rate (/4)	1.43	1.43	1.43	1.43
Assessment Unit Area (Impact) (ha)	31.60	33.40	6.20	4.10
Total Impact Area (ha)	75.30	75.30	75.30	75.30
Size Weighting	0.42	0.444	0.08	0.05
AU Weighted Score	2.24	2.41	0.39	0.29
Total Weighted Score	**5.34**			

3.3.11 Swift Parrot – Features-based Assessment Methodology

All key foraging species were plotted throughout the impact area with a handheld GPS device (Trimble) to record locations (accuracy ±1 m), and the following parameters of each tree specimen were recorded:

- tree species, via a combination of observations of the gum nuts, buds, leaves, bark and growth form;
- diameter of the trunk of the tree measured using the standard method of DSH;
- height of the tree estimated in metres from ground;
- canopy spread estimated in metres from ground;
- health assessment (canopy, trunk); and
- habitat values (for example, presence and/or number of hollows, nests, termites, scratches and scats).

Foraging species over 300 mm DSH are considered suitable to provide preferred foraging habitat for the life of the approval, in this case the key foraging species *Eucalyptus tereticornis* and *Corymbia citriodora*.

3.3.12 Swift Parrot Discussion

The Swift Parrot was not recorded on site despite targeted surveys. There have been no recent records of the Swift Parrot within 5 km of the impact site. A total of 187 key foraging trees for the Swift Parrot will be removed under the proposal (refer **Table 25**).

Table 25: Impact site Swift Parrot summary

Key Foraging Species	Count Impacted
Corymbia citriodora	33
Eucalyptus tereticornis	154
Total	187

3.3.13 Regent Honeyeater – Features-based Assessment Methodology

All key foraging species were plotted throughout the impact area with a handheld GPS device (Trimble) to record locations (accuracy ±1 m), and the following parameters of each tree specimen were recorded:

- tree species, via a combination of observations of the gum nuts, buds, leaves, bark and growth form;
- diameter of the trunk of the tree measured using the standard method of DSH;
- height of the tree estimated in metres from ground;
- canopy spread estimated in metres from ground;
- health assessment (canopy, trunk); and
- habitat values (for example, presence and/or number of hollows, nests, termites, scratches and scats).

Foraging species over 300 mm DSH are considered suitable to provide preferred foraging habitat for the life of the approval, in this case the key foraging species *Corymbia citriodora*.

3.3.14 Regent Honeyeater Discussion

The Regent Honeyeater was not recorded on site despite targeted surveys. There is one recent record of Regent Honeyeater within 5 km of the impact site within bushland west of the impact. A total of 33 key foraging trees for the Regent Honeyeater will be removed under the proposal (refer **Table 26**).

Table 26: Impact site Regent Honeyeater MHQA results

Key Foraging Species	Count Impacted
Corymbia citriodora	33
Total	33

4. Overview of Offset Area

4.1. Offset Property Description and Tenure

The Willow Vale Offset Area is located at Esk Crows Nest Road, Biarra, QLD, 4313, within the Somerset Regional Council (SRC) Local Government Area (LGA), approximately 17 km west of the Queensland town of Esk and approximately 12km south of Toogoolawah. The Offset Area is currently zoned as Rural under the Somerset Regional Council Planning Scheme and is comprised of Lots 140 on CA31918, 213 on CA31970, 214 on CA311183, 2 on RP22348, 2 on SP269793, 97 on RP215969 and 42 on CA31692.

4.2. Offset Area Description

The Offset Area is located approximately 93 km north-west of the impact area (refer **Plan 3**). Key details relating to the Offset Area are provided in **Table 27.**

Table 27: Willow Vale Offset Area summary

Address:	Biarra, QLD, 4313				
Lot/plan(s):	140CA31918	213CA31970	214CA311183	2RP223480	42CA31692
Area (ha):	65 ha	65.1 ha	77 ha	61.6 ha	53.9ha
Area (ha) within Offset Area	32.3 ha	65.1 ha	68.8 ha	60.6 ha	38.7 ha
Total lot area:	322.6 ha (total Offset Area 265.5 ha)				
Tenure:	Freehold				
Local Government:	Somerset Regional Council (SRC)				

The Offset Area has been secured to help compensate for the New Beith Road Project's significant residual impact on the TEC, Koala, GHFF, Greater Glider, Yellow-bellied Glider, Swift Parrot and Regent Honeyeater. The offset proposal is a direct land-based solution that will establish new habitat and restore and rehabilitate regrowth and remnant habitat. Based on ground-truthed AUs, the Offset Area is 265.5 ha in size with 108.7 ha remnant (AU1-AU3), 96.3 ha non-remnant vegetated (AU4 – AU6) and 60.6 ha non-remnant paddock vegetation (AU7-AU10), totalling 156.9 ha in non-remnant (AU4 – AU10) overall.

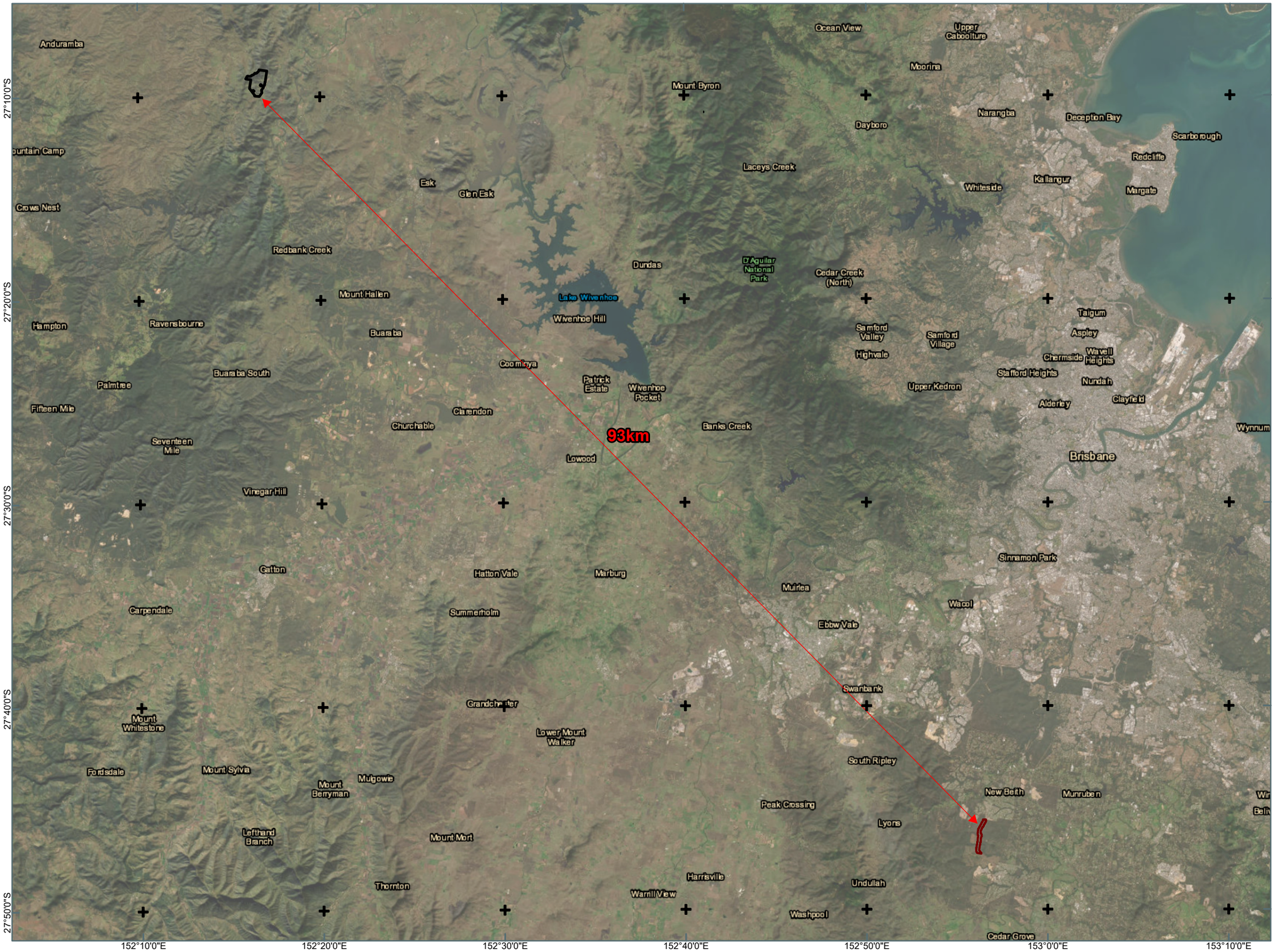
The mix of paddock and scattered trees within the Offset Area as a result of historical disturbance allows for the intended conservation outcomes of restoration to be achieved (refer **Plan 4** and **Plan 5**). The Offset Area contains large mature eucalypts and hollow-bearing trees within scattered and dense vegetation patches with the ability to potentially support the TEC, Koala, GHFF, Greater Glider, Yellow-bellied Glider, Swift Parrot and Regent Honeyeater habitat with well-connected and functioning corridors to adjacent patches of intact vegetation. The rehabilitation of the proposed Offset Area will provide a net gain of threatened species habitat by strategic habitat restoration. As it is adjacent to regional biodiversity corridors and conservation areas, this habitat is optimally located to maximise the projected benefits to MNES.

It is important to note that there are two building envelopes allowed for within the proposed offset area evident on **Plan 4** and subsequent plans. These building envelopes have been separated from the offset

area to allow for the construction of necessary caretaker residences for ongoing stewardship and management of the offset site including bushfire setbacks. They do not form part of the offset nor offset area calculations. Both residence areas will be accessed by existing and ongoing fire trails with no new clearing for residence access required (refer also **Section 9.2**). It is anticipated that each residence will generate minimal traffic expected for a typical rural property private access so threat elevations to MNES beyond existing rural use levels are not anticipated.

Upon EPBC Act Approval, the offset will be protected via a Voluntary Declaration under the *Vegetation Management Act 1999* prior to commencement of the action followed by a permanent securing method agreed with the Department, which will provide protection for the duration of the impact. An assessment of the suitability of the proposed Offset Area is provided in **Section 5**.

03. CONTEXT



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LEGEND

- Offset Area
- Referral Area/Impact Site [90.4 ha]

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PEET

WILLOW VALE OFFSET

0 2 4 6 8 km

N

Transverse Mercator 1:350,000
GDA 2020 | Zone 56 @ A3

Address / RPD: Biarra, QLD

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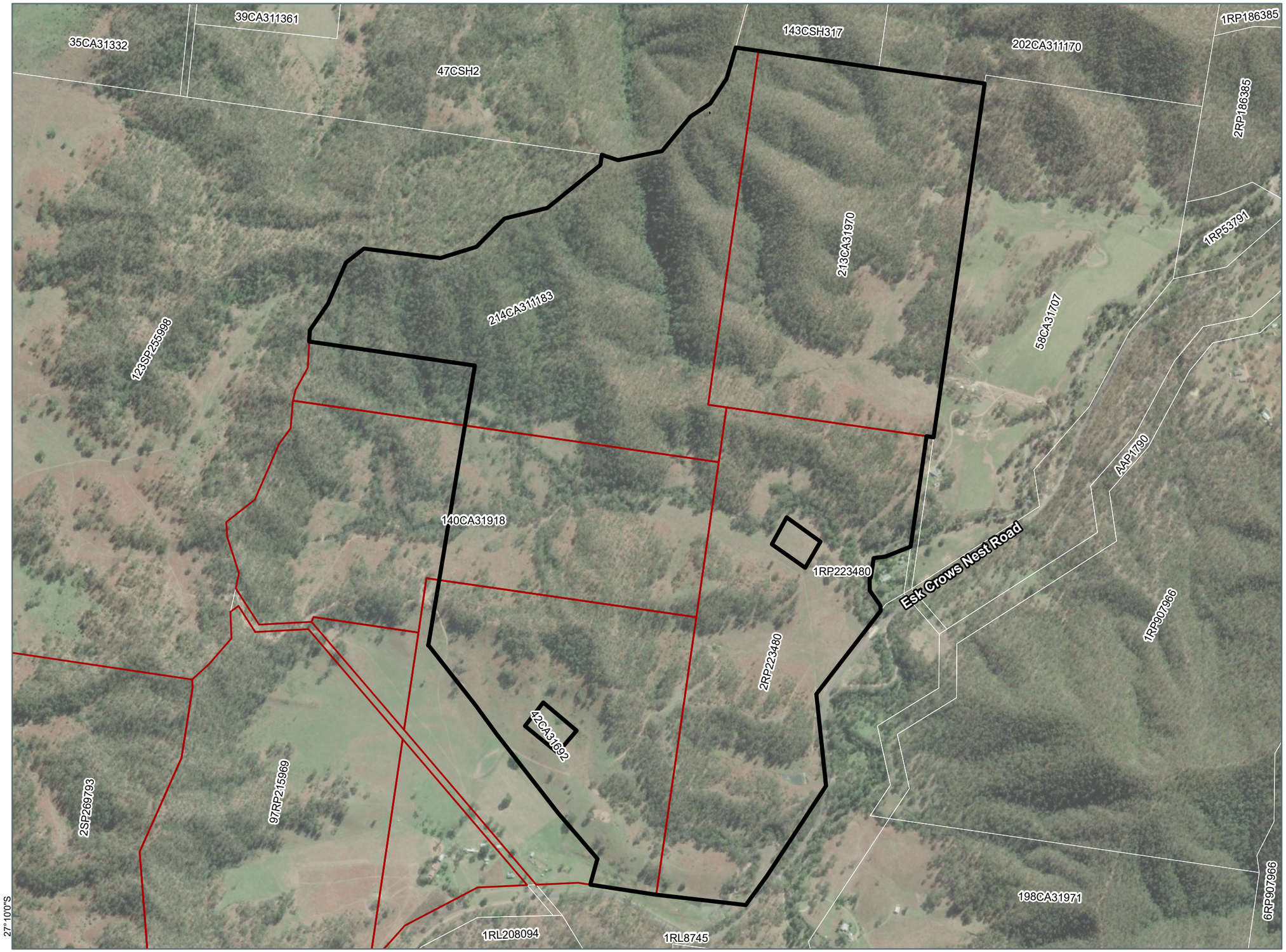
04. AERIAL



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LEGEND

- Qld DCDB
- Offset property boundaries
- Offset Area

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WILLOW VALE OFFSET

0 100 200 300 m

N

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1:11,000 @ A3

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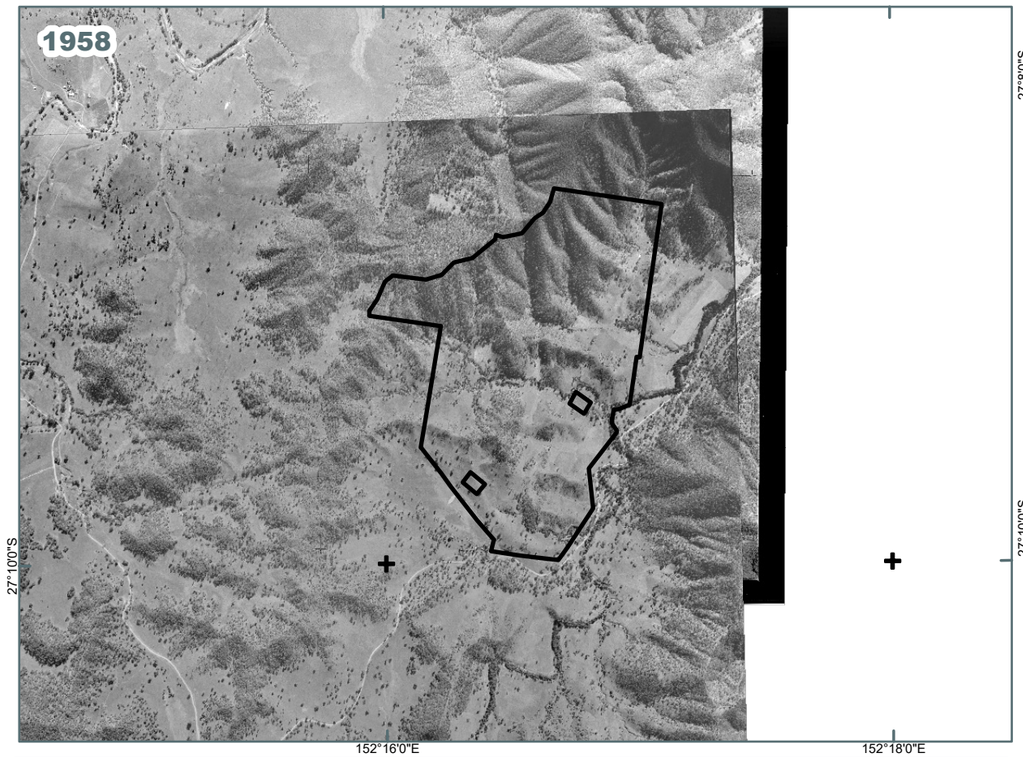
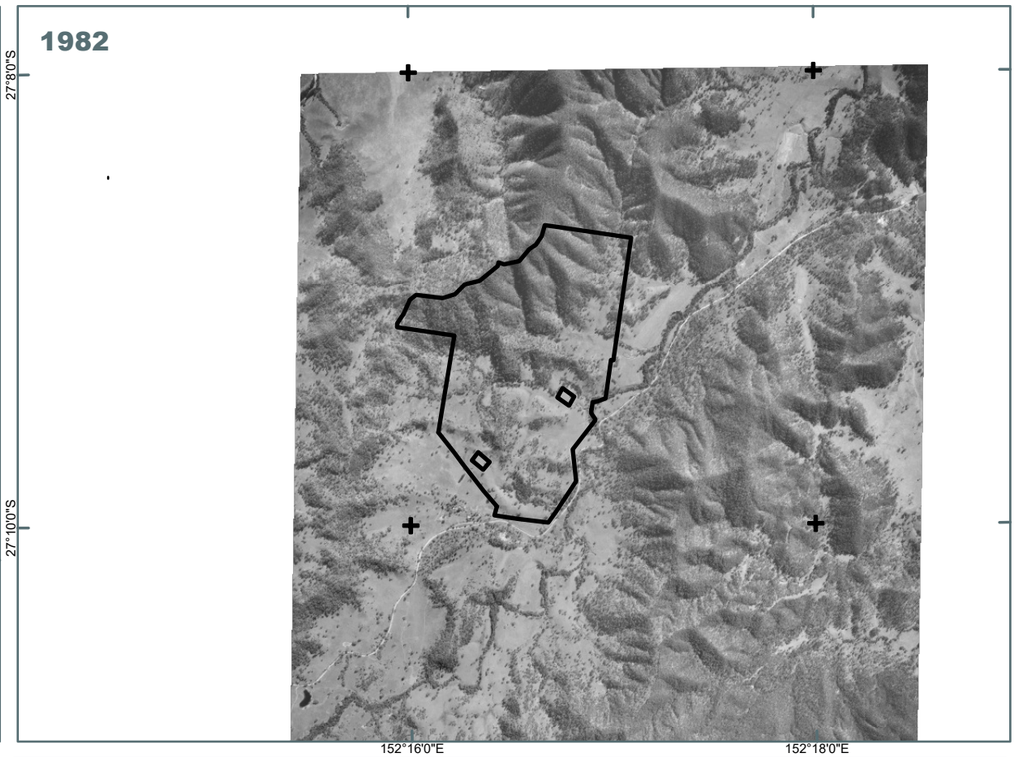
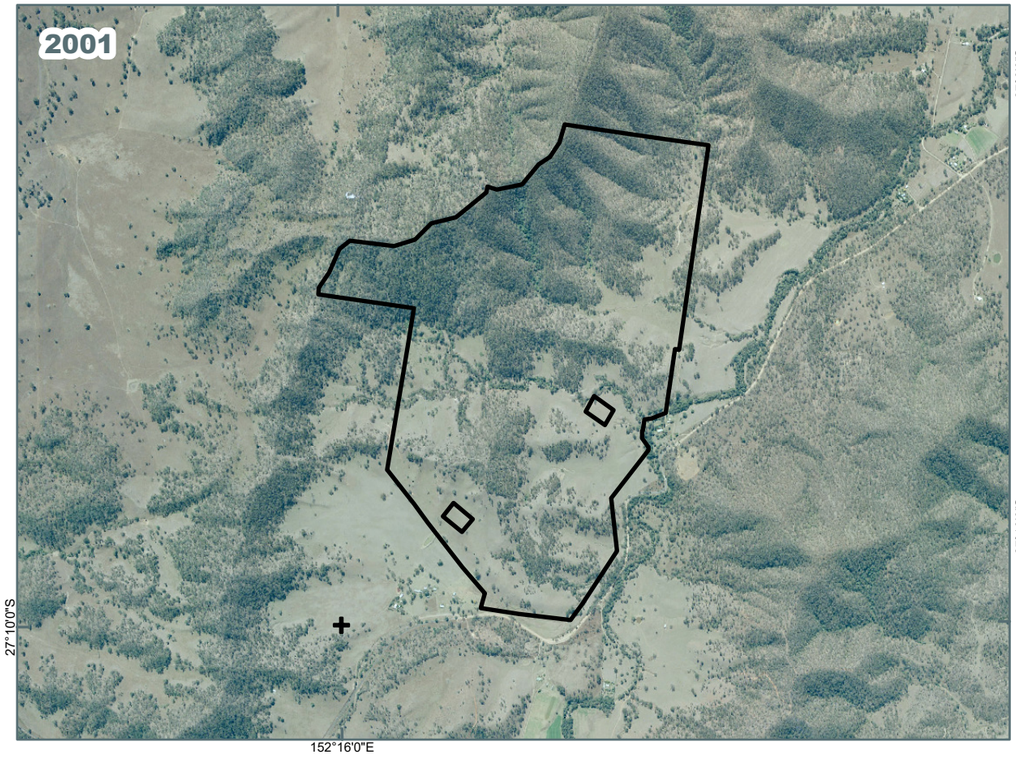
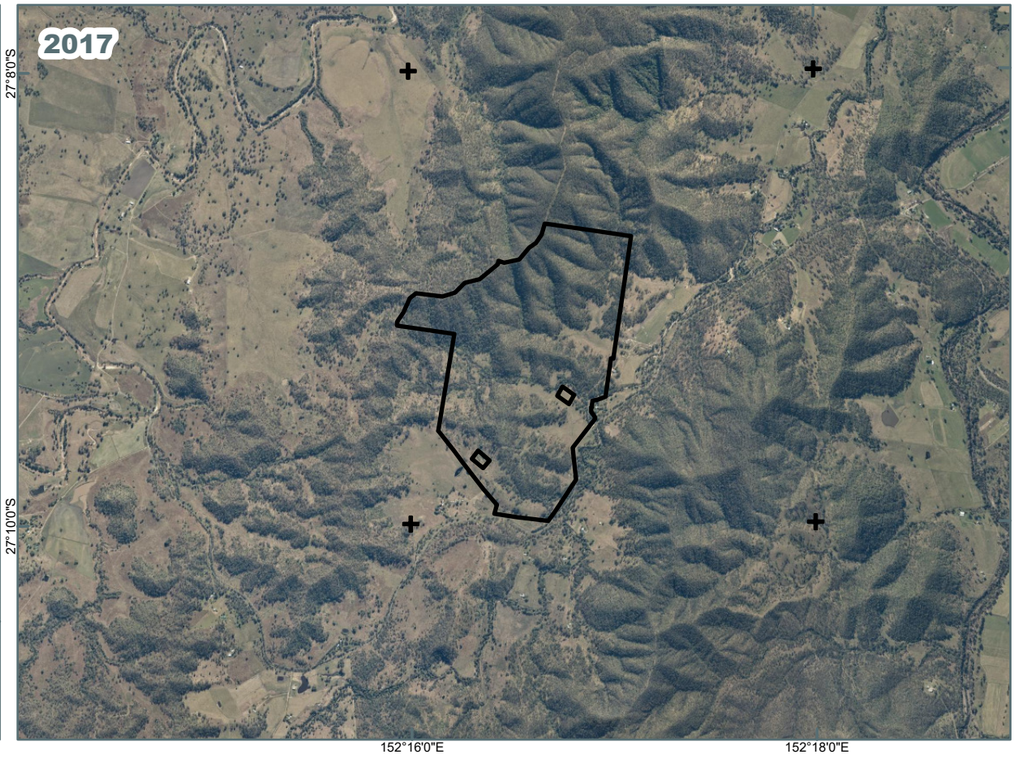
05. AERIAL HISTORY









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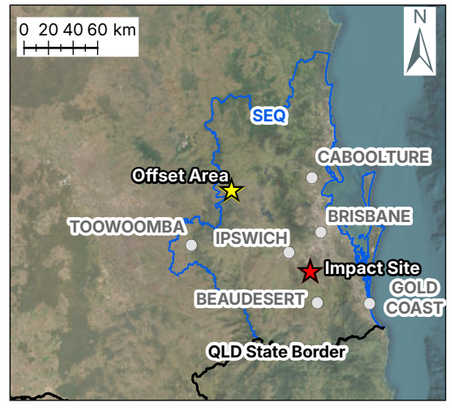
LEGEND

Offset Area



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WILLOW VALE OFFSET

0 500 1,000 m

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8418 E 05 OMP_Esk Aerial History A

5. Offset Area Suitability

As detailed **Section 4**, one (1) Offset Area has been selected to be secured to help acquit the impacts to MNES under EPBC 2023/09505 and provide benefit additional to the required compensation for residual impacts. The suitability of the Offset Area is discussed within this section and considers the bioregional context of the site, ecological values, water resources and topography and existing habitat values for MNES.

5.1. Bioregional Context

Queensland is divided into 13 biogeographical areas to identify biodiversity features at a regional scale. The Offset Area is located in the South East Queensland (SEQ) Bioregion. The SEQ Bioregion shares its western boundary with the Brigalow Belt Bioregion and extends from the Border Ranges on the New South Wales border, north to the dry coastal corridor between Gladstone and Rockhampton (DEHP 2016). The McPherson Range borders the southern boundary of the bioregion while the Great Dividing Range is to the west. Ranges extend north south through the central region creating an altitudinal gradient from the coast. Small volcanic plugs remain in the landscape offering distinctive conditions for taxa and ecosystems (DEHP 2016). Large sand islands off the coast offer unique environments and create sheltered bays and passages within which marine and coastal plants and animals thrive (DEHP 2016). The impact area and Offset Area are both in the same sub-bioregion, being the Moreton Basin.

5.2. Offset Area Values

5.2.1 Regional and landscape context

The proposed Offset Area sits within the Biodiversity Planning Assessment regional corridor and South East Queensland Regional Plan (*'ShapingSEQ 2023'*) regional biodiversity corridor that spans from the Noosa headland in the north, down to Mount Barney and Lamington National Park on the Queensland border (refer **Plan 6**).The corridor aims to encompass large tracts of vegetation, terrestrial connectivity, aquatic connectivity, species richness, diversity and refugia, ecosystem representation and uniqueness and climate resilience areas (Queensland Government 2017).

The regional biodiversity corridor forms part of the Great Eastern Ranges (GER) terrestrial corridor which extends from the mountains of Victoria to the Atherton Tablelands in far north Queensland (Mackay *et al.* 2010). The GER corridor provides habitat and movement for a range of species that have Federal, State and Local significance, supports significant cultural heritage values and offers scenic amenity and outdoor recreation opportunities (Mackay *et al*. 2010).

The proposed Offset Area will conserve freehold land surrounding the regional biodiversity corridor, extending the habitat within the adjoining legally bound environmental offset areas and that is generally available around the remnant vegetation within the regional biodiversity corridor. The proposed Offset Area is well positioned to provide high conservation values once rehabilitated through the management actions proposed in this OMP and contribute to the provision of protected, well-connected, and high-quality MNES habitat in the region. By assisting the natural revegetation, replanting, and removing pests, weeds, and threats, the property will provide biodiversity offsets that ensure an ecological gain on the

residual impacts resulting from the impact area which aligns with offset principle 1 of the Environmental Offsets Policy (EOP).

5.2.2 Topography

Topographically, the Offset Area reflects a series of slopes, with several drainage features leading into the eastern Oaky Creek that runs adjacent to the site (refer **Plan 7**). Elevation ranges from approximately 445 meters above sea level (AHD) at the summit in the north of the property down to approximately <200 meters AHD in the eastern portions of the site and gully lines. The terrain generally rises from east to west, with steeper slopes and higher elevations concentrated in the northwestern sections of the property.

The impact site and Offset Area are also located within the same Southeast Queensland bioregion (SEQ Bioregion 12) established and mapped by the Queensland Government. Furthermore, both the impact and offset properties are located within the same sub-region of Bioregion 12 mapped under the Southeast Queensland Biodiversity Planning documents, therefore experiencing similar climatic, landform, geological, topographical, vegetation and biota patterns. It is noted that the Offset Area is 93 km north-west of the impact site (**Plan 7**).

5.2.3 Water resources

Nine (9) waterways are mapped throughout the Offset Area, being Oaky Creek that is Major (purple) risk, one (1) High (red), two (2) Moderate (amber) and five (5) Low (Green) risk Waterways for Waterway Barrier Works (WWBW) under the Queensland *Fisheries Act 1994* (**Plan 7**). Several flow paths that are undetermined features under the *Water Act 2000* are also mapped throughout the offset property. These features contribute to a network of gully lines that flow toward Oaky Creek.

Oaky Creek transverses through the eastern portion of the Offset Area fed by multiple tributaries. Ivory Creek is situated approximately 2.5 km to the west of the site with Cressbrook Creek approximately 2.5 km to the east of the site. This graduation in topography and hydrology indicates the offset property's potential to support a range of aquatic and terrestrial ecological functions. These watercourses can be observed in **Plan 7**. Vegetation is consistent across the proposed Offset Area.

5.2.4 MNES habitat

The proposed Offset Area comprises of a mixture Category X (non-remnant) and Category B (remnant) vegetation which is mapped with numerous Regional Ecosystems. Species present are indicative of the vegetation communities that are described in **Table 28.**

Table 28: Regional ecosystem descriptions

Status	Regional Ecosystem	Description
Endangered	RE 12.3.3	*Eucalyptus tereticornis woodland. Eucalyptus crebra and E. moluccana are sometimes present and may be relatively abundant in places, especially on edges of plains and higher level alluvium. Other species that may be present as scattered individuals or clumps include Angophora subvelutina or A. floribunda, Corymbia clarksoniana, C. intermedia, C. tessellaris, Lophostemon suaveolens and E. melanophloia. Occurs on Quaternary alluvial plains, terraces and fans where rainfall is usually less than 1000mm/y. Not a Wetland. (BVG1M: 16c).*
Least Concern	RE 12.3.7	*Narrow fringing woodland of Eucalyptus tereticornis, Casuarina cunninghamiana subsp. cunninghamiana +/- Melaleuca viminalis. Other species associated with this RE include Melaleuca bracteata, M. trichostachya, M. linariifolia. North of Brisbane Waterhousea floribunda commonly occurs and may at times dominate this RE . Melaleuca fluviatilis occurs in this RE in the north of the bioregion. Lomandra hystrix often present in stream beds. Occurs on fringing levees and banks of rivers and drainage lines of alluvial plains throughout the region. (BVG1M: 16a)*
Least concern	RE12.11.6	*Open forest to woodland of Corymbia citriodora subsp. variegata generally with Eucalyptus crebra. Other species such as Eucalyptus exserta, E. tereticornis, E. moluccana, E. melanophloia, E. acmenoides, Corymbia tessellaris and Angophora leiocarpa may be present in scattered patches or in low densities. Understorey grassy or shrubby. Occurs on Palaeozoic and older moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. Drier habitats than RE 12.11.5. Not a Wetland. (BVG1M: 10b).*
Least concern	RE 12.12.5	*Open forest to woodland of Corymbia citriodora subsp. variegata, usually with Eucalyptus crebra. Other species such as Eucalyptus exserta and E. moluccana present in scattered patches or in low densities. Understorey generally grassy. Occurs on hills and ranges on Mesozoic to Proterozoic igneous rocks. Not a Wetland. (BVG1M: 10b).*

5.2.5 Current management arrangement

Presently, the proposed Offset Area is utilised for cattle grazing and is managed through various farming practices. This includes the use of the following management activities:

- Controlled grazing to ensure ground cover levels are maintained, subsoil moisture is retained, and pasture growth is encouraged
- Invasive and noxious weed control in grazing areas where practicable, and;
- Establishing and maintaining adequate firebreaks across the property.

5.2.6 Current Threats

The offset property contains a number of agricultural land uses, which attracts threats to both livestock and native wildlife. The major and obvious threat within the Offset Area and broader offset property is feral dogs. The SRC lists feral dogs as abundant and widespread throughout the Somerset region with wild dogs (*Canis familiaris dingo*, *Canis familiaris dingo* X *Canis familiaris*, *Canis familiaris*) listed as declared pest animals by SRC. The SRC website documents that wild dog numbers are at an all-time high

across Somerset Regional Council area. Further, residents are increasingly engaged in raising livestock and poultry, resulting in a readily available food sources for wild dogs.

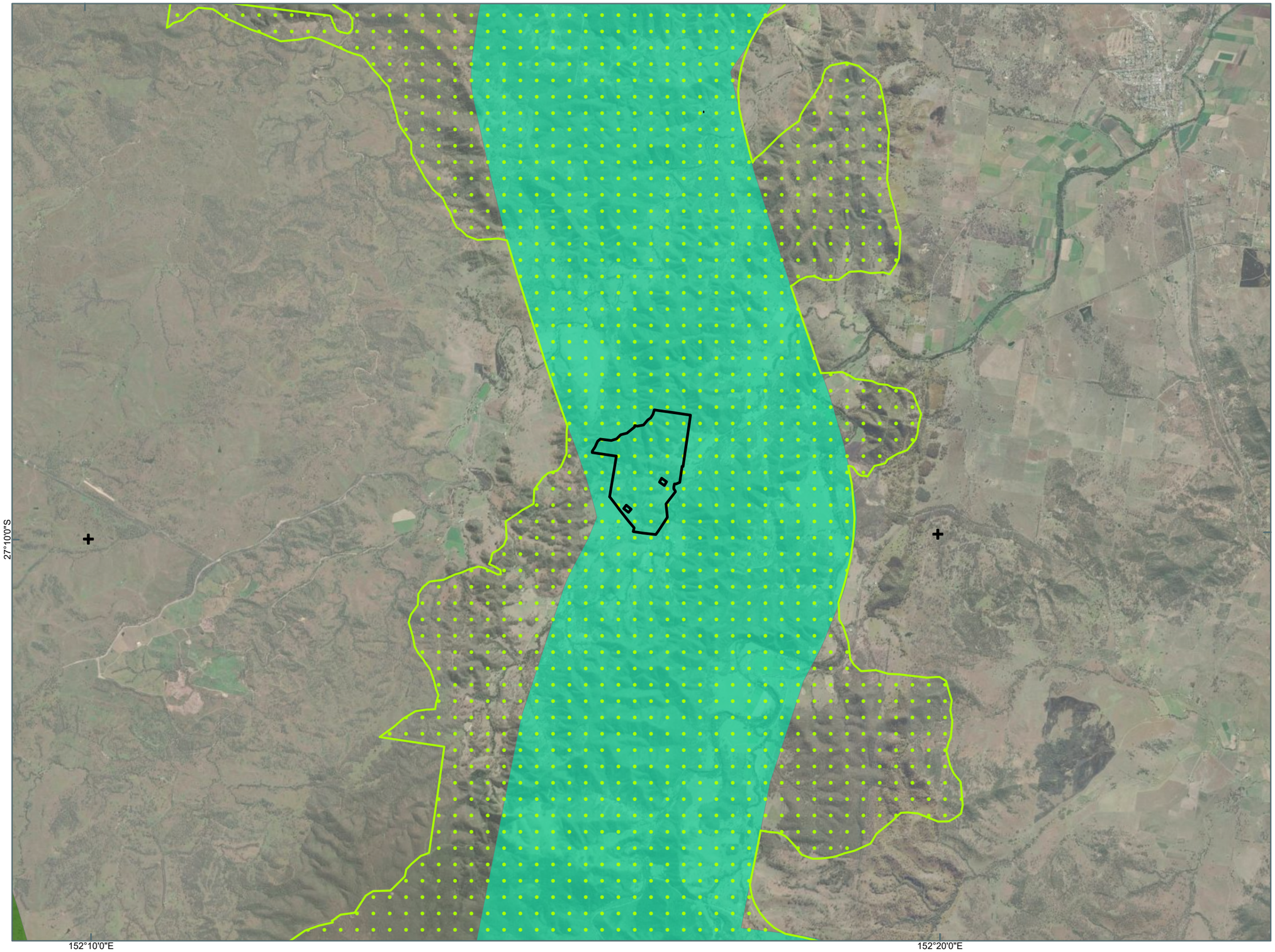
In addition, *Canis familiaris* (wild dog), *Cervus elaphus* (Red deer) and *Sus scrofa (Feral Pig)* are confirmed to occur within the offset property. The Queensland WildNet database identifies numerous confirmed records of *Canis* sp. and/or *Canis familiaris* (wild dog), European foxes and feral cats within 20 km of the Offset Area, located within connected vegetation. Wild dogs are known to travel up to 20 km seeking prey with home ranges of individuals likely to overlap with the Offset Area.

Presently, under the Queensland *Biosecurity Act 2014*, there is the 'general biodiversity obligation' for landholders to manage biosecurity risks that are under their control and take reasonable and practical steps in doing so. To determine the extent of management and to determine if it is necessary to take reasonable and practical steps in managing the biosecurity risk, the landholder is required to assess the risk and its potential harm (*i.e.,* extensive productivity loss). Currently, the landholder does not undertake feral animal control as it is assessed under the 'general biosecurity obligation' of the *Biosecurity Act 2014*, that feral animal threat to productivity does not have a positive cost benefit to the current land use (*i.e.,* the expenditure to undertake feral animal control would not result in enough economic gain in productivity to warrant implementation).

Other threats include:

- clearing and harvesting of timber for pastoral uses,
- uncontrolled wildfire;
- barbed wire; and
- significant weed infestations, in particular, *Lantana camara*.

06. SOUTH EAST QUEENSLAND BIODIVERSITY CORRIDORS



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LEGEND

- Qld DCDB
- Offset Area
- SEQ Regional Plan 2023 - regional biodiversity corridor

Qld Biodiversity Planning Assessment

- Regional (Terrestrial)

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1:75,000
@ A3

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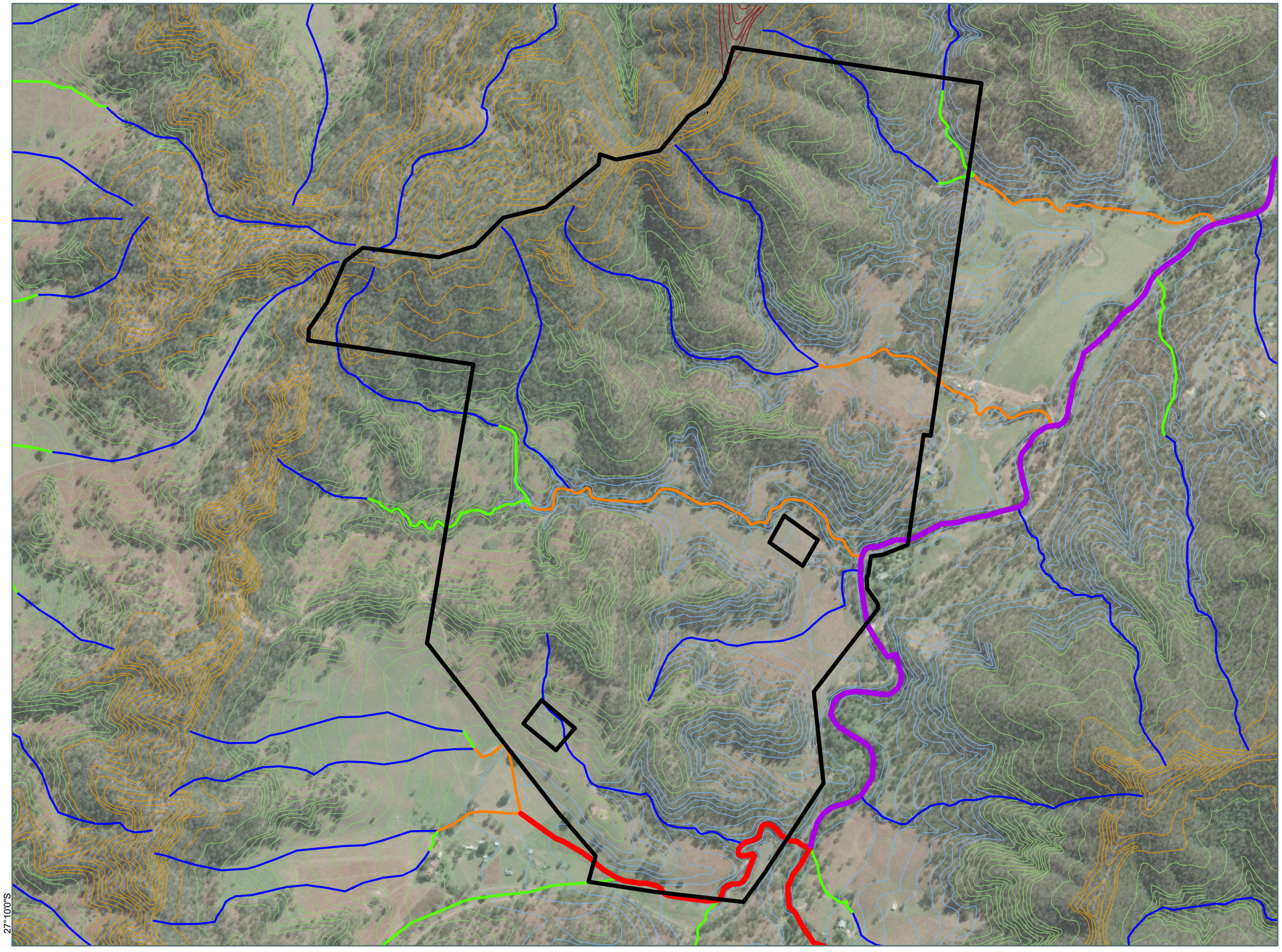
07. TOPOGRAPHY & WATER



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LEGEND

- Qld DCDB
- Offset Area

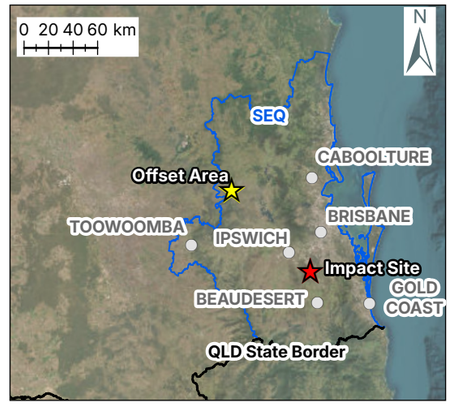
5m contours

- < 200m
- 200 - 295m
- 300 - 395m
- 400 - 445m
- Water Act - Undefined feature

DAF Waterways

Fish Passage risk rating

- Low risk
- Moderate risk
- High risk
- Major risk



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5.3. Suitability Analysis – Environmental Offset Policy

The objective of this OMP is to outline appropriate management actions to achieve the offset outcomes specified within the EPBC Act and provide an overall improved conservation outcome and net gain in MNES habitat, thereby ensuring the long-term viability of these species and communities. **Table 29** lists the principles of the EPBC Act EOP and describes how the proposed offset has been developed to adhere to these principles.

Table 29: Offset suitability analysis – Environmental Offsets Policy

EOP Requirements	Delivery
Suitable offsets must:	
Deliver an overall conservation outcome that improves or maintains the viability of the protected matter	The Offset Area will directly contribute to the ongoing viability of the MNES. Protection and management of the Offset Area in accordance with this OMP aims to deliver an overall conservation and net gain in MNES habitat. Prior to the impact, the Offset Area was not protected or managed for conservation outcomes. This OMP and management actions within will support regeneration and restoration of habitat, contributing to a connected corridor with reduced threats. In doing so, the OMP aims to encourage the use of restored and new areas of habitat through providing increased numbers and area of MNES food, foraging and shelter trees, removal of weeds and reduction in predators and other threats. The proposed offset aims to contribute to the resilience of the target MNES by increasing landscape connectivity provided through the protection of the offset properties.
Be built around direct offsets but may include other compensatory measures	The offset is built around direct offsets and easily compensates for the potential impact. The Offset Area is to be legally secured for conservation purposes prior to the impact occurring and will endure for the duration of the impact. Legally securing and managing the Offset Area in accordance with this OMP protects the areas from incompatible land uses and contributes to the viability of the MNES.
Be in proportion to the level of statutory protection that applies to the protected matter	The Offset Assessment Guide (OAG) lists the probability of annual extinction of the Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions (SEFFW), Koala and Greater Glider as 1.2%; GHFF, Yellow-bellied Glider as 0.2 and the Swift Parrot and Regent Honeyeater as 6.8%. The use of these measurements in the OAG ensures that the appropriate level of statutory protection is applied. All threats to MNES outlined in the Department's Species Profile and Threats Database (SPRAT) and EPBC Act listing advice and documents have been addressed within this OMP.

EOP Requirements	Delivery
Be of a size and scale proportionate to the residual impacts on the protected matter	Permanent protection and management for the lifetime of the approval will deliver a conservation gain adequately compensating for the quantum impact for each matter. The total Offset Area for protection and management is 265.5 ha, delivering a significant proportion of the offset requirements for each MNES that, in conjunction with the separate offsets concurrently under assessment, exceeds 100% of the requirement. Management actions outlined within this OMP aim to protect and enhance MNES habitat, compensating for and exceeding habitat quality of the impact. The offset and management actions will provide: • Legally secured and long-term protection of 265.5 ha of MNES habitat. • Improvement of habitat through revegetation and natural regeneration of food, foraging and shelter trees and removal of weeds. • Contribution to a large contiguous protected habitat and biodiversity corridor with reduced threats. • Long-term reduction in threats, through the removal of incompatible land uses. • Reduced risk of MNES mortality or injury due to vehicle strike. • Reduced risk of MNES mortality or injury due to predators, through control of non-native predators, and removal of other threats such as fencing, • Reduced risk of high intensity fire through management of fuel loads. • Reduced risk of the spread of diseases and/or pathogens.
Effectively account for and manage the risks of the offset not succeeding	Confidence in the success of the offset is high (≥75%) given the detail and intensity of the management actions outlined within this OMP. The confidence is supported by the Offset Area selection, design of management actions, and clear monitoring and reporting procedures. The Offset Area contains well-maintained access tracks that will facilitate access to high priority weed treatment areas and planting areas. Non-remnant vegetation areas across the Offset Area are considered to have a lower confidence level reflecting the potential risks relating to higher levels of disturbance, revegetation processes and plant stock success/failure rates, and natural events.

EOP Requirements	Delivery
	Risks associated with the offset delivery will be mitigated and managed through the detailed management actions outlined in **Section 9**. Management actions have been drawn from offset targets which aim to protect and conserve large, connected areas of MNES habitat to support viable populations.
Be additional to what is already required, determined by law or planning regulations, or agreed to under other schemes or programs	Legally securing the Offset Area for the duration of the impact will ensure existing and future owners are prohibited from conflicting land uses, including clearing. Management beyond minimum legislative requirements is proposed across the whole area to ensure loss of habitat values does not occur through intensification of weeds causing loss of connectivity, destruction of habitat via hot, intense fires, or increased risk of mortality or injury by predator attack.
Be efficient, effective, timely, transparent, scientifically robust and reasonable	Efficient and Effective: • The Offset Area is large and located within a contiguous landscape of connected MNES habitat. Management actions will ensure efficient delivery of outcomes over the Offset Area and proactive management, monitoring and reporting will ensure response/corrective actions are timely and focused. • Prior to the EPBC Act process, the Offset Area was not protected or managed for conservation outcomes. Protection and management of the Offset Area in accordance with this OMP aims to deliver an overall improved conservation outcome and net gain in MNES habitat. Timely: • The non-remnant vegetation provided within the Offset Area allows for the achievement of immediate and long-term conservation outcomes. The Offset Area is to be legally secured prior to the commencement clearing above at the project site. • Following the approval and implementation of this OMP, management actions outlined within **Section 9** will commence. Adaptive management processes will ensure management actions respond to technology improvements, natural events and potential risks identified in the risk assessment. Transparent: • The baseline surveys established the survey methodology to be used for the monitoring and reporting required for the

EOP Requirements	Delivery
	lifetime of the approval. A clear monitoring and reporting framework is established within this OMP (refer **Section 6**). Monitoring and reporting of the Offset Area will be summarised within the Offset Area Annual Report provided by the Offset Provider which is then included in the Annual Compliance Reports for project. Scientifically robust: • The proposed Offset Area was assessed by qualified and experienced ecologists. Ongoing management and monitoring actions will be conducted in collaboration with other qualified ecologists and regeneration specialists to achieve the outcomes specified within the EPBC Act approval and this OMP. • The baseline surveys conducted for the Offset Area follows standard, accepted monitoring methodology and are considered scientifically robust, reliable and repeatable. This will ensure the monitoring and compliance reporting are consistent and relate back to the overall outcomes specified within the EPBC Act approval. Reasonable: • The offset is considered reasonable as the Offset Area is greater than the significant residual impact on all MNES (using the OAG). • This OMP outlines appropriate management actions to achieve the offset outcomes specified within the EPBC Act approval and an overall improved conservation outcome and net gain in MNES habitat, ensuring the long-term viability of the protected matters.
Have transparent governance arrangements including being able to be readily measures, monitored, audited and enforced	This OMP provides a detailed monitoring and reporting framework, performance criteria and corrective actions (refer **Sections 9**). These provide minimum requirements for success/failure of management actions and triggers for corrective actions. The approval holder will engage qualified and experienced consultants and specialists periodically throughout the offset delivery to ensure the offset outcomes are achieved. Section 491 of the 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*

EOP Requirements	Delivery
	Biodiversity Conservation Regulations 2000 (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. As such, engaged consultants and specialists are required to complete a declaration of accuracy in reports provided to the Department, acknowledging their responsibility and accountability for information provided to the Department. Annual Compliance Reports must be published on the approval holder's website in accordance with an EPBC Act approval and may be subject to audit by the Department by an independent auditor in accordance with section 458 of the EPBC Act, and/or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the Department's website or through the general media.

5.3.1 Recovery plans and advice

5.3.1.1 Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions (SEFFW)- TEC

TEC Conservation Advice

The Conservation Advice for the SEFFW TEC came into effect from 5th October 2022.

Impact and offset are considered to be consistent with the on-ground approaches detailed in the Conservation Advice that identifies priority conservation actions under the following key approaches:

- PROTECT the ecological community to prevent further losses;
- RESTORE the ecological community by active abatement of threats, appropriate management, restoration and other conservation initiatives;
- COMMUNICATE, ENGAGE WITH AND SUPPORT people to increase understanding of the value and function of the ecological community and encourage their efforts in its protection and recovery; and
- RESEARCH AND MONITORING to improve our understanding of the ecological community and the best methods to aid its management and recovery.

Protect the ecological community

Protecting the ecological community should be ensured during the early stages of zoning and development planning decisions, including in strategic planning documents at state, regional and local levels.

The regions of TEC within the referral area proposed to be impacted adjoins an already existing road identified as New Beith Road and has been subject to significant historic and ongoing disturbance due historical logging and use as 4WD track. The project is for upgrades to the road and as such its current alignment minimises impacts to MNES by being concentrate within already disturbed regions. The referral area falls within the Flagstone PDA and as such the strategic plan for this region is for increased

urbanisation. As a result, disturbance in this region is expected to increase. By offsetting impacts to TEC the project will meet state strategic planning intentions and will protect and uplift SEFFW TEC within a region where increased urbanisation is not present.

Conserve remaining patches

There should be no further clearance and deliberate damage to patches of this ecological community that meet the minimum condition thresholds because it has been greatly reduced in its extent and ecological integrity.

The region of TEC within the referral area was observed to be of relatively low conditions as a result of historical and ongoing disturbance. Condition of vegetation is likely further decline as a result of expected increased urbanisation within the locality. The Offset Area will provide an opportunity to restore land which has historically been associated with the SEFFW TEC and protect it for the lifetime of the offset. This will result in a net increase in the current extent and integrity of SEFFW TEC within the SEQ region.

Manage actions to minimise impacts

Apply the mitigation hierarchy to avoid, then mitigate, then offset potential impacts on the ecological community from development or other actions. The priority is to avoid further clearance and fragmentation of remnants, with offsetting as the last resort.

The referral area has been chosen as to minimise impacts to potential MNES within the locality. The chosen region is associated with an already existing road with evidence of historical logging in the surrounding area. Impacts to TEC within this region cannot be avoided as upgrades to the road are required to meet the needs of future Flagstone City community. Potential impacts to TEC will be offset via land based offset. The offset will restore and protect a larger region of SEFFW TEC than that being impacted.

Apply buffer zones

Protect and apply appropriate buffers, particularly of other native vegetation, around patches of the ecological community to minimise impacts arising off-site. A buffer zone is a contiguous area adjacent to a patch, that is important for protecting the integrity of the ecological community.

The region of TEC within the referral area is already subject to edge effects as a result of occurring adjacent to an existing road. The proposed offset in regions will provide significant buffer to existing and future SEFFW TEC on site reducing the potential impacts of edge effects on the quality and condition of vegetation.

Prevent the introduction and spread of exotic species

Use an integrated weed management approach to control transformer weeds species. Where appropriate use a staged approach and use methods that reduce off-target damage. Weed control should target all problematic species. Schedule regular follow-up work to maintain effective weed management.

Weed management will be employed within the Offset Area, in particular targeting transformer species including *Lantana camara* (Lantana). The quality and condition of AU's associated with SEFF TEC will be maintained and restored through the suppression or weed species and revegetation of the offset with suitable native plant species.

Restore and manage the ecological community

This key approach includes priorities to restore and maintain remaining occurrences of the ecological community by active abatement of threats, appropriate management, restoration and other conservation initiatives. Restoration actions should be based on the best available knowledge and scientific research, to maximise positive biodiversity outcomes.

The project will result in a net increase of the extent and condition of SEFFW TEC within SEQ. AU's associated with the SEFFW TEC will be restored and protected. This will occur via a combinations of removal of threats including bushfire management, exclusion of inappropriate land use, and weed management. Active restoration and rehabilitation including planting will be employed where vegetation condition is not observed to be increase a

Manage weeds, pests and diseases

Implement effective integrated control and management techniques for weeds, pests and diseases affecting the ecological community and manage sites to prevent the introduction of new, or further spread of, invasive species.

The Offset Area will be managed for weeds and pests using integrated control methods and overall vegetation condition will be improved.

Manage trampling, browsing and grazing

Strategically timed reductions in grazing pressure are essential to ensure periodic recruitment and renewal of the tree layer. Stop grazing in the ecological community during seedling establishment. Fencing may be required, to exclude stock and native herbivores, until seedlings are at least two metres high. The most appropriate way to manage tree recruitment may be to protect individual seedlings by installing herbivore guards.

Cattle grazing will be controlled on site to minimise ecological impacts. Where cattle grazing is deemed unsuitable for restoration goals cattle will be removed.

Manage other activity and access causing degradation

Cease/prohibit and monitor wood collection, such as for firewood or fencing, that leads to the loss and damage of trees, stags, logs or disturbs the natural litter layer.

The offset is a private property and will be managed by a dedicated Offset Provider. Access by unauthorised persons will be restricted and any unauthorised access will be monitored and intervention will be taken where necessary.

Manage appropriate fire regimes

Fires (including planned burns and associated activities) must be managed, to maintain the integrity of the ecological community; avoid disruption of the life cycles of component species; support rather than degrade the habitat; avoid invasion and facilitate control of exotic species; avoid impacts from suppression and mop-up operations; and avoid increasing the impacts of other threats (such as drought, prolonged

heavy grazing or predation by feral predators). Isolated faunal populations and threatened plants are particularly vulnerable to local extinction following intense fires, combined with other threats.

A Bushfire Management Plan (BMP) will be developed and implemented in accordance with relevant Queensland guidelines and endorsed by an experienced bushfire practitioner to reduce potential threats from fires to Koala and the Gliders.

Undertake restoration

There are opportunities for private landholders, Government agencies, bush regenerators and community groups, Traditional Owners/Custodians and others to work together to strategically maintain and where possible improve the extent and condition of ecological community. The overall aim of any restoration actions is to develop ecosystem resilience. This is done by restoring representative flora and fauna diversity, natural structural elements, and ecological function, over the long term, while avoiding deleterious management interventions that alter restoration trajectory.

The Offset Area will be subject to integrated restoration management employing both native regeneration and active plantings in order to ensure the vegetation meets remnant status and improved condition by required timeframe.

Communicate, engage with and support

This key approach includes priorities to promote the ecological community, to build awareness and encourage people and groups to contribute to its recovery. This includes communicating, engaging with, and supporting the public and key stakeholders: to increase their understanding of the value and function of the ecological community; and to encourage and assist their protection and recovery efforts. Key groups to communicate with include landholders, land managers, land use planners, researchers, schools, volunteers, Indigenous communities and other community members and groups.

Not Applicable

Raise awareness

Raise awareness by distributing relevant publications, erecting interpretive signs at strategic locations, through school programs and by establishing demonstration sites for the ecological community.

Not applicable

Gather and provide information

Develop education programs, information products and signage to help the public recognise the presence and importance of the ecological community – and to understand their responsibilities under state and local regulations, and under the EPBC Act.

Awareness signage and traffic calming devices will be installed is suitable locations across the referral area to ensure community awareness of the importance of limiting activities that could disturb or damage significant matters in the area.

Coordinate efforts
Raise awareness by distributing relevant publications, erecting interpretive signs at strategic locations, through school programs and by establishing demonstration sites for the ecological community.

Awareness signage will be installed in suitable locations to raise awareness and consideration of significant matter within the region.

Research and monitoring
This key approach includes priorities for research into the ecological community, and monitoring, to improve understanding of the ecological community and the best methods to aid its recovery through restoration, management and protection. Relevant and well-targeted research and other information gathering activities are important to inform protecting and managing the ecological community.

Not applicable

Mapping
Collate, update and validate existing vegetation mapping information and associated data for this ecological community and identify gaps in knowledge.

The Offset Area will be subject to regular monitoring including the production of maps to monitor and record changes on site and identify any gaps in knowledge or emerging concerns.

Options for management
Investigate key ecological interactions, such as the role of fauna in pollination, seed dispersal and nutrient cycling.

Not applicable.

Monitoring
It is important that any monitoring is planned before management commences and considers what data are required to address research questions. Monitoring must also be resourced for management activities, especially for those using a novel approach, and applied during and following management action.

A monitoring schedule has been devised and will be implemented in for the lifetime of the offset. Survey techniques have been developed based on government manuals and failing the availability of this, scientifically backed literature. Survey techniques will remain consistent with those outlined in **Section 3.3** for the lifetime of the offset to allow comparison to monitor changes.

5.3.1.2 Koala

Koala Conservation Recovery Plan
The Conservation Advice for *Phascolarctos cinereus* (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory came into effect on 12 February 2022. It lists six conservation and recovery actions that are categorised into 'supporting strategies' which provide governance to coordinate actions, led by the Australian Government in partnership with the States and Territories, and 'on-ground (direct) strategies' which relate to improving habitat quality and restoration, implemented at the site level.

The impact and offset are considered to be consistent with the on-ground strategies detailed in the Conservation Advice and recovery Plan:

- Strategy 3: Increase habitat protection
- Strategy 5: Strategic habitat restoration
- Strategy 6: Active metapopulation management

Strategy 3: Increase habitat protection

Land-use change is the most significant threat to the Koala through habitat loss, fragmentation, and degradation. Increasing the total area of protected, connected, quality Koala habitat is important to protect and recover Koala populations.

The proposed Offset Area will create a net gain of Koala habitat, with improved habitat quality, connectivity, and longevity over the impact area. The eventual dedication of the Offset Area will protect this gain in Koala habitat in perpetuity, securing it from the threat of land-use change or increases in the intensity of current grazing practices.

Strategy 5: Strategic habitat restoration

Restoration increases the overall habitat available for Koalas and increases the connectivity between areas of habitat to contribute to ensuring the long-term survival of Koala populations. It involves restoring lost and degraded habitat to improve environmental functions.

While the project proposes to impact MNES habitat within the impact area that consists of a mixture of moderate and low value habitat as a result of high levels of disturbance and poor value habitat. At approximately thirteen times the size of the impact area and with greater contextual suitability that will be protected, the rehabilitation of the proposed Offset Area will provide a net gain of MNES habitat by strategic habitat restoration in conjunction with the additional offsets. As it is surrounded by other offset areas and adjacent to a regional biodiversity corridor, this habitat is located well to maximise the projected benefit to MNES.

Strategy 6: Active metapopulation management

Metapopulation management concerns the movement of individuals and genes between populations. Consideration of metapopulation management is reflected in the design of the development, specifically the creation and rehabilitation of conservation areas to promote connectivity and Koala movement within the landscape, and through the removal of hazards to Koala.

Although the project will involve the removal of habitat critical to the survival of the Koala, all significant residual impacts are to be compensated through the provision of land-based offsets. Proposed offsets will be located amongst Koala-occupied areas of connected and resilient habitat, and within the same sub-bioregion as the impact area.

South East Queensland Koala Conservation Strategy

The South East Queensland Koala Conservation Strategy 2020-2025 (the Strategy) came into effect on 16 February 2020 and addresses the key threats facing Koalas and outlines strategies to stop the decline of Koala numbers and set in train the species' recovery. Issues addressed in the Strategy include:

Habitat Protection

The project will involve the removal of habitat critical to the survival of Koala as defined under the EPBC Act and Koala habitat area mapped under the Strategy.

All vegetation clearing under the project will continue to be governed by impact and pre-clearing management protocols including preparation of a site-based management plans and pre-start checklists.

Habitat Restoration for Koalas
The impact area is located adjoining an approved masterplanned development which is located within the urban land-use of the Greater Flagstone Priority Development Area, or GFPDA. Habitat restoration is recommended within areas of connected habitat. Proposed offsets will be located in areas of connected and resilient habitat.

Threat Management
Section 5.2.6 lists the relevant threats to this species (vehicle strike, dog attack and weed invasion) and effective mitigation measures to reduce risks during the construction and operational phases of the project. Mitigation measures are to be incorporated into Vegetation Clearing and Management Plans (VC&MPs) and Fauna Management Plans (FMPs). All contractors and visitors are to undertake site inductions to address threats and risks to MNES.

Improved mapping, monitoring, research and reporting
Not applicable.

Strong Community engagement and partnerships
Awareness signage and traffic calming devices will be employed to ensure motorists are aware that Koalas have potential to occur in the area, making them more conscious of potentially dispersing Koalas and encouraging them to maintain a low vehicle speed. The proponent will continue to be involved in perpetuity for the proposed development, providing ongoing management of the action.

Partnerships and strategic coordination
Not Applicable.

The project has sought to reduce impacts to the Koala through the avoid, mitigate and offset hierarchy. The proposed residential development will be entirely located within the approved masterplanned project area which is approved for development under approval ref EPBC 2023/09505. The project has been sited within the referral area to reduce impacts to higher quality habitat within the State mapped Koala Habitat Areas as well as maintaining and enhancing connected habitat to the east and west. As such, only areas that are relatively fragmented and with low habitat scores and with lesser Koala habitat value are proposed for removal and development. All vegetation clearing under the proposal will be government by State requirements for fauna management and any significant residual impacts are to be compensated through land-based offsets.

5.3.1.3 Grey-headed Flying-fox

Grey-headed Flying-fox National Recovery Plan
The purpose of the National Recovery Plan for the Grey-headed Flying-fox is to set out the management and research actions necessary to stop the decline of and support the recovery of the Grey-headed Flying-fox over the next 10 years. The overall objectives of the Grey-headed Flying-fox recovery plan are:

- to improve the Grey-headed Flying-fox's national population trend by reducing the impact of the threats outlined in the plan on Grey-headed Flying-foxes through habitat identification, protection, restoration and monitoring, and
- to assist communities and Grey-headed Flying-foxes to coexist through better education, stakeholder engagement, research, policy and continued support to fruit growers.

The plan addresses the key threats facing the Grey-headed Flying-fox and recovery objectives that are provided below with responses relevant to the project:

Identify, protect and increase native foraging habitat that is critical to the survival of the Grey-headed Flying-fox

Although no roosts were identified on-site, the GHFF was recorded foraging within the referral area and as a fly-over. Habitat critical to the survival of the species is considered important winter and spring flowering vegetation communities. Important winter and spring vegetation communities are those that contain *Eucalyptus tereticornis, E. albens, E. crebra, E. fibrosa, E. melliodora, E. paniculata, E. pilularis, E. robusta, E. seeana, E. sideroxylon, E. siderophloia, Banksia integrifolia, Castanospermum australe, Corymbia citriodora, C. eximia, C. maculata, Grevillea robusta, Melaleuca quinquenervia* or *Syncarpia glomulifera* (Eby and Law 2008; Eby 2016; Eby et al. 2019).

Of the species listed above, *Corymbia Citriodora, Eucalyptus crebra and Eucalyptus tereticornis* were recorded within the referral area. However, as a result of historical clearing mature specimens are concentrated within mapped remnant vegetation within the referral area. The Grey-headed Flying-fox is a highly mobile species and the closest known active Grey-headed Flying-fox camp is approximately 7.9 km away.

Reviewing the above, the referral area vegetation is considered to provide foraging habitat for this species. Importantly, the proposed offset will provide a significant increase of native foraging habitat that is critical to the survival of the GHFF.

Identify, protect and increase roosting habitat of Grey-headed Flying-fox camps.
No roosts were identified within the comprehensive surveys of the referral area nor are they at the Offset Area. The proposed Offset Area will provide a substantial gain in native foraging habitat for the GHFF.

Determine trends in the Grey-headed Flying-fox population so as to monitor the species' national distribution, habitat use and conservation status.
Not applicable. Mitigation measures will be implemented during construction and operation of the project to reduce threats.

Build community capacity to coexist with flying-foxes and minimise the impacts on urban settlements from new and existing camps while avoiding interventions to move on or relocate entire camps.
There are no observed roosts on-site, with the nearest known roost site located more than 20km from the site.

Increase public awareness and understanding of Grey-headed Flying-foxes and the recovery program, and involve the community in the recovery program where appropriate.
Mitigation measures, including wildlife awareness signage, speed limits and vehicle slow points, to increase awareness for this species within the community.

Improve the management of Grey-headed Flying-fox camps in areas where interaction with humans is likely.
Not Applicable. There are no observed roosts on-site, with the nearest known active roost site located more than 20 km from the site.

Significantly reduce levels of licenced harm to Grey-headed Flying-foxes associated with commercial horticulture.
Not applicable.

Support research activities that will improve the conservation status and management of Grey-headed Flying-foxes.
Not applicable.

Reduce the impact on Grey-headed Flying-foxes of electrocution on power lines, and entanglement in netting and on barbed-wire.
This species was identified foraging or as fly-overs during field surveys. No roosts were identified on-site and the nearest known roost site located more than 20 km south-east of the referral area. As such, it is considered that the referral area vegetation provides foraging habitat for this species.

Electrocution on powerlines where they occur is a risk, however, entanglement in netting and on barbed-wire is considered highly unlikely post road construction and after mitigation efforts at the Offset Area. Threats can be managed through the implementation of mitigation measures and procedures outlined within future management documents at the impact site including the VC&MP and FMP.

5.3.1.4 Greater Glider

Greater Glider Conservation Advice
The conservation advice for *Petauroides volans* (Greater Glider (southern and central)) came into effect on 5th July 2022. The document combines the approved conservation advice and listing assessment for the species and provides a foundation for conservation action and further planning.

Key threats to the Greater Glider are frequent and intense bushfires, inappropriate prescribed burning, climate change, land clearing and timber harvesting. The primary conservation objective is that within the next three generations, the population size as well as the extent, quality and connectivity of habitat required to maintain the population will have increased.

Conservation and management priorities

Habitat loss, disturbance and modification (including fire)
In the wake of the recent bushfires, unburnt areas are to be protected to support population recovery. The referral area is not part of the recent bushfire impacts in question, nor was the species recorded on site.

The proposal will result in the clearing of potential Greater Glider habitat. Notably, substantial offsets are proposed that will include potential foraging and denning habitat to be enhanced including with hollow carving and nest boxes where necessary, as well as additional regrowth and re-established future foraging and denning habitat for the species. The proposed offset is considered suitable habitat, being recognised foraging species with denning resources that are suitably connected to external habitat values.

Climate change
The impact site is not considered to be a climate change refuge. Notably, retained habitat areas will be rehabilitated to remove weeds and improve natural microclimate resources.

Invasive species (including threats from predation, grazing, trampling)
The project will not introduce threats from predation that are not already present within the referral area. Invasive species will be controlled at the Offset Area.

Ex-situ recovery actions
Translocation is not proposed in the absence of the species.

Stakeholder and Community Engagement
Not applicable to the project.

Survey and Monitoring Priorities
Not applicable to the project.

Information and Research Priorities
Not applicable to the project.

Recovery Plan
There Is not yet a recovery plan for the species.

5.3.1.5 Yellow-bellied Glider

Yellow-bellied Glider Conservation Advice
The Conservation Advice for *Petaurus australis australis* (Yellow-bellied Glider (south-eastern)) came into effect on 2nd March 2022. The document combines the approved conservation advice and listing assessment for the species and provides a foundation for conservation action and further planning.

Key threats to the Yellow-bellied Glider are habitat clearing and fragmentation, extensive severe bushfires, inappropriate prescribed burns, timber harvesting, climate change, introduced species impacts and barbed wire fencing entanglement. The primary conservation objective is that population size has stabilised because sufficient areas of habitat are protected from extensive severe fire, fragmentation and timber harvesting, known threats are mitigated and key habitat features (e.g., sap trees, hollow-bearing trees) and habitat connectivity are retained.

Habitat loss, disturbance and modification (including fire)
The proposal will result in the clearing of potential Yellow-bellied Glider habitat. Notably, substantial offsets are proposed that will include potential foraging and denning habitat to be enhanced including with hollow carving and nest boxes where necessary, as well as additional regrowth and re-established future foraging and denning habitat for the species. The proposed offset is considered suitable habitat, being

recognised foraging species with denning resources that are suitably connected to external habitat values. Risk from barbed wire entanglement will be mitigated at the Offset Area via retrofitting of fencing. The BMP for the Offset Area will include appropriate management of prescribed burns to ensure risk to Yellow-bellied Glider is mitigated.

Climate change
The impact site is not considered to be a climate change refuge. Notably, retained habitat areas will be rehabilitated to remove weeds and improve natural microclimate resources.

Invasive species (including threats from predation, grazing, trampling)
The project will not introduce threats from predation that are not already present within the referral area. Invasive species will be controlled at the Offset Area.

Stakeholder and Community Engagement
Not applicable to the project.

Survey and Monitoring Priorities
Not applicable to the project.

Information and Research Priorities
Not applicable to the project.

Recovery Plan
There Is not yet a recovery plan for the species.

5.3.1.6 Swift Parrot

National Recovery Plan for Swift Parrot

The National Recovery Plan for the Swift Parrot considers the conservation requirements of the species across its range, identifies the actions to be taken to ensure its long-term viability in nature and the parties who will undertake these actions.

The overall objective of this plan is to prevent further population decline of the Swift Parrot and to achieve a demonstrable sustained improvement in the quality and quantity of Swift Parrot habitat to increase carrying capacity. The specific recovery objectives of the National Recovery Plan are provided below with responses relevant to the project.

Objective 1: Maintain known Swift Parrot breeding and foraging habitat at the local, regional and landscape scales.
This species was not recorded during field surveys and mature key tree species were relatively limited within the referral area and of sub-optimal foraging status.

Roost-tree requirements in mainland Australia are likely similar to nest-tree requirements in Tasmania. Nest-tree suitability has been shown to increase with increasing height, diameter at breast height, degree of senescence, and number of hollows (Webb et al. 2012). The referral area is compromised due to historical logging and pastoral activities. As a result, large diameter eucalypts and hollows are limited across the referral area. Aggressive competitor species were observed within the referral area during field

surveys, reducing the potential for opportunistic use of on-site vegetation by this species. Further, the closest record for this species is located approximately 10 km north of the referral area. The referral area is not considered to be used by the species.

The proposed offset will provide significant planting of foraging habitat for the Swift Parrot, and augment connectivity and canopy cover to existing large key foraging species at the Offset Area.

Objective 2: Reduce impacts from Sugar Gliders at Swift Parrot breeding sites
Not applicable – the site does not support breeding habitat.

Objective 3: Monitor and manage other sources of mortality.
Not applicable. This species was not recorded during field surveys.

Objective 4: Develop and apply techniques to measure changes in population trajectory in order to measure the success of recovery actions
Not applicable. This species was not recorded during field surveys.

Objective 5: Improve understanding of foraging and breeding habitat use at a landscape scale in order to better target protection and restoration measures.
Not applicable.

Objective 6: Engage community and stakeholders in Swift Parrot conservation.
Not applicable.

Objective 7: Coordinate, review and report on recovery progress.
Not applicable

5.3.1.7 Regent Honeyeater

National Recovery Plan for the Regent Honeyeater

The National Recovery Plan for the Regent Honeyeater considers the conservation requirements of the species across its range, identifies the actions to be taken to ensure its long-term viability in nature and the parties who will undertake these actions.

The overall objective of this plan is to reverse the long-term population trend of decline and increase the numbers of Regent Honeyeaters to a level where there is a viable, wild breeding population even in poor breeding years and to enhance the condition of habitat across the Regent Honeyeaters range to maximise survival and reproductive success, and provide refugia during periods of extreme environmental fluctuation.

The specific recovery objective strategies of the National Recovery Plan are provided below with responses relevant to the project.

Objective 1: Improve the extent and quality of Regent Honeyeater habitat.
The referral area is not within a key breeding area under the National Recovery Plan. This species was not recorded during field surveys and suitable foraging species and specimens were relatively limited within the referral area and of sub-optimal foraging status where present.

Although there is remnant vegetation across the site, the referral area includes non-remnant vegetation and the entire site has been subject to historical logging and disturbance as evidenced by high-weed incursion. As a result, large diameter foraging trees are relatively limited across the referral area. Also, aggressive competitor species were observed within the referral area during field surveys, potentially reducing opportunistic use of on-site vegetation by this species.

The project will directly impact sub-optimal foraging habitat (mapped remnant vegetation). However, large areas of conservation and corridors will be retained and rehabilitated on-site, providing ongoing potential foraging habitat for the species. Further, the closest recent record (within 20 years) for this species is located more than 20 km away from the referral area.

Notably, the proposed offset will provide significant planting of foraging habitat for the Regent Honeyeater, and augment connectivity and canopy cover to existing large key foraging species at the Offset Area.

Objective 2: Bolster the wild population with captive-bred birds until the wild population becomes self-sustaining
Not applicable.

Objective 3: Increase the understanding of the size, structure, trajectory and viability of the wild population.
Not applicable. This species was not recorded during field surveys.

Objective 4: Maintain and increase community awareness, understanding and involvement in the recovery program.
Not applicable.

6. Baseline Surveys

6.1. Offset Area Baseline Surveys – Methodology

Baseline field surveys to determine habitat quality for MNES were completed on 10th November 2025 through to 14th January 2026. Refer to **Table 30** and the subsections below for specific details on survey dates for each method applied.

Table 30: Offset Area baseline field surveys methods summary

Date	Methods
10th November 2025	Installation of 7 camera traps at 500 m intervals & MHQA T1, GHFF stem counts, SATs (1)
11th November 2025	MHQA transects (T2 – T9), GHFF stem counts, SATs (4)
14th November 2025	MHQA transects (T10 - T12), GHFF stem counts, SATs (1)
19th November 2025	MHQA Transects (T13-T16), GHFF stem counts, SAT (3)
20th November 2025	MHQA Transects (T17-T19), GHFF stem counts, SAT (3), Tree Plot =/>500mm DSH and / or with hollows + weed mapping
25th November 2025	MHQA Transects (T20-T23), GHFF stem counts, SAT (4)
25th November 2025	Rebait cameras - 2nd deployment (new SD cards / new baits) + spotlighting
27th November 2025	Tree Plot =/>500mm DSH and / or with hollows + weed mapping
1st December 2025	Tree Plot =/>500mm DSH and / or with hollows + weed mapping
2nd December 2025	Tree Plot =/>500mm DSH and / or with hollows + weed mapping
3rd December 2025	Tree Plot =/>500mm DSH and / or with hollows + weed mapping
4th December 2025	Tree Plot =/>500mm DSH and / or with hollows + weed mapping
5th December 2025	Tree Plot =/>500mm DSH and / or with hollows + weed mapping
8th December 2025	Tree Plot =/>500mm DSH and / or with hollows + weed mapping
8th December 2025	Collect cameras + spotlighting
9th December 2025	Weed transects 1 -3
10th December 2025	Weed transects 4-10
11th December 2025	Weed transects 11 -13
18th December 2025	1 X additional MHQA transect
12th January 2026	12 X Quaternaries in isolated polygons
14th January 2026	21 X Quaternaries in isolated polygons

6.1.1 Habitat - MNES

The MNES habitat quality assessment methods utilising the MHQA and FHA methodology used for the impact area (described in **Section 3.3**) were also applied to the Offset Area. Site condition within the Offset Area was assessed using the BioCondition method as recommended under the Queensland environmental

offsets framework within the ten (10) AUs identified in the Offset Area. These are summarised in **Table 31** and shown in **Plan 8**. Site condition was measured through the completion of MHQA transects (refer also **Plan 9**). Assessment at multiple locations per assessment unit is necessary where possible to measure vegetation condition at representative locations across the spatial extent of each assessment unit.

Site condition was assessed through the completion of a total of twenty-four (24) MHQA transects within the Offset Area with at least two (2) transects in each AU.

Table 31: Summary of assessment units and MHQA transects – Offset Area

AU	Vegetation community	Area (ha)	MHQA transect
AU1	Remnant RE12.11.6	57.1 ha	Transects 3, 14 17
AU2	Remnant RE12.12.5	40.8 ha	Transects 18 and 20
AU3	Remnant RE12.3.7	10.8 ha	Transects 19 and 21
AU4	Non-remnant - Preclear RE 12.11.6	58.8 ha	Transect 1,7 and 13
AU5	Non-remnant - Preclear RE 12.12.5	27.1 ha	Transect 11 and 15
AU6	Non-remnant - Preclear RE 12.3.7	10.4 ha	Transect 2, 22 and 23
AU7	Non-remnant - Preclear RE12.11.6	25.2 ha	Transects 5 and 8
AU8	Non-remnant - Preclear RE12.12.5	20.9 ha	Transects 9, 10 and 12
AU9	Non-remnant - Preclear RE12.3.7	2.9 ha	Transect 16 and 24
AU10	Non-remnant - Preclear RE12.3.3	11.6 ha	Transect 4 and 6

6.1.2 Spot Assessment Technique surveys

Baseline Koala activity levels were determined through utilising the Spot Assessment Technique (SAT) (Phillips et al. 2011). The SAT method is an industry recognised technique for identifying presence/absence of Koala at a site and is specified as an appropriate survey method in the EPBC Act Referral Guidelines for the Vulnerable Koala. Results from the SAT surveys are compared against current available published scientific literature to identify an estimated Koala carrying capacity (stocking rate) to be determined. A total of sixteen (16) SAT surveys were completed across the Offset Area in conjunction with the MHQA transects to target presence of Koala (**Plan 8** and **Plan 9**).

6.1.3 Habitat Mapping

All trees over 500 mm DSH were plotted throughout the Offset Area with a handheld GPS device (Trimble) to record locations (accuracy ±1 m), and the following parameters of each tree specimen were recorded to record potential denning opportunities:

- tree species, via a combination of observations of the gum nuts, buds, leaves, bark and growth form;
- diameter of the trunk of the tree measured using the standard method of Diameter at Breast Height (DSH);
- height of the tree estimated in metres from ground;
- canopy spread estimated in metres from ground;

- health assessment (canopy, trunk); and
- habitat values (for example, presence and/or number of hollows, nests, termites, scratches and scats).

The entire tree trunk and branches are visually surveyed from ground for habitat values including hollows. The spread of trees over 500 mm DSH was mapped to indicate foraging habitat for the species as per the conservation advice. Hollow bearing trees were plotted across the entire Offset Area.

6.1.4 Weed Mapping

Based on MHQA transects and general observations the primary weed species located within the Offset Area is *Lantana camara* (Lantana) which is identified as a WONS. An indication of the relative cover of weeds for the Offset Area was applied at the GIS scale as presented in **Plan 10**.

Notably, the Offset Provider is developing a Weed Management Plan for Offset Area, which ensures consistent and property-wide approaches to weed monitoring and management. It will include a quantitative and repeatable weed cover monitoring method that will enable assessment against the completion criteria "≤5% weed cover by year 10". It will also include photo-monitoring requirements as well as management actions to be employed. WONS mapping will include:

- Preparation of a Weed Management Plan by the Offset Provider in Year 1 of the offset
- Implementation of the Weed Management Plan by the Offset Provider including baseline weed cover surveys and photo-monitoring in Year 1 of the offset (in accordance with the method outlined in the Weed Management Plan)

6.1.5 Motion-triggered camera trapping

Surveys for non-native vertebrate pest presence, primarily targeting wild dogs which are the primary threat to Koala, were completed via the use of infrared motion-triggered camera trapping. Camera trapping involves setting up a fixed digital camera to capture images or video of animals that pass in front of a camera with an infrared trigger. This survey technique identifies fauna activity beyond the scope of direct observational studies and with the absence of potential observer impacts. The method for determining camera locations utilised the standard grid-based system which is common practice on sites where access is good. In lieu of any published guidelines from DCCEEW for monitoring wild dogs, the number of cameras/distances between cameras was driven by several case studies and existing guidelines. These documents state a suggested distance of between 500 m and 1000 m between camera locations, given the vast home range and mobility of wild dogs. For this assessment the lower threshold of 500 m was utilised to improve the chance of wild dog detection within the proposed Offset Area.

Once the camera locations were determined, cameras were directed to animal trails which are more likely to support fauna. Heavy, loose vegetation was avoided to reduce the chance of false triggering, and the camera was aimed to avoid sun shining directly onto the lens. Cameras were attached 30-100 cm from the ground on a tree or post and directed towards landscape features.

Seven (7) camera traps were installed across the proposed Offset Area and immediate surrounds for a minimum period of 28 nights with two (2) separate rounds of deployment from 10 November 2025 to 8 December 2025, baited with chicken necks to target wild dogs and other known potential threats to MNES in the broader area. Refer to **Plan 9** for the location of cameras and **Table 32 and Table 33** for a description of camera deployment locations.

Table 32: Fauna camera summary (November 2025 – December 2025)

Camera	'Name'	1st Deployment	Baited	2nd Deployment	Re-Baited	Latitude	Longitude
Camera 1	Anemone	10.11.2025	Chicken Necks	25.11.2025	Chicken Necks	-27.1608328°	152.2742131°
Camera 2	Nemo	10.11.2025	Chicken Necks	25.11.2025	Chicken Necks	-27.1563696°	152.2749911°
Camera 3	Beans	10.11.2025	Chicken Necks	25.11.2025	Chicken Necks	-27.148533 °	152.281783°
Camera 4	Hippo	10.11.2025	Chicken Necks	25.11.2025	Chicken Necks	-27.151589°	152.273335°
Camera 5	Owl	10.11.2025	Chicken Necks	25.11.2025	Chicken Necks	-27.156877°	152.280194°
Camera 6	Pigeon	10.11.2025	Chicken Necks	25.11.2025	Chicken Necks	-27.152277°	152.280670°
Camera 7	Slug	10.11.2025	Chicken Necks	25.11.2025	Chicken Necks	-27.151076, °	152.276107°

Table 33: Fauna camera locations (November 2025 – December 2025)

Camera	'Name'		
Camera 1	Anemone		
Camera 2	Nemo		

Camera	'Name'		
Camera 3	Beans		
Camera 4	Hippo		

Camera	'Name'		
Camera 5	Owl		
Camera 6	Pigeon		

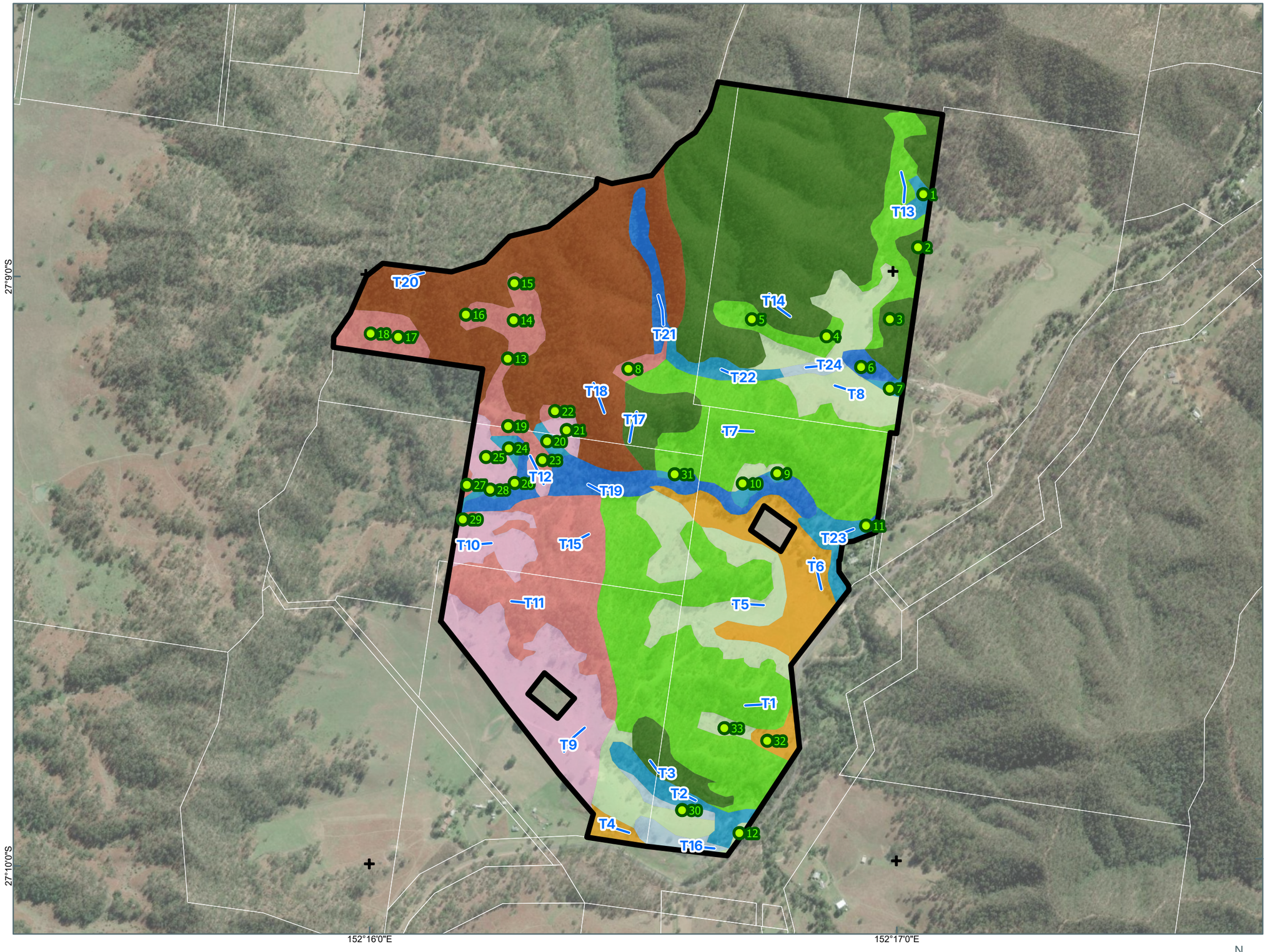
Camera	'Name'		
Camera 7	Slug		

6.1.6 Relative Abundance Index

The results of the motion-triggered camera detection survey (recorded species and number of occurrences over days of camera deployment) were utilised to provide relative abundance of non-native vertebrate pest species over the proposed Offset Area, reducing bias and increasing repeatability.

A relative abundance index (RAI) is then calculated for feral animal abundance, using the formula **RAI= D/TN x 100**, where D is number of individual detections and TN is the total number of camera-trap nights (all cameras combined). This methodology ensures that the surveys are representative of the entire area and are repeatable for future monitoring requirements. A higher RAI indicates a higher pest presence.

08. ASSESSMENT UNITS AND TRANSECTS



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LEGEND

- Qld DCDB
- Offset Area
- MHQA Transects [24]
- Vegetation observation site

Assessment Units

- Assessment Unit 1: Regional Ecosystem 12.11.6 (Remnant Vegetation) [57.1 ha]
- Assessment Unit 2: Regional Ecosystem 12.12.5 (Remnant Vegetation) [40.8 ha]
- Assessment Unit 3: Regional Ecosystem 12.3.7 (Remnant Vegetation) [10.8 ha]
- Assessment Unit 4: Regional Ecosystem 12.11.6 (Vegetated Non-remnant Area) [58.8 ha]
- Assessment Unit 5: Regional Ecosystem 12.12.5 (Vegetated Non-remnant Area) [27.1 ha]
- Assessment Unit 6: Regional Ecosystem 12.3.7 (Vegetated Non-remnant Area) [10.4 ha]
- Assessment Unit 7: Regional Ecosystem 12.11.6 (Open Paddock - Non-remnant) [25.2 ha]
- Assessment Unit 8: Regional Ecosystem 12.12.5 (Open Paddock - Non-remnant) [20.9 ha]
- Assessment Unit 9: Regional Ecosystem 12.3.7 (Open Paddock - Non-remnant) [2.9 ha]
- Assessment Unit 10: Regional Ecosystem 12.3.3 (Open Paddock - Non-remnant) [11.6 ha]

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PEET

WILLOW VALE OFFSET

0 100 200 300 m

N

Transverse Mercator
GDA 2020 | Zone 56

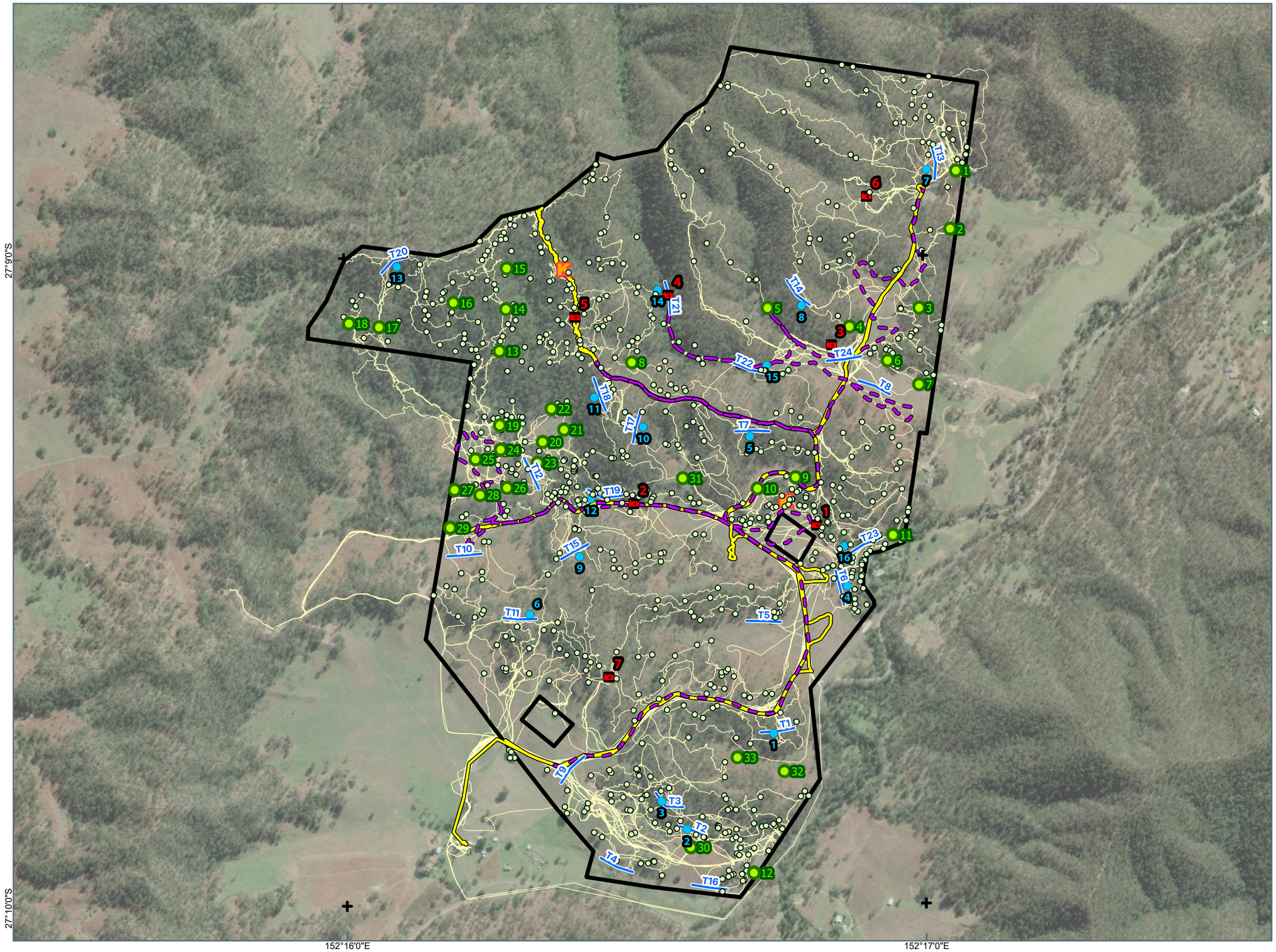
1:12,000 @ A3

Address / RPD: Biarra, QLD

23/01/2026

8418 E 08 OMP_Esk AUs A

09. FIELD SURVEY EFFORT



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LEGEND

- Offset Area
- MHQA Transect
- Koala SAT location
- Vegetation Observation
- Motion sensor camera
- Koala observation (visual/auditory)
- Spotlighting (2025-11-25)
- Spotlighting (2025-12-08)
- GPS Tracklog
- GPS Tree Plot

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PEET

WILLOW VALE OFFSET

0 100 200 300 m
N
Transverse Mercator 1:11,000
GDA 2020 | Zone 56 @ A3

Address / RPD: Biarra, QLD

29/01/2026

8418 E 09 OMP_Esk Field A

6.2. Offset Area Baseline Assessment Results

6.2.1 Assessment unit description

6.2.1.1 Assessment Unit 1

Assessment Unit 1 (AU1) is mapped as containing remnant vegetation representative of 'Least Concern' Regional Ecosystem 12.11.6 described as *Corymbia citriodora (Spotted Gum) and Eucalyptus crebra (Narrow Leaf Ironbark) woodland occurring on metamorphic +/- interbedded volcanics*. Transect 3 alignment is 303°NW with the average tree height within T1 canopy being 21 m and the average tree height of T2 subcanopy being 8.25 m. A SAT survey was conducted at this transect with no scats recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 3 is 267 mm. Transect 14's alignment is 311°NW with the average tree height within T1 canopy being 22 m and the average tree height of T2 subcanopy being 12 m. The average trunk diameter of trees searches within the SAT survey of transect 14 is 201 mm. Transect 17 alignment is on a steep facing slope, recently burnt, with an alignment of 352°N. The average tree height within T1 canopy being 21m and the average tree height of T2 subcanopy being 10 m. A SAT survey was conducted at transect 17 with 2/30 scats recorded. The average trunk diameter of trees searches within the SAT survey associated with transect 17 is 238 mm. Transects 3,14 and 17 are largely dominated by *Corymbia citriodora (Spotted Gum)* with recruiting species. **Photo set 1** shows the vegetation present within this AU. Uniformity between disjunct polygons which form this AU were confirmed via observations, refer to **Plan 9** for locations.

Photo set 1: AU1 – Remnant RE 12.11.6 (top right – transect 3)(top right– transect 14)(bottom – transect 17)

6.2.1.2 Assessment Unit 2

Assessment Unit 2 (AU2) is mapped as containing remnant vegetation representative of 'Least Concern' Regional Ecosystem 12.12.15, described as *Corymbia citriodora* (Spotted Gum) and *Eucalyptus crebra* (Narrow Leaf Ironbark) woodland occurring on Mesozoic to Proterozoic igneous rocks. This community is typically classified as a sparse structure category, with a crown cover of approximately 20–50% and trees reaching heights of 10–30 metres. Transect 18's alignment is 343°N with the average tree height within T1 canopy being 22m and the average tree height of T2 subcanopy being 9 m. A SAT survey was conducted at transect 18 with 2/30 scats recorded. The average trunk diameter of trees searches within the SAT survey associated with transect 18 is 238mm. Transect 20 is adjacent to the crest of the mountain, on a steep slope, with dominance of *Eucalyptus crebra (Narrow Leaf Ironbark)* and *Eucalyptus tereticornis* (Forest Red Gum). Transect alignment is 37°NE. The average tree height in Transect 20 is 21 meters with the subcanopy being 12 meters. A SAT survey was conducted at this transect with 3/30 scats recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 20 is 220 mm. **Photo set 2** shows the vegetation present within this AU. Uniformity between disjunct polygons which form this AU were confirmed via observations, refer to **Plan 9** for locations.

Photo set 2: AU2 - Remnant RE 12.12.5 (left – Transect) (right – Transect 20)

6.2.1.3 Assessment Unit 3

Assessment Unit 3 (AU3) was rectified on-ground as containing remnant vegetation representative of 'Least Concern' Regional Ecosystem 12.3.7 described as *Eucalyptus tereticornis, Casuarina Cunninghamiana* subsp. *Cunninghamiana* +/- *Melaleuca* spp. fringing woodland. This community is a sparse structure category which generally has a crown cover of between 20-50% with trees between 10 and 30 meters in height. Transect 19's alignment is 80°E. The transect is located on an embankment that is heavily weeded. The average tree height within T1 canopy is 19 m with the average tree height of T2 subcanopy being 6.25 m. A SAT survey was conducted at this transect with 1/30 scats recorded. Transect 21 is within a waterway dominated by *Mallotus* philippensis (Red Kamala) with *Corymbia citriodora* (Spotted Gum), *Eucalyptus tereticornis* (Forest Red Gum) and *Corymbia intermedia* (Pink Bloodwood) in the EDL. The transect location is heavily weeded with 85% non-native plant cover. A SAT survey was conducted at this location with no scats recorded. **Photo set 3** shows the vegetation present within this AU. Uniformity between disjunct polygons which form this AU were confirmed via observations, refer to **Plan 9** for locations.

Photo set 3: AU3 – Remnant RE 12.3.7 (left – Transect 19) (right – Transect 21)

6.2.1.4 Assessment Unit 4

Assessment Unit 4 (AU4) is mapped as containing non-remnant vegetation with preclear mapping once containing Regional Ecosystem 12.11.6 described as *Corymbia citriodora (Spotted Gum) and Eucalyptus crebra (Narrow Leaf Ironbark) woodland occurring on metamorphic +/- interbedded volcanics*. The plot alignment of Transect 1 is 262°W and is situated on the southeast facing steep slope, upper of the lower slope. The average tree height in Transect 1 is 19 meters with the subcanopy being 6.25 meters. A SAT survey was conducted at this transect with no scats recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 1 is 243mm. Transect 7 with an alignment of 251°W is dominated by *Corymbia citriodora* (Spotted Gum) with recruiting species. The average tree height in Transect 7 is 19 meters with the subcanopy being 9 meters. A SAT survey was conducted at this transect with no scats recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 7 is 202mm. The plot alignment of transect 7 is 251°W with the average tree height being 19 meters with the subcanopy being 9 meters. A SAT survey was conducted at this transect with no scats recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 7 is 202mm. The plot alignment of transect 13 is 346°N and contains fire evidence on the lower slope. The average tree height in Transect 13 is 22 meters with the subcanopy being 13 meters. A SAT survey was conducted at this transect with no scats recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 13 is 262 mm. Transects 1, 7 and 13 were dominated by *Corymbia citriodora* (Spotted Gum) with recruiting species. **Photo set 4** shows the vegetation present within this AU. Uniformity between disjunct polygons which form this AU were confirmed via observations, refer to **Plan 9** for locations.

Photo set 4: AU4 – non-remnant - Preclear RE 12.11.6 (top left – Transect 7)(top right – Transect 13)(bottom centre- Transect 1)

6.2.1.5 Assessment Unit 5

Assessment Unit 5 (AU5) is mapped as non-remnant vegetation once containing 'Least Concern' Regional Ecosystem 12.12.5 described as *Corymbia citriodora (Spotted Gum) and Eucalyptus crebra (Narrow Leaf Ironbark) woodland occurring on Mesozoic to Proterozoic igneous rocks.* This community is typically classified as a sparse structure category, with a crown cover of approximately 20–50% and trees reaching heights of 10–30 metres. Transect 11 alignment is 81°W towards crest of hill with exposed surface rocks. The transect is dominated by *Eucalyptus crebra (Narrow Leaf Ironbark)* and *Corymbia intermedia* (Pink Bloodwood) with recruiting species for both. The average tree height in Transect 11 is 20 meters with the subcanopy being 10 meters. A SAT survey was conducted at this transect with no scats recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 11 is 181 mm. Transect 15 alignment is 61°NE with fire evidence. The transect is dominated by *Eucalyptus siderophloia (Grey Ironbark)* and *Corymbia citriodora (Spotted Gum)* with recruiting species for both. The average tree height in Transect 15 is 18 meters with the subcanopy being 9 meters. A SAT survey was conducted at this transect with 1/30 recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 15 is 177 mm. **Photo set 5** shows the vegetation present within this AU. Uniformity between disjunct polygons which form this AU were confirmed via observations, refer to **Plan 9** for locations.

Photo set 5: AU5 – non-remnant – Pre- clear RE 12.12.5 (left – Transect 11) (right- Transect 15)

6.2.1.6 Assessment Unit 6

Assessment Unit 6 (AU6) is mapped as containing non-remnant vegetation with preclear mapping once containing 'Least Concern' Regional Ecosystem 12.3.7 described as *Eucalyptus tereticornis, Casuarina Cunninghamiana* subsp. *Cunninghamiana* +/- *Melaleuca* spp. fringing woodland. This community is a sparse structure category which generally has a crown cover of between 20-50% with trees between 10 and 30 meters in height. Transect 2 is dominated by *Corymbia citriodora* (Spotted Gum) and *Corymbia tessellaris* (Moreton Bay Ash) with recruiting species. The average tree height in Transect 2 is 22 meters with the subcanopy being 10 meters. A SAT survey was conducted at this transect with 1/30 scats recorded. Transect 22 with an alignment of 87°E is dominated by *Corymbia citriodora* (Spotted Gum) with recruiting species. The average tree height in Transect 22 is 23 meters with the subcanopy being 10 meters. A SAT survey was conducted at this transect with no scats recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 22 is 234mm. Transect 23 is within a waterway also dominated by *Corymbia citriodora* (Spotted Gum) with recruiting species. The average tree height in Transect 23 is 26 meters with the subcanopy being 14 meters. A SAT survey was conducted at this transect with no scats recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 23 is 381mm. **Photo set 6** shows the vegetation present within this AU. Uniformity between disjunct polygons which form this AU were confirmed via observations, refer to **Plan 9** for locations.

Photo set 6: AU6 – non-remnant - Pre-clear RE 12.3.7 (top left – transect 22) (top right – transect 23)(bottom – transect 2)

6.2.1.7 Assessment Unit 7

Assessment Unit 7 (AU7) is mapped as containing non-remnant vegetation with preclear mapping once containing Regional Ecosystem 12.11.6 described as *Corymbia citriodora (Spotted Gum) and Eucalyptus crebra (Narrow Leaf Ironbark) woodland occurring on metamorphic +/- interbedded volcanics*. Transect 5 is within an open paddock area utilised for cattle grazing. Adjacent vegetation on the slope is consistent with this regional ecosystem community. Transect 8 with an alignment of 288°W is dominated by open paddock. No SAT survey was conducted at transect 5 or 8 due to lack of trees. **Photo set 7** shows the vegetation present within this AU. Uniformity between disjunct polygons which form this AU were confirmed via observations, refer to **Plan 9** for locations.

Photo set 7: AU7 – non-remnant - Preclear RE 12.11.6 (left – Transect 5) (right- Transect 8)

6.2.1.8 Assessment Unit 8

Assessment Unit 8 (AU8) is mapped as containing non-remnant vegetation with preclear mapping once containing 'Least Concern' Regional Ecosystem 12.12.5, described as *Corymbia citriodora* (Spotted Gum) and *Eucalyptus crebra* (Narrow Leaf Ironbark) woodland occurring on Mesozoic to Proterozoic igneous rocks. This community is typically classified as a sparse structure category, with a crown cover of approximately 20–50% and trees reaching heights of 10–30 metres. Transect 9's alignment is 218°SW with only one (1) established tree recorded in the transect 9 location being *Ficus rubiginosa* (Port Jackson Fig) with the balance area cleared for cattle grazing. No dominant species or recruitment recorded. Transect 10 contains scattered native trees within open paddock areas. Transect 12's alignment is 324°NW with only two (2) established trees recorded being *Corymbia tessellaris* (Moreton Bay Ash) and *Angophora subvelutina* (Broad-leaved Apple) with the balance area cleared for cattle grazing. The T1 height of transect 12 is 19 metres. No SAT survey was conducted at Transect 9, 10 or 12 due to lack of trees. **Photo set 8** shows the vegetation present within this AU. Uniformity between disjunct polygons which form this AU were confirmed via observations, refer to **Plan 9** for locations.

Photo set 8: AU8 – non-remnant - Pre-clear RE 12.12.5 (top left – transect 9)(top right – transect 10)(bottom – transect 12)

Assessment Unit 9

Assessment Unit 9 (AU9) is mapped is mapped as non-remnant vegetation formerly mapped as 'Least Concern' Regional Ecosystem 12.3.7 described as *Eucalyptus tereticornis, Casuarina Cunninghamiana* subsp. *Cunninghamiana* +/- *Melaleuca* spp. fringing woodland. This community is a sparse structure category which generally has a crown cover of between 20-50% with trees between 10 and 30 meters in height. The average tree height in transect 16 is 24 meters with the subcanopy being 8 meters. The transect location is disturbed with evidence of cattle and pig damage. The transect is dominated by *Corymbia tessellaris* (Moreton Bay Ash), one of which meets the large tree threshold, totalling 620mm. Transect 24 consists of open paddock with no trees present. No SAT survey was conducted at either transect 16 or 24. 12 pieces of woody debris were recorded at this transect and the non-native plant cover was 90%. **Photo set 9** shows the vegetation present within this AU. Uniformity between disjunct polygons which form this AU were confirmed via observations, refer to **Plan 9** for locations.

Photo set 9: AU9 – non-remnant - Pre-clear RE 12.3.7 (left – transect 16)(right – transect 10)

6.2.1.9 Assessment Unit 10

Assessment Unit 10 (AU10) is mapped as non-remnant vegetation formerly mapped as Endangered' Regional Ecosystem 12.3.3 described as *Eucalyptus tereticornis on Quaternary alluvium*. *Eucalyptus crebra and E. moluccana are sometimes present and may be relatively abundant in places, especially on edges of plains and higher level alluvium*. Transect 4 with an alignment of 279°W is within a waterway dominated by *Typha domingensis (*Narrow Leaf Cumbungi). Large, scattered trees within the adjacent road reserve would suggest this regional ecosystem was once present in the area however very little vegetation remains. The average tree height in Transect 4 is 32 meters with the subcanopy being absent. No SAT survey was recorded at this transect due to lack of trees. Transect 6 with an alignment of 339°N is also nearby a waterway dominated by *Corymbia tessellaris* (Moreton Bay Ash) with recruiting species. The average tree height in Transect 6 is 19.5meters with the subcanopy being 12 meters. A SAT survey was conducted at this transect with no scats recorded. The average trunk diameter of trees searches within the SAT survey associated with Transect 6 is 333 mm. **Photo set 10** shows the vegetation present within this AU. Uniformity between disjunct polygons which form this AU were confirmed via observations, refer to **Plan 9** for locations.

Photo set 10: AU10 – non-remnant RE 12.3.3 (left – transect 4)(right – transect 6)

6.2.2 Non-native vertebrate pest records – broader Offset Property

Wild dogs and foxes have been reported to occur within the broader offset property and public database records indicate records are present in the surrounding landscape.

There were sixty-six (66) individual detections of non-native predator species over a combined total of twenty-eight (28) survey nights per camera as part of preliminary baseline surveys (refer to **Table 34**). Non-native species were detected, being *Canis lupus familiaris (Wild Dog), Cervus elaphus (Red Deer) and Sus scrofa (Feral Pig)* (refer **Photo sets 11-16**). Other native fauna species were also captured during this survey. Any non-native animal was recorded as a new individual if >1 hour had elapsed between sightings.

A baseline RAI was calculated using the formula **RAI = D/TN x 100**, where D is numbers of detection and TN is the total number of camera-trap nights (all cameras combined). This methodology ensures that the surveys are representative of the entirety of the proposed Offset Area and are repeatable for future monitoring requirements. The RAI for non-native pests is **33.67** (refer **Table 34)**

Table 34: Non-native pest survey results summary

Camera Number	Name	Records	Survey Duration (TN)	Detection (D)	RAI
Camera 1	Anemone	*Canis lupus familiaris (Wild Dog)* *Cervus elaphus (Red Deer)*	28	1 3	**Dog 4.59**
Camera 2	Nemo	*Canis lupus familiaris (Wild Dog)* *Cervus elaphus (Red Deer)* *Sus scrofa (Feral Pig)*	28	3 10 2	**Red Deer 10.71**
Camera 3	Beans	N/A	28		**Fedal Pig 18.37**
Camera 4	Hippo	*Cervus elaphus (Red Deer)*	28	2	
Camera 5	Owl	*Canis lupus familiaris (Wild Dog)*	28	1	
Camera 6	Pigeon	*Canis lupus familiaris (Wild Dog)* *Cervus elaphus (Red Deer)* *Sus scrofa (Feral Pig)*	28	3 3 22	
Camera 7	Slug	*Canis lupus familiaris (Wild Dog)* *Cervus elaphus (Red Deer)* *Sus scrofa (Feral Pig)*	28	1 3 12	
Totals		**13**	**196**	**66**	

Photo set 11: *Canis lupus familiaris* (Wild Dog) & *Cervus elaphus* (Red Deer) captured on camera trap (pictured Anemone)

Photo set 12: *Sus scrofa (*Feral Pig) & *Cervus elaphus (Red Deer)* captured on camera traps (pictured Nemo)

Photo set 13: *Canis lupus familiaris* (Wild Dog) & *Cervus elaphus* (Red Deer) captured on camera trap (pictured Hippo & Owl)

Photo set 14: *Canis lupus familiaris* (Wild Dog) & *Cervus elaphus* (Red Deer) captured on camera trap (pictured Pigeon)

Photo set 15: *Sus scrofa (*Feral Pig) captured on camera traps (pictured Pigeon & Slug)

Photo set 16: *Canis lupus familiaris* (Wild Dog) & *Cervus elaphus* (Red Deer) captured on camera trap (pictured slug)

6.2.3 Weed Mapping

Based on MHQA transects, general observations during MNES surveys and weed coverage mapping on 100 m weed transects, broad areas of uncontrolled Lantana infestation are present across the Offset Area including within the gully lines and paddock areas. Lantana was recorded across most transect locations. Refer to **Photo set 17** for photos of Lantana infestations. Grass coverage on site is heavily dominated by pasture grasses as a result of historical land-uses including native *Heteropogon contortus* (Black Spear Grass), *Imperata cylindrica* (Blady Grass), *Cymbopogon refractus* (Barbed Wire Grass), *Panicum decompositum* (Native Millet) and invasive *Sporobolus pyramidalis* (Giant Rat's Tail Grass), *Melinis repens* (Red Natal Grass), *Solanum mauritianum* (Rhodes Grass) and *Sporobolus africanus* (Paramatta Grass). The coverage of both WONS and all weed species in total was recorded for each transect.

Table 35 presents the summary of WONS and total weed coverage within the weed transect data. The WONS representatives in the transects consist of *Lantana montevidensis* (Creeping Lantana) and *Lantana camara* (Lantana).

Photo set 17: Lantana infestations present across the Willow Vale offset property

Table 35: Weed coverage transects summary

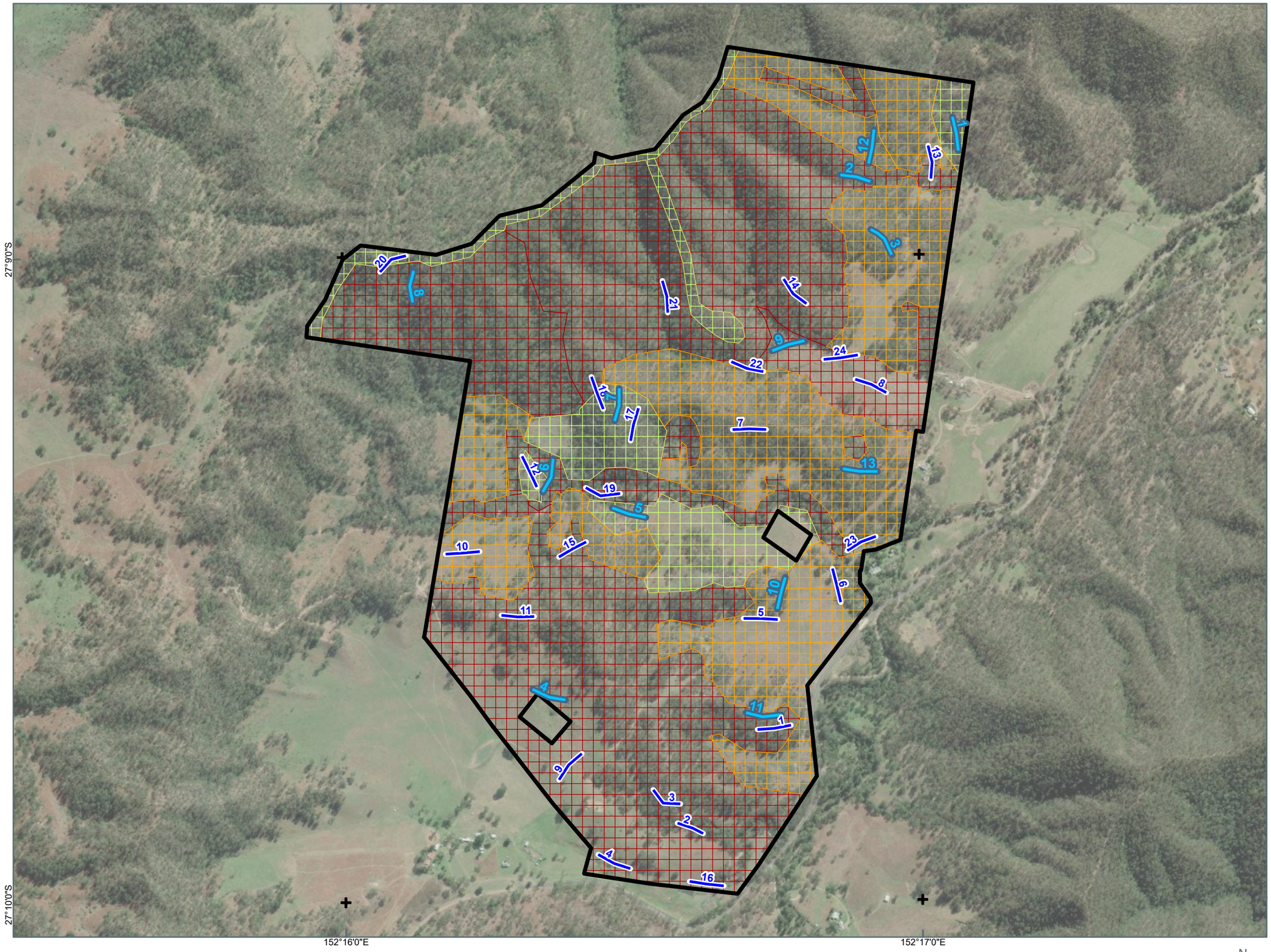
Weed Transect ID	WONS Coverage (%)	Total Weed Coverage (%)	Area (ha)	Relative cover of WONS (ha)
Low (0-24%)				
Weed Transect 1	0.7	17.2	25.8	**0.12**
Weed Transect 5	0.7	18.6		
Weed Transect 7	0.0	8.1		
Average	**0.47**	14.73		
Moderate (25-49%)				
Weed Transect 3	40.2	45.5	83.1	**15.29**
Weed Transect 10	0.5	40.0		
Weed Transect 12	28.8	33.4		
Weed Transect 13	4.1	40.5		
Average	**18.4**	39.9		
High (50-100%)				
Weed Transect 2	76.8	86.3	156.6	**105.39**
Weed Transect 4	48.4	73.6		
Weed Transect 6	79.5	83.2		
Weed Transect 8	86.9	86.9		
Weed Transect 9	33.3	72.1		
Weed Transect 11	78.9	91.0		
Average	**67.3**	82.2		
Combined Total			**98.48 ha**	

The majority of WONS infestations on the site are within the high cover (50-100%) category, indicating dense infestations over most of the offset property. Moderate cover occurs in smaller patches, while low cover is sporadic. Overall, the site is heavily impacted by Lantana infestations and weed management will focus on high-density areas to prevent further spread.

Notably, the Offset Provider is developing a weed management plan for entire Offset Property, including this Offset Area, which ensures consistent and property-wide approaches to weed monitoring and management. It will include a quantitative and repeatable weed cover monitoring method that will enable assessment against the completion criteria "≤ 5% weed cover by year 10". It will also include photo-monitoring requirements as well as management actions to be employed. Weed mapping will include:

- Preparation of a Weed Management Plan by the Offset Provider in Year 1 of the offset
- Implementation of the Weed Management Plan by the Offset Provider including weed cover surveys and photo-monitoring in Years 1 to 5 of the offset (in accordance with the method outlined in the Weed Management Plan)

10. BASELINE WEED COVERAGE



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LEGEND

- Offset Area
- Weed transect
- Modified Habitat Quality Assessment Transect

Weed coverage

- High (50-100%) [156.6 ha]
- Moderate (25-49%) [83.1 ha]
- Low (0-24%) [25.8 ha]

Transect Coverage

Transect 1 - Low
Transect 2 - High
Transect 3 - Moderate
Transect 4 - High
Transect 5 - Low
Transect 6 - Low and High
Transect 7 - Low
Transect 8 - High
Transect 9 - High
Transect 10 - Moderate
Transect 11 - High
Transect 12 - Moderate
Transect 13 - Moderate

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6.2.4 Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and Southeast Queensland bioregions MHQA

6.2.4.1 Site Condition (70%)

The site condition scoring for the Offset Area is summarised in **Table 36**. Refer to **Appendix A** for detailed baseline TEC MHQA scoring and **Appendix F** for the raw data.

Table 36: Site condition scores for Offset Area assessment units - TEC

Assessment Unit	AU3	AU6	AU9	AU10
Regional Ecosystem	12.3.7	12.3.7	12.3.7	12.3.3
Status*	R	NR	NR	NR
Recruitment of woody perennial species in EDL	3	3	3	3
Native plant species richness - trees	5	5	0	2.5
Native plant species richness - shrubs	5	2.5	0	2.5
Native plant species richness - grasses	2.5	2.5	2.5	2.5
Native plant species richness - forbs	2.5	2.5	0	2.5
Average tree canopy height*	5	5	3	4
Average tree canopy cover*	4	5	2	3.5
Shrub canopy cover	5	3	0	3
Native grass cover	5	5	5	3
Organic litter	5	5	0	3
Large trees	5	5	5	5
Coarse woody debris	5	2	0	2
Non-native plant cover	0	0	0	0
Total (Out of 80)	**52**	**45.5**	**20.5**	**36.5**
Score out of 7	**4.55**	**3.98**	**1.79**	**3.19**

* R = Remnant, NR = Non-remnant

The site condition values for AU1 – AU10 are scored as above.

6.2.4.2 Site Context (30%)

The site context characteristics for TEC are shown on **Plan 11** with scores summarised in **Table 37**.

Table 37: TEC site context scores for Offset Area

Assessment Unit	AU3	AU6	AU9	AU10
Size of patch	10	10	10	10
Connectedness	0	0	0	0
Context	0	0	0	0
Ecological corridors	6	6	6	6
Role of the site location to species overall population in the state	5	5	5	5
Threats to species	7	7	7	7
Total (out of 46)	**28**	**28**	**28**	**28**
Score out of 3	**1.83**	**1.83**	**1.83**	**1.83**

Size of patch

AU3, AU6, AU9 and AU10 are connected to a patch of 392 ha therefore achieves a score of **10 out of 10**.

Connectedness

AU3, AU6, AU9 and AU10 share <4% of their boundary with a connection off / on-site a RE associated with the SEFFW TEC therefore achieves a score of **0 out of 5**.

Context

AU3, AU6, AU9 and AU10 includes remnant vegetation of RE's associated with the SEFFW TEC of **3%** within 1 km of the Offset Area and scores **0 out of 5**.

Ecological corridors

The Offset Area is located entirely within a Statewide corridor of regional significance (refer **Plan 6**) therefore achieves a score of **6 out of 6**.

Role of Site

The Offset Area is a suitable offset so scores **5 out of 5**.

Threats to species

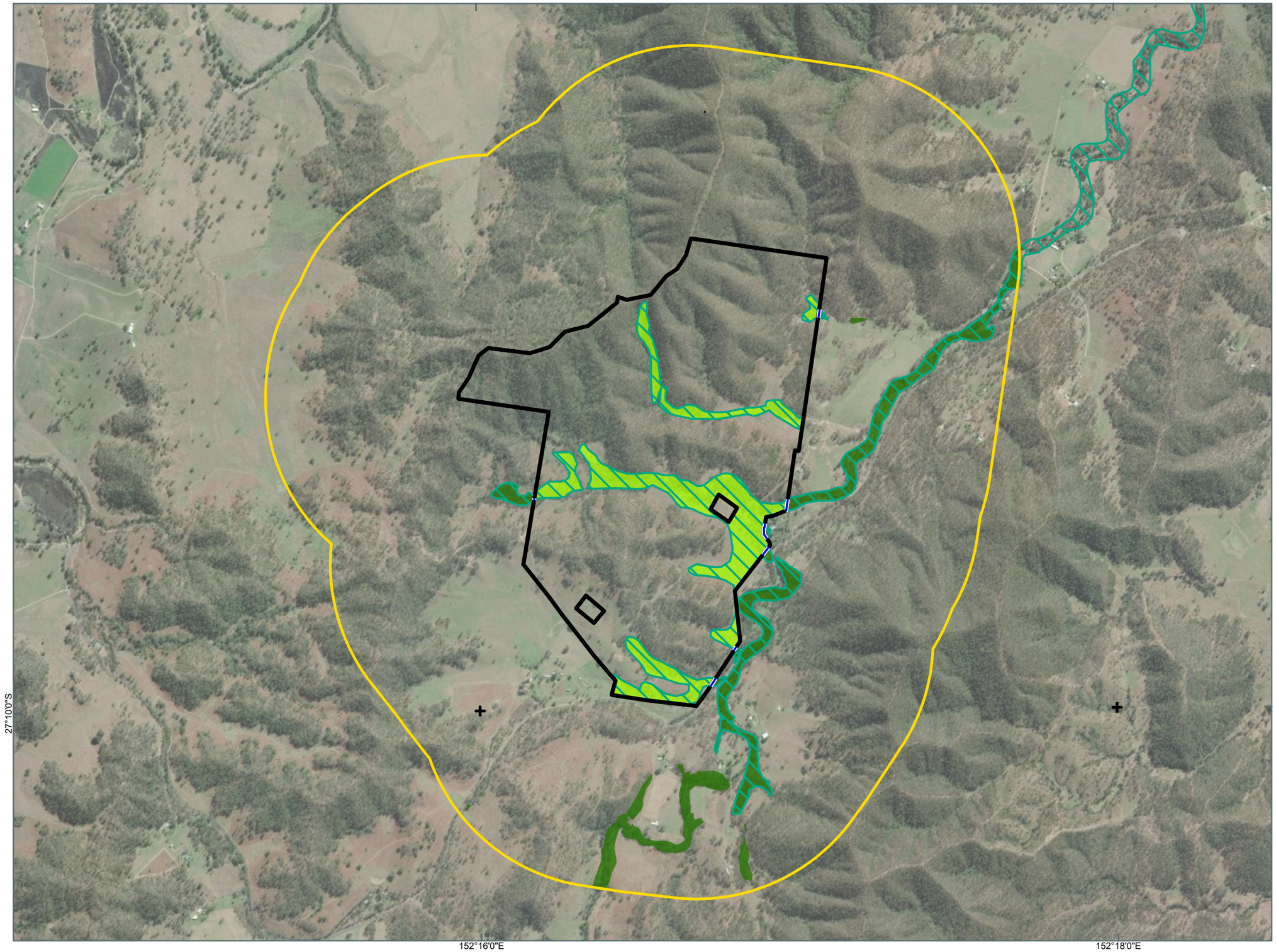
Threats to the TEC are present across the Willow Vale Offset Property and includes uncontrolled wildfire, increased weed incursion or additional disturbance caused by land use including routine clearing and cattle grazing.

The site has no current Government endorsed Bushfire Management Plan (BMP) increasing the potential for significant impacts if wildfires were to occur within the region. Evidence of historical selective logging and cattle grazing is present on site. Grazing of cattle is still occasionally present within and surrounding the Offset Area. In addition, significant incursion of WONS *Lantana camara* has been observed across site. The presence of invasive species can supress the growth of native species.

Given the presence of multiple threats across the Offset Area, a **score of 7** or 'moderate' was considered appropriate.

An adaptive management approach is proposed to manage threats on site including the establishment of a BMP, restrictions on cattle grazing and management of non-native plant species, in particular WONS for the life of the offset (20 years).

11. THREATENED ECOLOGICAL COMMUNITY CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- Offset Area 1km buffer
- Remnant RE 12.3.7 threatened ecological community [35.7 ha]
- Percentage of boundary length supporting a connection off/on Offset Site to AU03 / Remnant RE 12.3.7 - 4%
- Percentage of AU03 / Remnant RE 12.3.7 within 1km of Offset Area - 3%
- Size of Remnant RE 12.3.7 patch - 392 ha

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6.2.5 Koala MHQA

6.2.5.1 Site Condition (30%)

The site condition scoring for the Offset Area is summarised in **Table 38**. Refer to **Appendix B** for detailed baseline Koala MHQA scoring and **Appendix F** for the raw data.

Table 38: Site condition scores for Offset Area assessment units - Koala

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Regional Ecosystem	12.11.6	12.12.5	12.3.7	12.11.6	12.12.5	12.3.7	12.11.6	12.12.5	12.3.7	12.3.3
Status*	R	R	R	NR	NR	NR	NR	NR	NR	NR
Recruitment of woody perennial species in EDL	5	5	3	3	5	3	0	3	3	3
Native plant species richness - trees	5	5	5	2.5	5	5	2.5	2.5	0	2.5
Native plant species richness - shrubs	5	2.5	5	2.5	2.5	2.5	2.5	5	0	2.5
Native plant species richness - grasses	2.5	2.5	2.5	2.5	2.5	2.5	0	5	2.5	2.5
Native plant species richness - forbs	2.5	2.5	2.5	2.5	2.5	2.5	0	5	0	2.5
Average tree canopy height*	5	5	5	5	5	5	0	3	3	4
Average tree canopy cover*	4	4	4	5	4	5	0	2	2	3.5
Shrub canopy cover	5	3	5	5	5	3	3	5	0	3
Native grass cover	5	3	5	5	1	5	3	5	5	3
Organic litter	3	3	5	3	5	5	3	3	0	3
Large trees	5	5	5	5	5	5	0	5	5	5
Coarse woody debris	2	2	5	5	5	2	2	0	0	2
Non-native plant cover	5	3	0	0	0	0	0	0	0	0
Quality and availability of food and foraging habitat	10	5	5	5	5	5	1	5	1	5
Quality and availability of shelter	10	5	5	5	5	5	1	5	1	5
Total (Out of 100)	**74**	**55.5**	**62**	**56**	**57.5**	**55.5**	**18**	**43.5**	**22.5**	**46.5**
Score out of 3	**2.22**	**1.67**	**1.86**	**1.68**	**1.73**	**1.67**	**0.54**	**1.31**	**0.68**	**1.40**

* R = Remnant, NR = Non-remnant

The site condition values for AU1 – AU10 are scored as above.

6.2.5.2 Site Context (30%)

The site context characteristics for Koala are shown on **Plan 12A** and **Plan 12B** with scores summarised in **Table 39.**

Table 39: Koala site context scores for Offset Area

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Size of patch	10	10	10	10	10	10	10	10	10	10
Connectedness	4	4	4	4	4	4	4	4	4	4
Context	5	5	5	5	5	5	5	5	5	5
Ecological corridors	6	6	6	6	6	6	6	6	6	6
Role of the site location to species overall population in the state	5	5	5	5	5	5	5	5	5	5
Threats to species	7	7	7	7	7	7	7	7	7	7
Species mobility capacity	10	10	10	10	10	10	10	10	10	10
Total (out of 56)	**47**	**47**	**47**	**47**	**47**	**47**	**47**	**47**	**47**	**47**
Score out of 3	**2.52**	**2.52**	**2.52**	**2.52**	**2.52**	**2.52**	**2.52**	**2.52**	**2.52**	**2.52**

Size of patch

The Offset Area is connected to a patch of >5000 ha therefore achieves a score of **10 out of 10**.

Connectedness

The Offset Area shares 61.5% of its boundary with Koala habitat therefore achieves a score of **4 out of 5**.

Context

The Offset Area includes habitat coverage of 76% within 1 km of the Offset Area and scores **5 out of 5**.

Ecological corridors

The Offset Area is located entirely within a Statewide corridor of regional significance (refer **Plan 6**) therefore achieves a score of **6 out of 6**.

Role of Site

The Offset Area is a suitable offset so scores **5 out of 5**.

Threats to species

The threats to the species attribute aims to quantify the risk to survival of the Koala on-site. Threats to Koala are present across the Willow Vale Offset Property and include potential for dog, fox and pig attacks, degradation of habitat through uncontrolled weed infestations, mostly *Lantana camara* (Lantana), potential for vehicle strike and uncontrolled wildfire.

Threat level was determined using a threats matrix. Methodology for scoring threats is outlined in **Section 3.3.** Refer to **Table 40** for Koala threats matrix scoring results and refer **Plan 12C** for threats.

Table 40: Threats Matrix Assessment for Koala

Metric	Low	Moderate	High
Threat Thresholds			
Clearing and Degradation of Habitat	Apply one of the following options in order of priority: 1. Apply a current legal protective mechanism. 2. The site is zoned for conservation purposes or clearing is not permitted. 3. If ≤30% of the area within a 5 km buffer of the site is cleared or disturbed land.	In the absence of justification for scoring as high or low and if: >30% and <70% of the area within a 5km buffer of the site is cleared or disturbed land.	Apply one of the following options in order of priority: 1. The site is zoned for development 2. If ≥ 70% of the area within a 5 km buffer of the site is cleared or disturbed land.
Score Weighting	**6**	**2.8**	**0.4**

Metric	Low	Moderate	High
Inappropriate Fire Regimes Very High Risk	Current Government endorsed Bushfire Management Plan (BMP) to protect the Koala is in effect.	Non-Koala specific BMP in effect. or; Low fuel load and low fire risk.	Site has a high fuel load and/or high fire risk.
Score Weighting	**6**	**2.8**	**0.4**
Vehicle Strike Moderate Risk	Low volume of cars, unsealed, no Koala accessibility, fencing, and mitigation measures in place, negligible Koala mortality.	Site-specific and evidence-based qualitative assessment of these considerations	High volume of cars, sealed, accessibility for Koala, no fencing, and no mitigation measures in place, high Koala mortality
Score Weighting	**1.5**	**0.7**	**0.1**
Dog Attack Moderate Risk	No dogs recorded on site.	Dogs recorded on site and adequate refuge for Koalas (>70% canopy cover).	Dogs recorded on site and limited refuge for Koalas (<70% canopy cover)
Score Weighting	**1.5**	**0.7**	**0.1**
Threats to Species			
Threshold Analysis	≥10	>4 and <10	≤4
Score	**15**	**7**	**1**
Description	Low threat level (i.e. likely to survive)	Moderate threat level	High threat level (i.e. likely to result in death, irreversible damage)

Given the presence of multiple threats across the Offset Area, a score of (6.4) 7 or 'moderate' was considered appropriate.

An adaptive management approach is proposed to manage threats from dogs and other vertebrate pest species for the life of the offset (20 years).

Species mobility capacity

Species mobility capacity was given a **score of 10** out of 10 across all AU's.

6.2.5.3 Species Stocking Rate (40%)

Evidence of Koala was recorded within the Offset Area through the detection of scats during SAT surveys as part of the baseline field surveys A summary of the SAT survey results completed at each MHQA transect are provided in **Table 41** with raw data provided at **Appendix F**.

Table 41: Baseline SAT survey results

SAT ID (MHQA transect)	Number of scats	Evidence of Koala activity (%)	Koala use (East Coast med-high)
AU1			
SAT 3 – Transect 3	0	0.00%	No activity

SAT ID (MHQA transect)	Number of scats	Evidence of Koala activity (%)	Koala use (East Coast med-high)
SAT 8 - Transect 14	0	0.00%	No activity
SAT 10 - Transect 17	2	6.67%	Low
AU2			
SAT 11 - Transect 18	2	6.67%	Low
SAT 13 - Transect 20	3	10.00%	Low
AU3			
SAT 12 - Transect 19	1	3.33%	Low
SAT 14 - Transect 21	0	0.00%	No activity
AU4			
SAT 1 – Transect 1	0	0.00%	No activity
SAT 7 - Transect 13	0	0.00%	No activity
AU5			
SAT 6 – Transect 11	2	6.67%	Low
SAT 9 - Transect 15	1	3.33%	Low
AU6			
SAT 2 – Transect 2	1	3.33%	Low
SAT 5 - Transect 7	0	0.00%	No activity
SAT 15 -Transect 22	0	0.00%	No activity
SAT 16 - Transect 23	0	0.00%	No activity
AU7			
N/A – open paddock	-	-	-
AU8			
N/A – open paddock	-	-	-
AU9			
N/A – open paddock	-	-	-
AU10			
SAT 4 – Transect 6	0	0.00%	No activity

The SAT surveys demonstrate that Koalas utilise most of the AUs across the site (excluding open paddock lacking trees) and that the Offset Area has the capacity to support ecological gain for the Koala.

The species stocking rate for Koala scored **40 out of 70** for AU1, AU2, AU3, AU5 and AU6 and a **20 out of 70** for AU4, AU7, AU8, AU9 and AU10.

- A Koala was observed within the broader Offset Property therefore 'presence detected on or adjacent to site' was assigned a score of **10 out of 10** for all assessment units.
- AU1, AU2, AU3, AU5 and AU6 **15 out of 15** for evidence of use indicating foraging/breeding habitat as trees were present as per Department expectations. AU4, AU7, AU8, AU9 and AU10 scored a **5 out of 15** for dispersal habitat as per department expectations.
- The 'approximate density' for AU4, AU7, AU8, AU9 and AU10 was scored as **0 out of 30** due to the absence of evidence of utilisation within these assessment units. It is considered that the variability in the landscape of the Offset Area, Koalas utilised the more heavily treed and connected habitat areas. It is anticipated that the capacity of these non-remnant assessment units to support Koala will improve with weed management and active regeneration. The remaining AUs scored **10 out of 30** for low use.

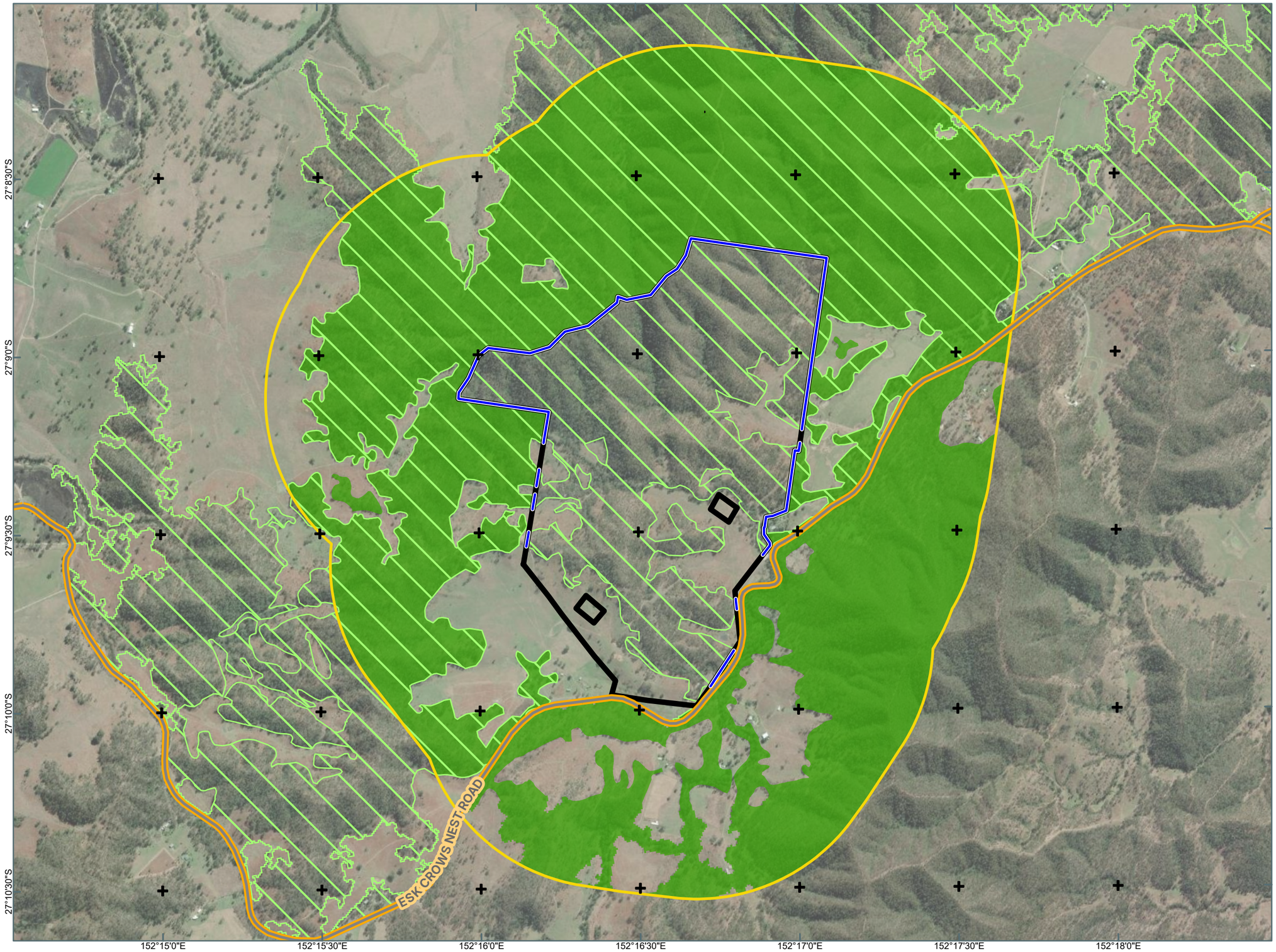
- Using the precautionary principle, the Offset Area is considered a key source for population for dispersal under 'role/importance of species population on-site' therefore was scored a **5 out of 15**.

Table 42: Koala species stocking rate scores within Offset Area assessment units

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Presence detected on or adjacent to site (neighbouring property with connecting habitat) (/10)	10	10	10	10	10	10	10	10	10	10
Species usage of the site (habitat type and evidenced usage) (/15)	15	15	15	5	15	5	5	5	5	5
Approximate density (per ha) (/30)	10	10	10	0	10	10	0	0	0	0
Role/importance of species population on site* (/15)	5	5	5	5	5	5	5	5	5	5
Total Species Stocking Rate Score (/70)	0.57	0.57	0.57	0.29	0.57	0.57	0.29	0.29	0.29	0.29
Species Stocking Rate Score – out of 4	2.29	2.29	2.29	1.14	2.29	2.29	1.14	1.14	1.14	1.14

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Key source population for breeding (/5)	0	0	0	0	0	0	0	0	0	0
Key source population for dispersal (/5)	5	5	5	5	5	5	5	5	5	5
Necessary for maintaining genetic diversity (/15)	0	0	0	0	0	0	0	0	0	0
Near the limit of the species range (/15)	0	0	0	0	0	0	0	0	0	0

12A. KOALA MHQA CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- Major Roads
- 1km Offset Area Buffer
- Percentage of offset area boundary length supporting a connection off and on site to Koala critical habitat - 61.5%
- Percentage of Koala critical habitat within 1km of offset area (76%)
- Size of Koala critical habitat patch > 200 ha

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PEET

WILLOW VALE OFFSET

0 100 200 300 400 m

N

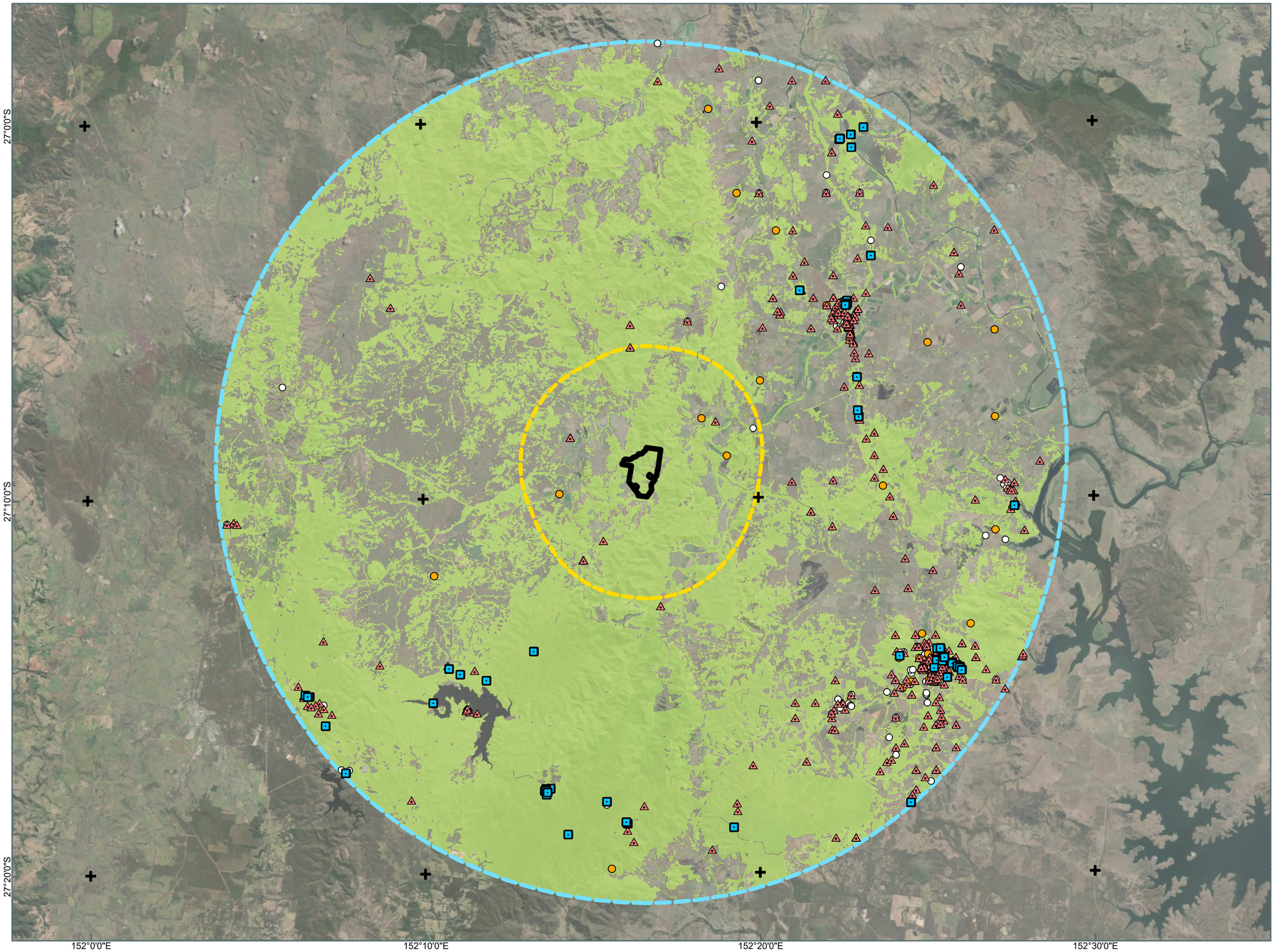
Transverse Mercator | 1:20,000
GDA 2020 | Zone 56 | @ A3

Address / RPD: Biarra, QLD

23/01/2026

8418 E 12a OMP_Esk Koala CA A

12B. KOALA LANDSCAPE CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- Offset Site 5km buffer
- Offset Site 20km buffer
- Potential Koala habitat within 20km of the Offset Site

Koala records within 20km (ALA, 2026)

- Koala (Phascolarctos cinereus) records within 20km of the Offset Area recorded since 2020 [58]
- Koala (Phascolarctos cinereus) records within 20km of the Offset Area recorded between 2005-2019 [439]
- Koala (Phascolarctos cinereus) records within 20km of the Offset Area recorded prior to 2005 [31]
- Koala (Phascolarctos cinereus) records within 20km of the Offset Area recorded without a date [172]

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PEET

WILLOW VALE OFFSET

0 1 2 3 4 km

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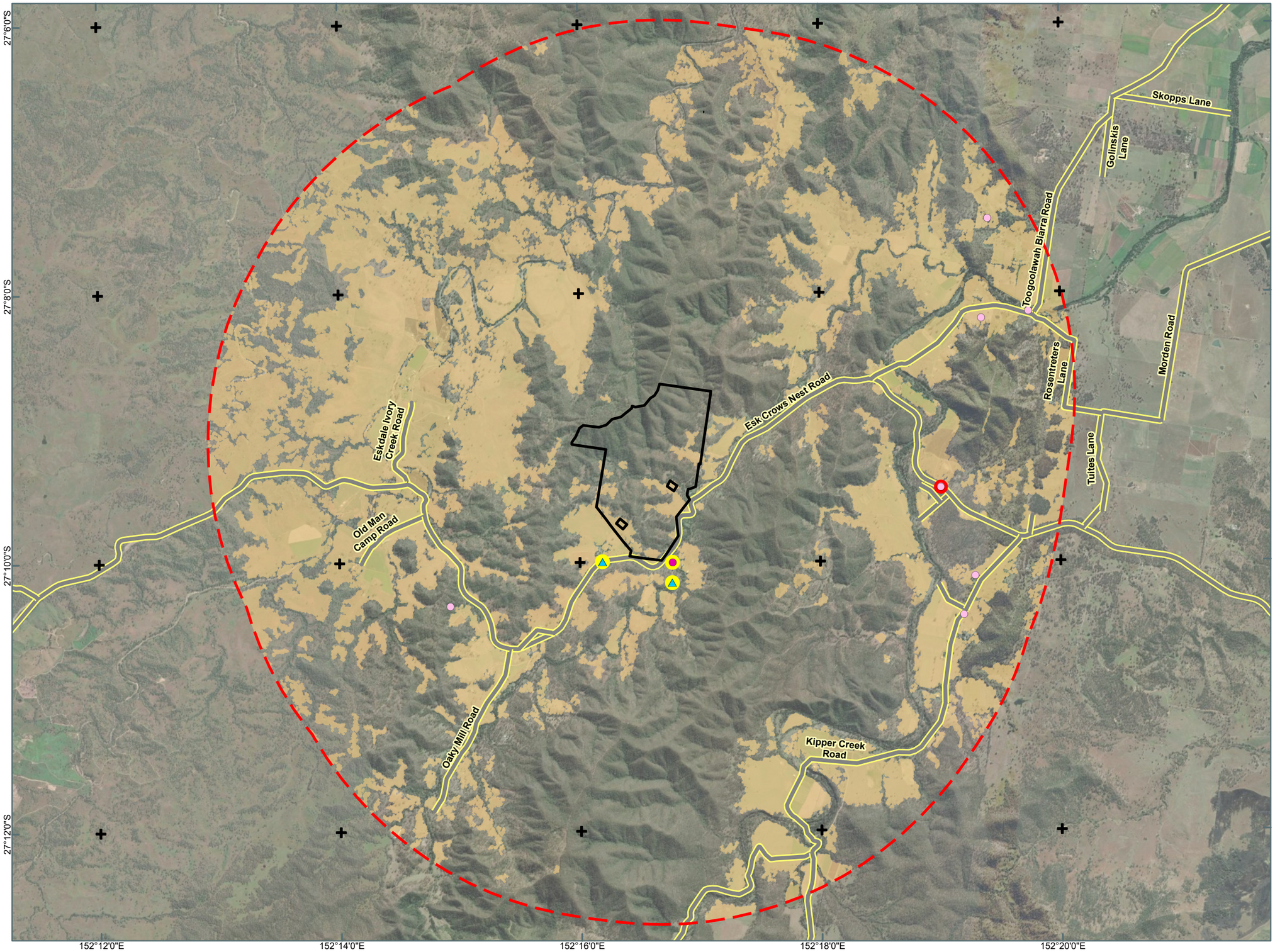
8418 E 12b OMP_Esk Koala Landscape A

12C. KOALA THREATS ASSESSMENT



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LEGEND

- Qld DCDB
- Offset Area
- Offset Area 5km buffer
- Roads and Unsealed tracks
- Non-Koala habitat areas and degraded habitat within 5km of offset area (32%)

Koala Hospital data (2023)

- Deceased (0)
- Injured (2)
- Sick and/or wasted (7)
- Sick & Injured (1)
- Orphaned Joey (1)
- Vehicle hit (3)

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PEET

WILLOW VALE OFFSET

0 500 1,000 1,500 m

N

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1:53,000
@ A3

Address / RPD: Biarra, QLD

27/01/2026

8418 E 12c OMP_Esk Koala Threats A

6.2.6 Grey-headed Flying-fox FHA

6.2.6.1 Site Condition (40%)

The baseline site condition characteristics for GHFF are summarised in **Appendix D**.

6.2.6.2 Site Context (30%)

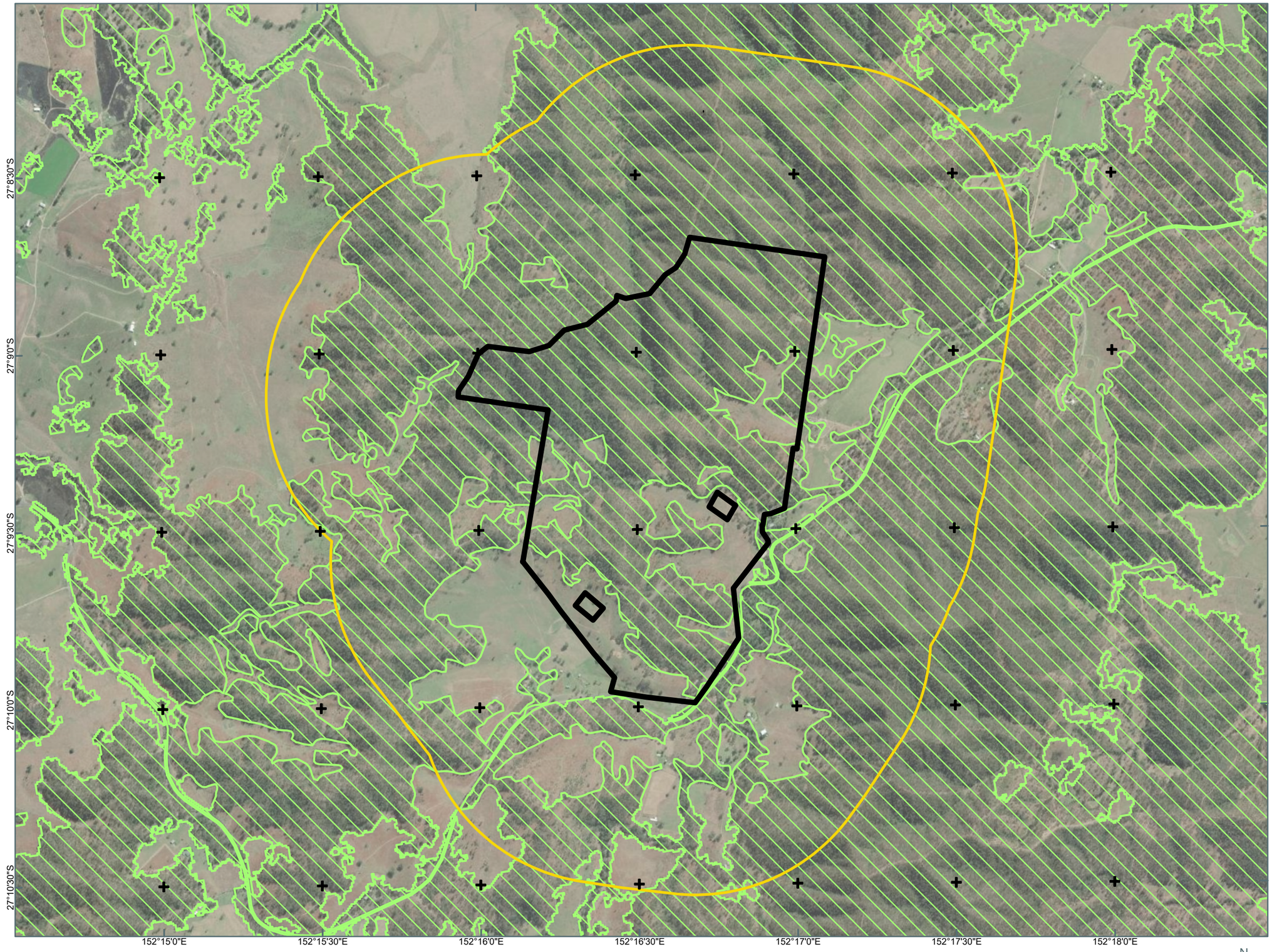
The baseline site context characteristics for GHFF are shown on **Plan 13a** and **Plan 13b** with results summarised in **Appendix D.**

A 'moderate' level of threats to GHFF are present within the Offset Area including the presence of barbed wire fencing.

6.2.6.3 Species Stocking Rate (30%)

The baseline species stocking rate scores is determined by the stem density of GHFF foraging species. The Offset Area species stocking rate results for GHFF are summarised in **Appendix D.**

13A. GREY-HEADED FLYING-FOX MHQA CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- 1km Offset Area Buffer
- Size of Grey-headed Flying-fox habitat patch > 200 ha

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PEET

WILLOW VALE OFFSET

0 100 200 300 400 m

N

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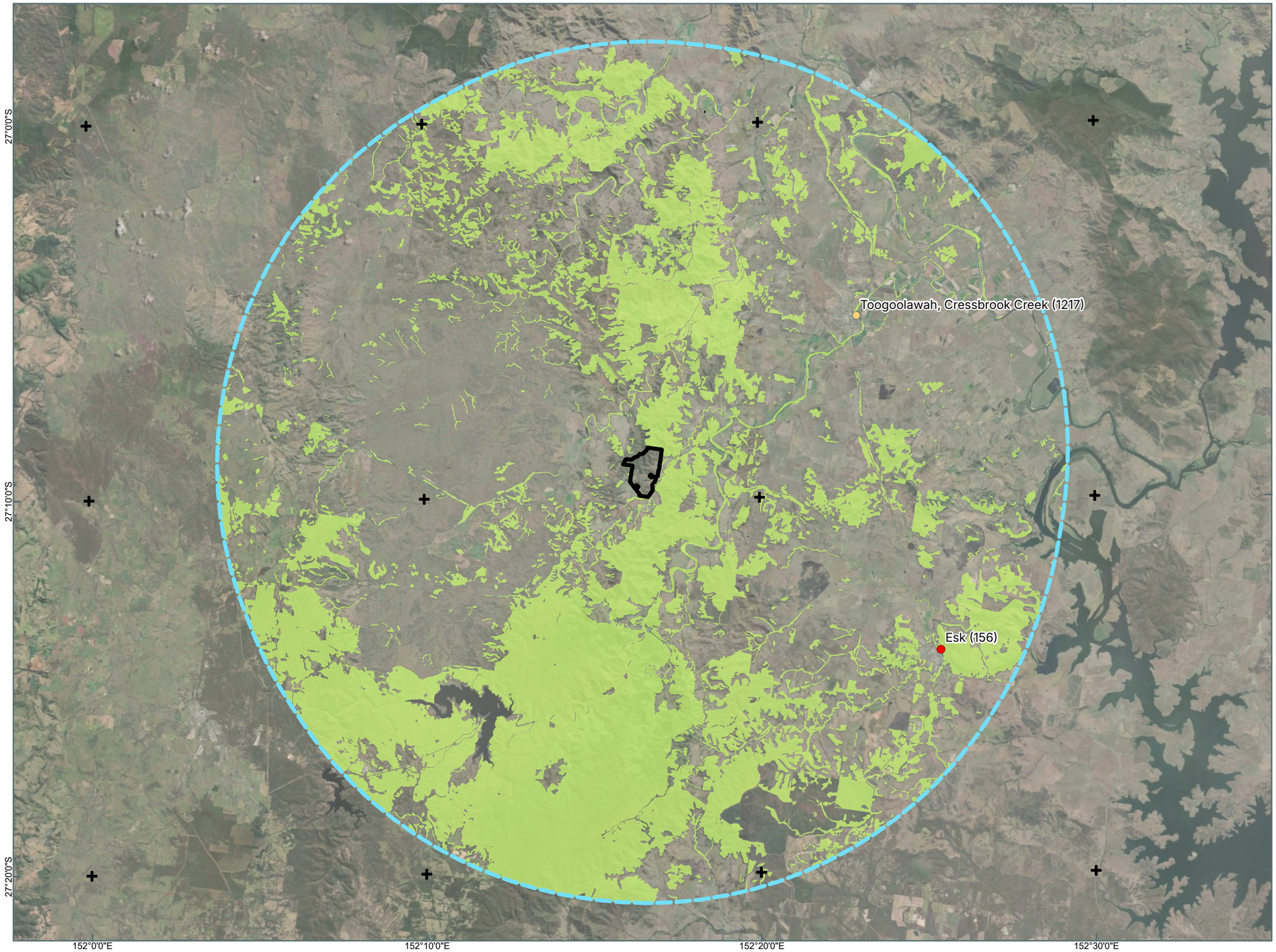
GDA 2020 | 1:20,000 @ A3

Address / RPD: Biarra, QLD

23/01/2026

8418 E 13a OMP_Esk GHFF CA A

13B. GREY-HEADED FLYING-FOX LANDSCAPE CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- Offset Site 20km buffer
- Potential Grey-headed Flying-fox habitat within 20km of the Offset Site [34%]

GHFF Camp Locations (last survey - 2024)

- Grey-headed Flying Fox roost inactive within recent surveys
- Grey-headed Flying Fox roost active within recent surveys
- Grey-headed Flying Fox roost active within recent surveys with a population level of 3 or above
- Nationally significant Grey-headed Flying Fox roost active within recent surveys
- Nationally significant Grey-headed Flying Fox roost active within recent surveys with a population level of 3 or above

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PEET

WILLOW VALE OFFSET

0 1 2 3 4 km

N

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1:190,000
@ A3

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23/01/2026

8418 E 13b OMP_Esk GHFF Landscape A

6.2.7 Greater Glider MHQA

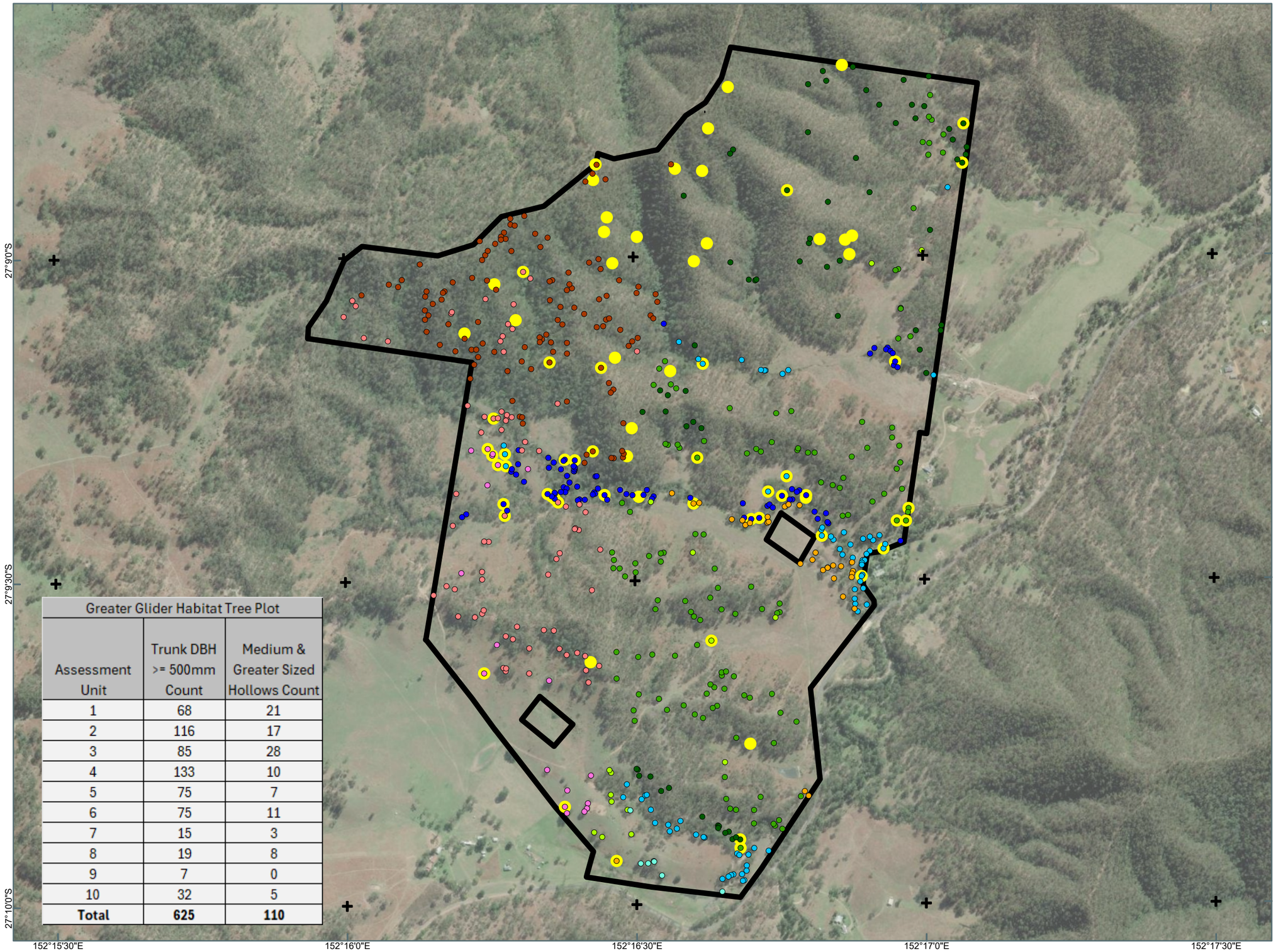
6.2.7.1 Features

The number of existing hollow features recorded per assessment unit are presented in **Table 43** and **Plan 14A**. The counts of potential foraging trees 500 mm DSH and over per assessment unit are also presented in **Plan 14A**.

Table 43: Hollow records

Assessment Unit	≥ Medium Hollow Count
1	21
2	17
3	28
4	10
5	7
6	11
7	3
8	8
9	0
10	5

14A. GREATER GLIDER HABITAT



Greater Glider Habitat Tree Plot		
Assessment Unit	Trunk DBH >= 500mm Count	Medium & Greater Sized Hollows Count
1	68	21
2	116	17
3	85	28
4	133	10
5	75	7
6	75	11
7	15	3
8	19	8
9	7	0
10	32	5
Total	**625**	**110**

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LEGEND

- Offset Area
- Greater Glider Habitat Tree Plot
  - Tree with DBH >= 500mm
  - Tree with medium or larger sized hollow/s [72 trees with 110 hollows]
- Tree AU locations
  - AU01: 12.11.6 (remnant)
  - AU02: 12.12.5 (remnant)
  - AU03: 12.3.7 (remnant)
  - AU04: 12.11.6 (vegetated non-remnant)
  - AU05: 12.12.5 (vegetated non-remnant)
  - AU06: 12.3.7 (vegetated non-remnant)
  - AU07: 12.11.6 (paddock non-remnant)
  - AU08: 12.12.5 (paddock non-remnant)
  - AU09: 12.3.7 (paddock non-remnant)
  - AU10: 12.3.3 (paddock non-remnant)

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PEET

WILLOW VALE PROJECT

0 100 200 300 m
N

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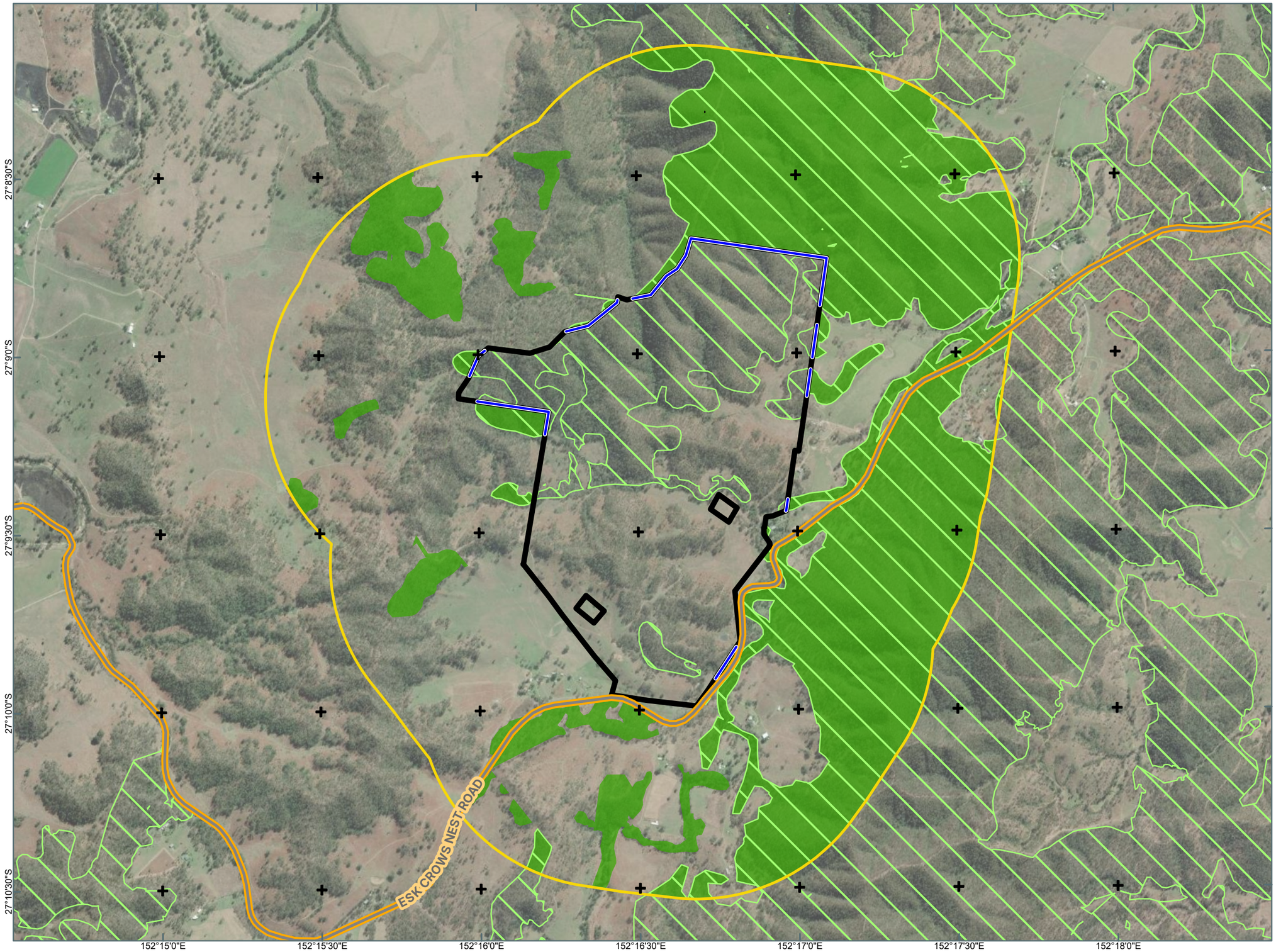
Address / RPD: Biarra, QLD

29/01/2026

8418 E 14a OMP_Esk GG Habitat A

14B. GREATER GLIDER MHQA CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- Major Roads
- 1km Offset Area Buffer
- Percentage of offset area boundary length supporting a connection off and on site to Greater Glider habitat - 35.6%
- Percentage of Greater Glider habitat within 1km of offset area (44%)
- Size of Greater Glider habitat patch > 200 ha

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PEET

WILLOW VALE OFFSET

0 100 200 300 400 m

N

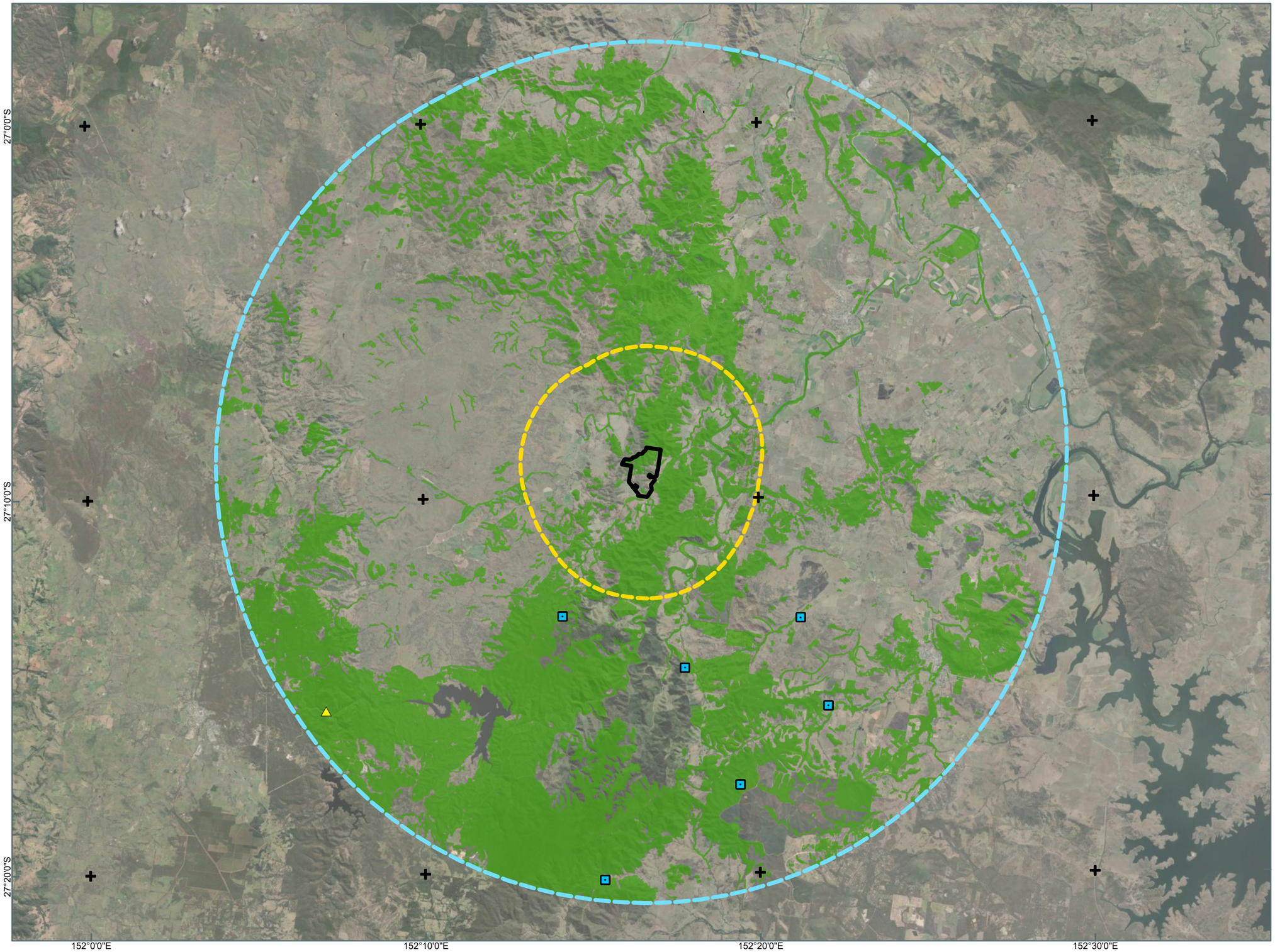
Transverse Mercator | 1:20,000
GDA 2020 | Zone 56 | @ A3

Address / RPD: Biarra, QLD

29/01/2026

8418 E 14b OMP_Esk GG CA A

14C.GREATER GLIDER LANDSCAPE CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- Offset Site 5km buffer
- Offset Site 20km buffer
- Potential Greater Glider habitat within 20km of the Offset Site

Greater Glider ALA records 2025.10

- Greater Glider (Petauroides minor) records recorded over 20 years ago [2]
- Greater Glider (Petauroides volans) records within 20km of the Offset Area recorded since 2020 [6]

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PEET

WILLOW VALE OFFSET

0 1 2 3 4 km

N

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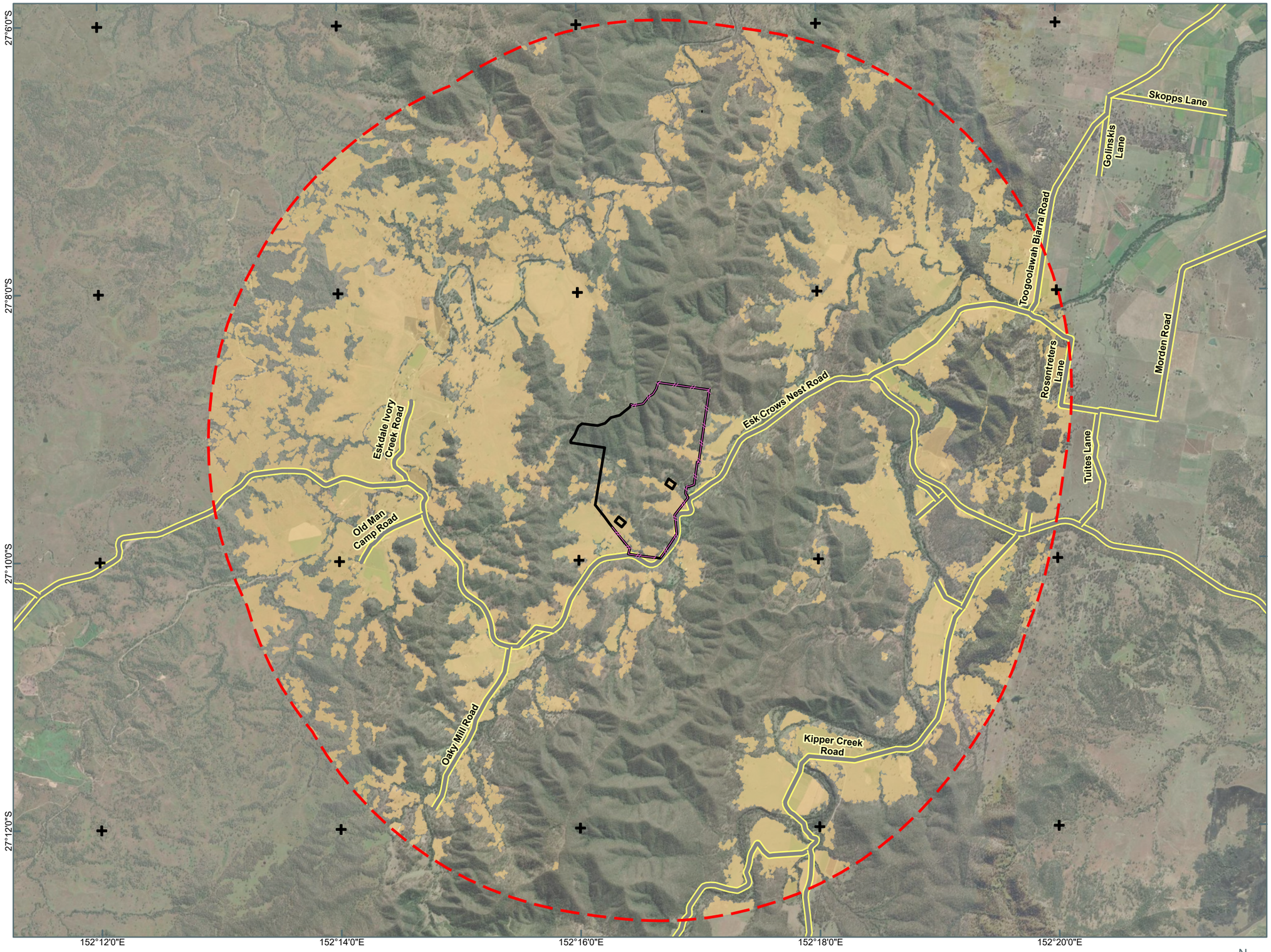
8418 E 14c OMP_Esk GG Landscape A

14D. GREATER GLIDER THREATS ASSESSMENT



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LEGEND

- Qld DCDB
- Offset Area
- Offset Area 5km buffer
- Known locations of barbed-wire fence [56%]
- Minor and Unsealed Roads/Tracks
- Non-Greater Glider habitat areas and degraded habitat within 5km of offset area (32%)

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PEET

WILLOW VALE OFFSET

0 500 1,000 1,500 m

N

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Address / RPD: Biarra, QLD

29/01/2026

8418 E 14d OMP_Esk GG Threats A

6.2.7.2 Site Condition (30%)

The site condition scoring for the Offset Area is summarised in **Table 44**. Refer to **Appendix D** for detailed baseline Greater Glider MHQA scoring and **Appendix F** for the raw data. Please note 40:20:40 relative weighting for general site condition, quality and availability of food and foraging habitat and quality and availability of shelter as outlined in **Section 3.3**.

Table 44: Site condition scores for Offset Area assessment units – Greater Glider

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Regional Ecosystem	12.11.6	12.12.5	12.3.7	12.11.6	12.12.5	12.3.7	12.11.6	12.12.5	12.3.7	12.3.3
Status*	R	R	R	NR	NR	NR	NR	NR	NR	NR
Recruitment of woody perennial species in EDL	5	5	3	3	5	3	0	3	3	3
Native plant species richness - trees	5	5	5	2.5	5	5	2.5	2.5	0	2.5
Native plant species richness - shrubs	5	2.5	5	2.5	2.5	2.5	2.5	0	0	2.5
Native plant species richness - grasses	2.5	2.5	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5
Native plant species richness - forbs	2.5	2.5	2.5	2.5	2.5	2.5	0	2.5	0	2.5
Average tree canopy height*	5	5	5	5	5	5	0	3	3	4
Average tree canopy cover*	4	4	4	5	4	5	0	2	2	3.5
Shrub canopy cover	5	3	5	5	5	3	3	5	0	3
Native grass cover	5	3	5	5	1	5	3	5	5	3
Organic litter	3	3	5	3	5	5	3	3	0	3
Large trees	5	5	5	5	5	5	0	5	5	5
Coarse woody debris	2	2	5	5	5	2	2	0	0	2
Non-native plant cover	5	3	0	0	0	0	0	0	0	0
Quality and availability of food and foraging habitat	10	10	10	10	5	10	1	1	1	5
Quality and availability of shelter	1	1	10	1	1	5	1	1	1	1
Total (Out of 100)	**51**	**46.75**	**86**	**47**	**37.75**	**62.75**	**14**	**22.75**	**16.25**	**32.25**
Score out of 3	**1.53**	**1.40**	**2.58**	**1.41**	**1.13**	**1.88**	**0.42**	**0.68**	**0.49**	**0.97**

* R = Remnant, NR = Non-remnant

The site condition values for AU1 – AU10 are scored as above.

6.2.7.3 Site Context (30%)

The site context characteristics for Greater Glider are shown on **Plan 14B** and **Plan 14C** with scores summarised in **Table 45.**

Table 45: Greater Glider context scores for the Offset Area

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Size of patch	10	10	10	10	10	10	10	10	10	10
Connectedness	2	2	2	2	2	2	2	2	2	2
Context	4	4	4	4	4	4	4	4	4	4
Ecological corridors	6	6	6	6	6	6	6	6	6	6
Role of the site location to species overall population in the state	5	5	5	5	5	5	5	5	5	5
Threats to species	7	7	7	7	7	7	7	7	7	7
Species mobility capacity	7	7	7	7	7	7	4	4	4	4
Total (out of 56)	41	41	41	41	41	41	38	38	38	38
Score out of 3	2.20	2.20	2.20	2.20	2.20	2.20	2.04	2.04	2.04	2.04

Size of patch

The Offset Area is connected to a patch of 200 ha therefore achieves a score of **10 out of 10**.

Connectedness

The Offset Area shares 35.6% of its boundary with Greater Glider habitat therefore achieves a score of **2 out of 5**.

Context

The Offset Area includes habitat coverage of 44% within 1 km of the Offset Area and scores **4 out of 5**.

Ecological corridors

The Offset Area is located entirely within a Statewide corridor of regional significance (refer **Plan 6)** therefore achieves a score of **6 out of 6**.

Role of Site

The Offset Area is a suitable offset so scores **5 out of 5**.

Threats to species

The threats to the species attribute aims to quantify the risk to survival of the Greater Glider on-site. Threats to Greater Glider are present across the Willow Vale Offset Property and include potential for dog, fox and cat attacks, degradation of habitat through uncontrolled timber harvesting or weed infestations, mostly *Lantana camara* (Lantana), potential for barbed wire entanglement and uncontrolled wildfire.

Threat level was determined using a threats matrix. Methodology for scoring threats is outlined in **Section 3.3**. Refer to **Table 46** for Greater Glider threats matrix scoring results and refer **Plan 14D** for threats.

Table 46: Threat Matrix for Greater Glider

Metric	Low	Moderate	High
Threat Thresholds			
Clearing and Degradation of Habitat	Apply one of the following options in order of priority: 1. Apply a current legal protective mechanism. 2. The site is zoned for conservation purposes or clearing is not permitted. 3. If ≤30% of the area within a 5 km buffer of the site is cleared or disturbed land.	In the absence of justification for scoring as high or low and if: >30% and <70% of the area within a 5km buffer of the site is cleared or disturbed land.	Apply one of the following options in order of priority: 1. The site is zoned for development 2. If ≥ 70% of the area within a 5 km buffer of the site is cleared or disturbed land.
Score Weighting	**4**	**1.8**	**0.25**

Metric	Low	Moderate	High
Inappropriate Fire Regimes Very High Risk	Current Government endorsed Bushfire Management Plan (BMP) to protect the Greater Glider is in effect.	Non-Greater Glider specific BMP in effect. or; Low fuel load and low fire risk.	Site has a high fuel load and/or high fire risk.
Score Weighting	**4**	**1.8**	**0.25**
Timber Harvesting Very High Risk	No timber harvesting on site.	Historical timber harvesting having occurred on site	Current timber harvesting occurring on site
Score Weighting	**4**	**1.8**	**0.25**
Feral Cat Attack Low Risk	No feral cats recorded on site.	Feral cats recorded on site and adequate refuge for Greater Glider (>70% canopy cover).	Feral cats recorded on site and limited refuge for Greater Glider (<70% canopy cover)
Score Weighting	**1**	**0.53**	**0.08**
Fox Attack Low Risk	No foxes recorded on site.	Foxes recorded on site and adequate refuge for Greater Glider (>70% canopy cover).	Foxes recorded on site and limited refuge for Greater Glider (<70% canopy cover)
Score Weighting	**1**	**0.53**	**0.08**
Barbed Wire Entanglement Low Risk	No barbed wire on or adjoining the site	Up to 50% of the site and boundary is traversed by barbed wire	More than 50% of the site and boundary is traversed by barbed wire
Score Weighting	**1**	**0.53**	**0.08**
Threats to Species			
Threshold Analysis	≥10	>4 and <10	≤4
Score	**15**	**7**	**1**
Description	Low threat level (i.e. likely to survive)	Moderate threat level	High threat level (i.e. likely to result in death, irreversible damage)

Species mobility capacity

Species mobility capacity is varied across AU's depending on vegetation cover. AU1 to AU6 have relatively intact canopy cover and as a result had 'moderate restrictions' so scored 7 similar to the impact site, and AU's 7-10 were assessed as being 'highly restricted' (Score 4) as the ecological dominant layer was relatively patchy or absent and there is an absence of connected canopy for Greater Glider dispersal.

6.2.7.4 Species Stocking Rate (40%)

The species stocking rate for Greater Glider scored **20 out of 70** for AU's where foraging and breeding habitat was present, **15 out of 70** where foraging habitat was present but hollows depauperate, 10 out of 70 where foraging habitat availability scored moderately and hollows were depauperate being dispersal habitat, and **5 out of 70** where very little to no canopy or habitat was present (refer **Table 47**). Further details on the assessment are provided below:

- Greater Glider have not been recorded on site or within nearby adjoining sites, therefore 'presence detected on or adjacent to site' was assigned a score of **0 out of 10** for all assessment units.
- No Greater Glider were recorded on site. Species usage score varied between AU's as prescribed earlier. AU's 1, 2, 4 and 6 scored a **10 out of 15** for dispersal habitat, AU3 scored a **15 out of 15** for breeding habitat, AU5 score a 10 for dispersal habitat and paddock AU's 7, 8, 9 and 10 scored a **0 out of 15** for non-habitat.
- The 'approximate density' for each assessment unit was scored as **0 out of 30** due to the absence of evidence of utilisation on site.
- Using the precautionary principle, the Offset Area is considered a key source for population for dispersal under 'role/importance of species population on-site' therefore was scored a **5 out of 15**.

Table 47: Greater Glider species stocking rate scores within Offset Area assessment units

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Presence detected on or adjacent to site (neighbouring property with connecting habitat) (/10)	0	0	0	0	0	0	0	0	0	0
Species usage of the site (habitat type and evidenced usage) (/15)	10	10	15	10	5	10	0	0	0	0
Approximate density (per ha) (/30)	0	0	0	0	0	0	0	0	0	0
Role/importance of species population on site* (/15)	5	5	5	5	5	5	5	5	5	5
Total Species Stocking Rate Score (/70)	0.21	0.21	0.29	0.21	0.14	0.21	0.07	0.07	0.07	0.07
Species Stocking Rate Score – out of 4	0.86	0.86	1.14	0.86	0.57	0.86	0.29	0.29	0.29	0.29

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Key source population for breeding (/5)	0	0	0	0	0	0	0	0	0	0
Key source population for dispersal (/5)	5	5	5	5	5	5	5	5	5	5
Necessary for maintaining genetic diversity (/15)	0	0	0	0	0	0	0	0	0	0
Near the limit of the species range (/15)	0	0	0	0	0	0	0	0	0	0

Greater Glider has not been recorded in the vicinity of the proposed Offset Area with connectivity evident (**Plan 14C**).

6.2.8 Yellow-bellied Glider MHQA

6.2.8.1 Features

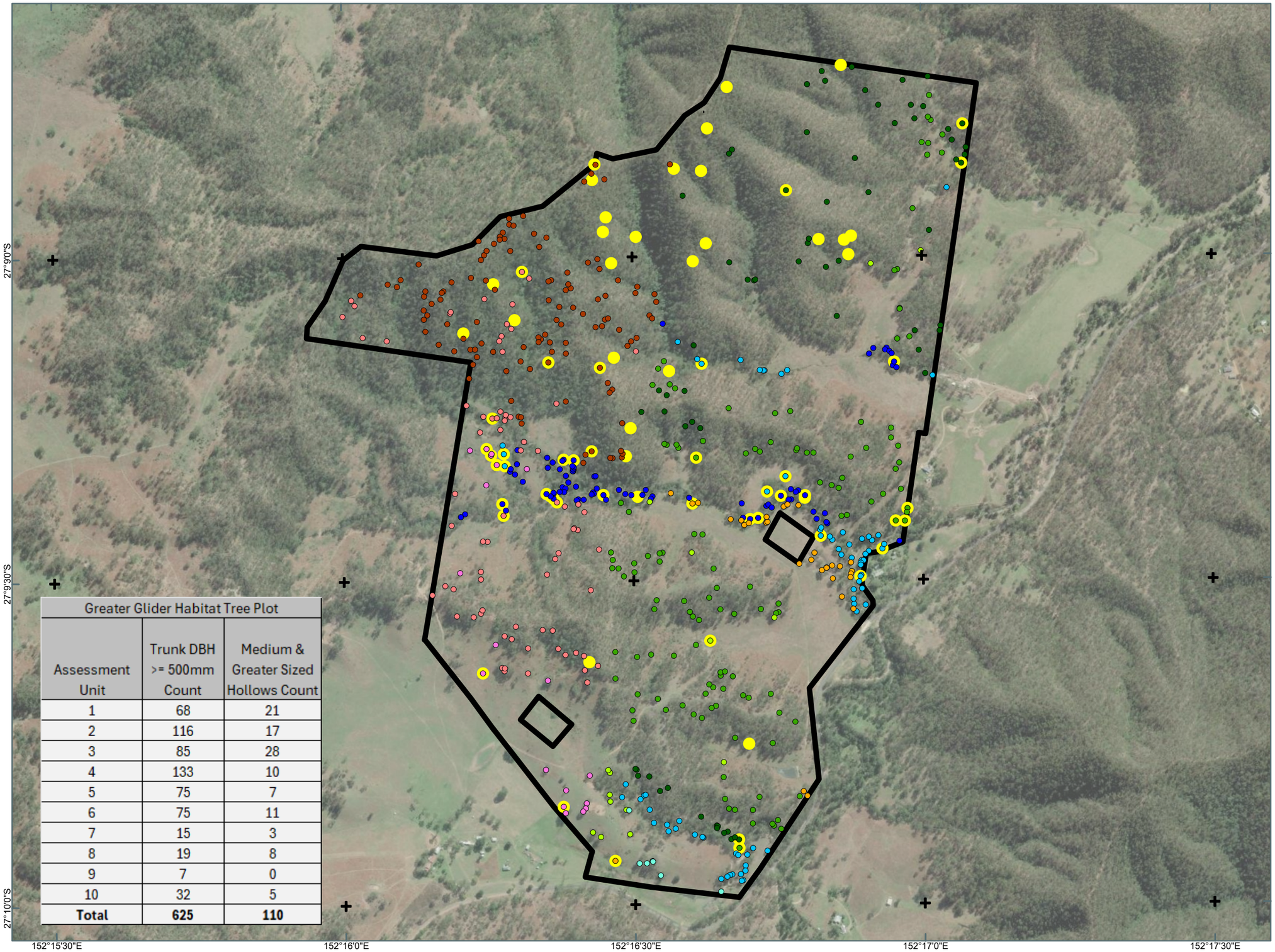
The number of existing hollow features recorded per assessment unit are presented in **Table 48** and **Plan 15**. The counts of potential foraging trees 500 mm DSH and over per assessment unit are also presented in **Plan 15A**.

Table 48: Hollow records

Assessment Unit	≥ Medium Hollow Count
1	21
2	17
3	28

Assessment Unit	≥ Medium Hollow Count
4	10
5	7
6	11
7	3
8	8
9	0
10	5

15A. YELLOW-BELLIED GLIDER HABITAT



Greater Glider Habitat Tree Plot		
Assessment Unit	Trunk DBH >= 500mm Count	Medium & Greater Sized Hollows Count
1	68	21
2	116	17
3	85	28
4	133	10
5	75	7
6	75	11
7	15	3
8	19	8
9	7	0
10	32	5
Total	**625**	**110**

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LEGEND

- Offset Area
- Yellow-bellied Habitat Tree Plot
  - Tree with DBH >= 500mm
  - Tree with medium or larger sized hollow/s [72 trees with 110 hollows]
- Tree AU locations
  - AU01: 12.11.6 (remnant)
  - AU02: 12.12.5 (remnant)
  - AU03: 12.3.7 (remnant)
  - AU04: 12.11.6 (vegetated non-remnant)
  - AU05: 12.12.5 (vegetated non-remnant)
  - AU06: 12.3.7 (vegetated non-remnant)
  - AU07: 12.11.6 (paddock non-remnant)
  - AU08: 12.12.5 (paddock non-remnant)
  - AU09: 12.3.7 (paddock non-remnant)
  - AU10: 12.3.3 (paddock non-remnant)

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PEET

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0 100 200 300 m
N

Transverse Mercator 1:11,000
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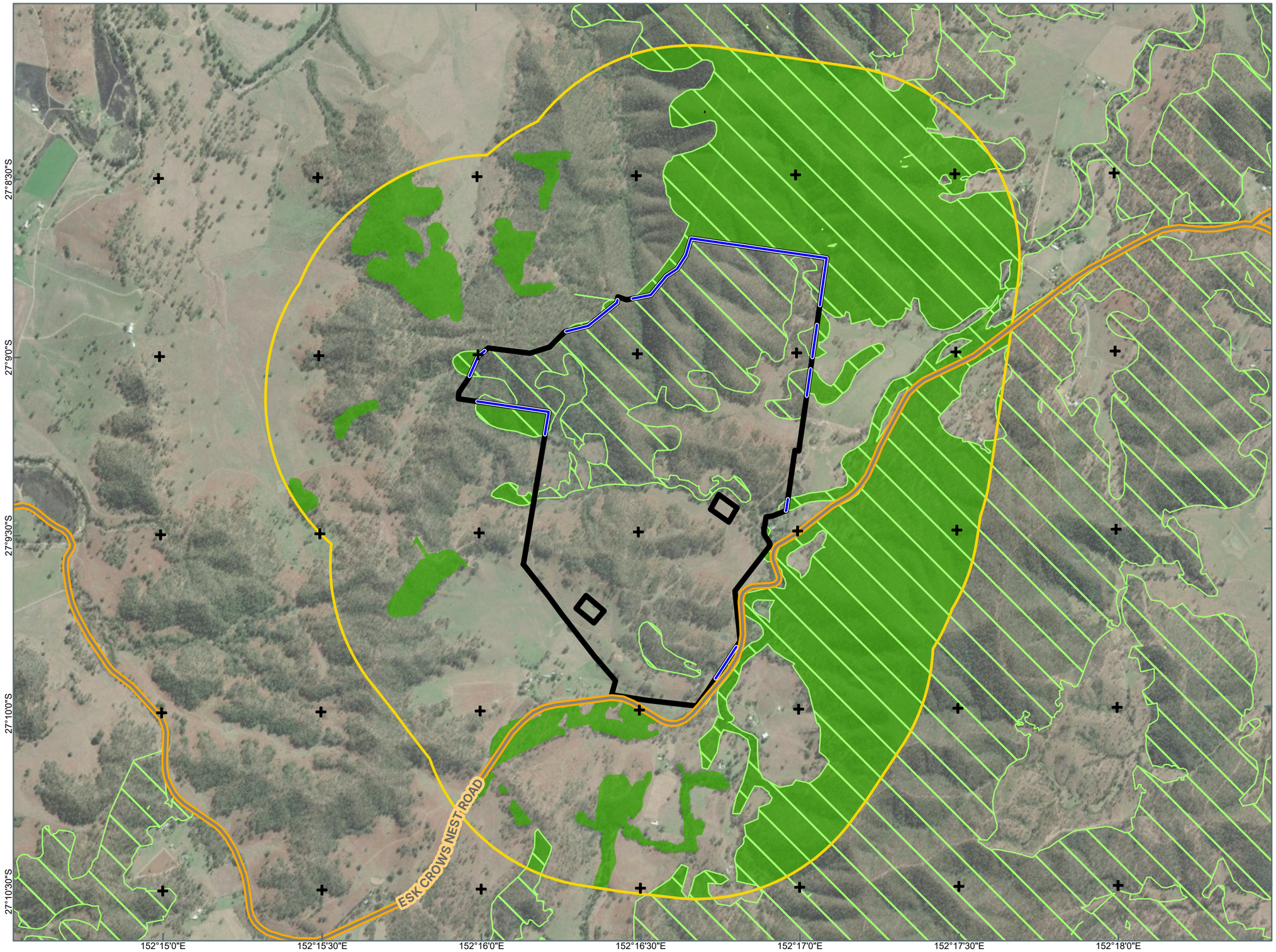
29/01/2026

8418 E 15a OMP_Esk YBG Habitat A

15B. YELLOW-BELLIED GLIDER MHQA CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- Major Roads
- 1km Offset Area Buffer
- Percentage of offset area boundary length supporting a connection off and on site to Yellow-bellied Glider habitat - 35.6%
- Percentage of Yellow-bellied Glider habitat within 1km of offset area (44%)
- Size of Yellow-bellied Glider habitat patch > 200 ha

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PEET

WILLOW VALE OFFSET

0 100 200 300 400 m

N

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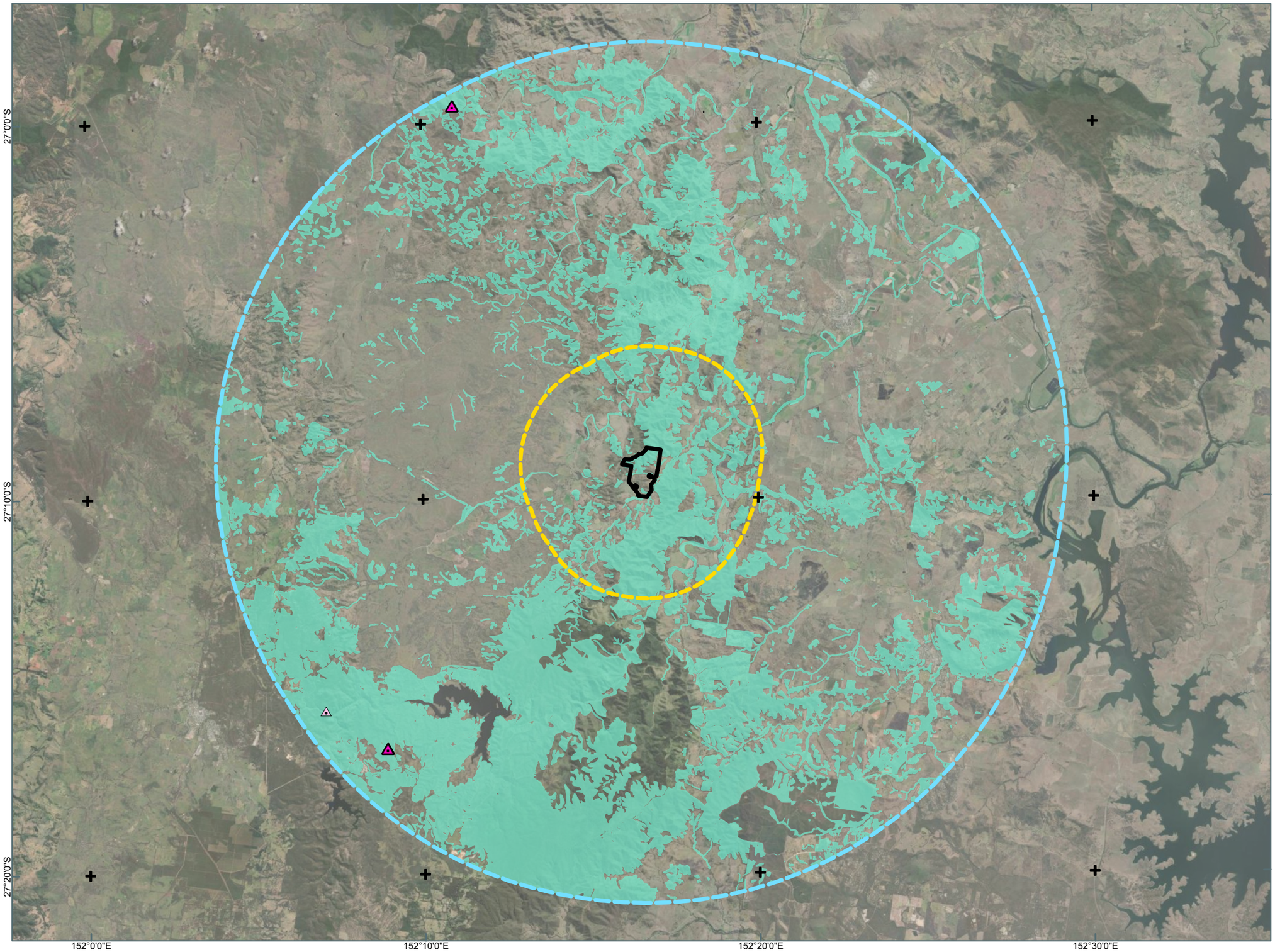
Address / RPD: Biarra, QLD

29/01/2026

8418 E 15b OMP_Esk YBG CA A

15C. YELLOW-BELLIED GLIDER LANDSCAPE CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- Offset Site 5km buffer
- Offset Site 20km buffer
- Percentage of Yellow-bellied Glider habitat within 20km of offset area (31%)

Yellow-bellied Glider ALA records 2025.10

- Yellow-bellied Glider (Petaurus australis) Records within 20km of Offset Area and recorded within the last 5 years [2]
- Yellow-bellied Glider (Petaurus australis) Records within 20km of Offset Area and recorded prior to 2005 [2]

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0 1 2 3 4 km

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1:190,000
@ A3

Address / RPD: Biarra, QLD

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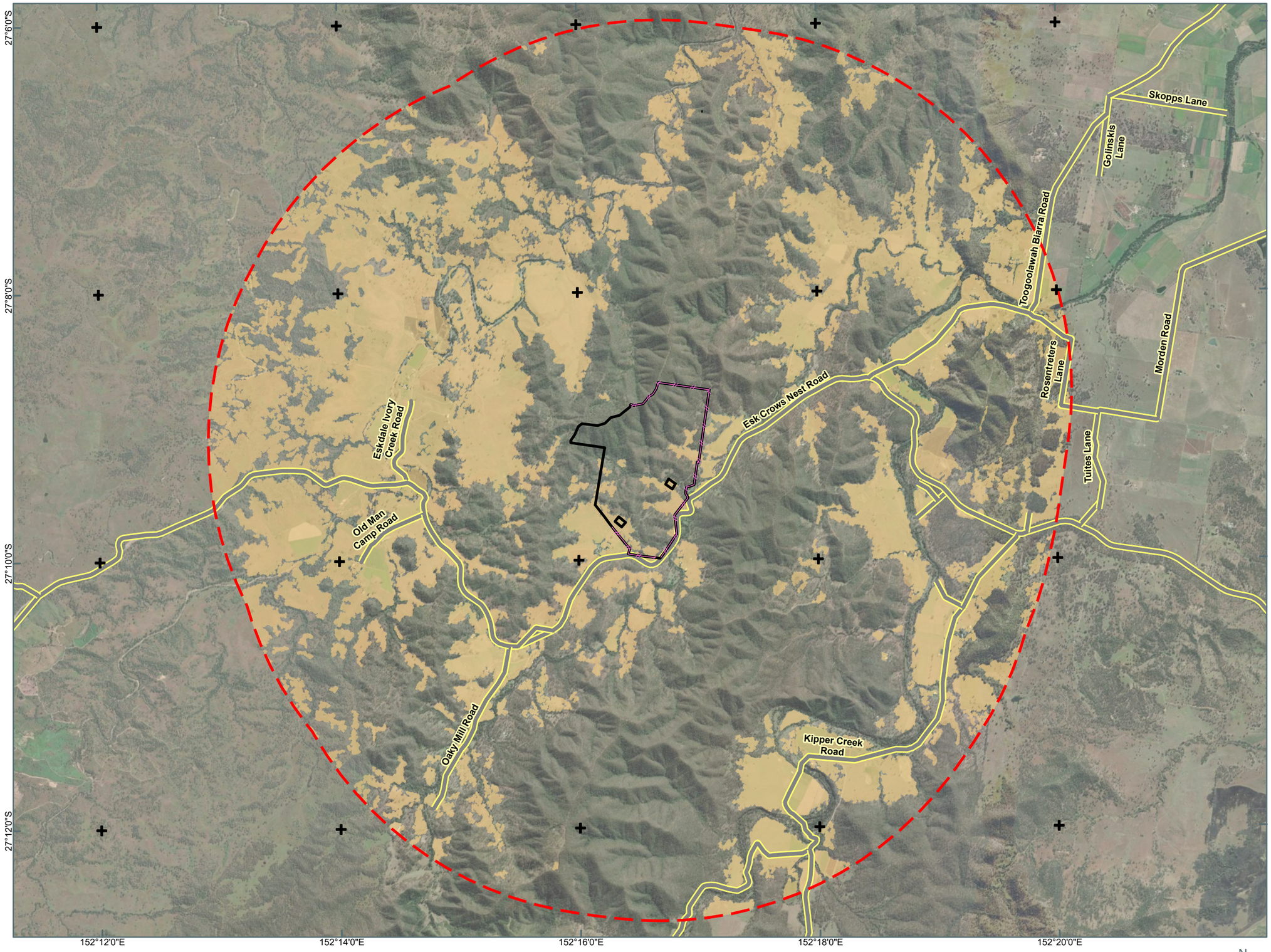
8418 E 15c OMP_Esk YBG Landscape A

15D. YELLOW-BELLIED GLIDER THREATS ASSESSMENT



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LEGEND

- Qld DCDB
- Offset Area
- Offset Area 5km buffer
- Known locations of barbed-wire fence [56%]
- Minor and Unsealed Roads/Tracks
- Non Yellow-bellied Glider habitat areas and degraded habitat within 5km of offset area (32%)

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Address / RPD: Biarra, QLD

29/01/2026

8418 E 15d OMP_Esk YBG Threats A

6.2.8.2 Site Condition (30%)

The site condition scoring for the Offset Area is summarised in **Table 49**. Refer to **Appendix E** for detailed baseline Yellow-bellied Glider MHQA scoring and **Appendix F** for the raw data. Please note 40:20:40 relative weighting for general site condition, quality and availability of food and foraging habitat and quality and availability of shelter as outlined in **Section 3.3**.

Table 49: Site condition scores for Offset Area assessment units – Yellow-bellied Glider

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Regional Ecosystem	12.11.6	12.12.5	12.3.7	12.11.6	12.12.5	12.3.7	12.11.6	12.12.5	12.3.7	12.3.3
Status*	R	R	R	NR	NR	NR	NR	NR	NR	NR
Recruitment of woody perennial species in EDL	5	5	3	3	5	3	0	3	3	3
Native plant species richness - trees	5	5	5	2.5	5	5	2.5	2.5	0	2.5
Native plant species richness - shrubs	5	2.5	5	2.5	2.5	2.5	2.5	0	0	2.5
Native plant species richness - grasses	2.5	2.5	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5
Native plant species richness - forbs	2.5	2.5	2.5	2.5	2.5	2.5	0	2.5	0	2.5
Average tree canopy height*	5	5	5	5	5	5	0	3	3	4
Average tree canopy cover*	4	4	4	5	4	5	0	2	2	3.5
Shrub canopy cover	5	3	5	5	5	3	3	5	0	3
Native grass cover	5	3	5	5	1	5	3	5	5	3
Organic litter	3	3	5	3	5	5	3	3	0	3
Large trees	5	5	5	5	5	5	0	5	5	5
Coarse woody debris	2	2	5	5	5	2	2	0	0	2
Non-native plant cover	5	3	0	0	0	0	0	0	0	0
Quality and availability of food and foraging habitat	10	10	10	10	5	10	1	1	1	5
Quality and availability of shelter	1	1	10	1	1	5	1	1	1	1
Total (Out of 100)	51	46.75	86	47	37.75	62.75	14	22.75	16.25	32.25
Score out of 3	1.53	1.40	2.58	1.41	1.13	1.88	0.42	0.68	0.49	0.97

* R = Remnant, NR = Non-remnant

The site condition values for AU1 – AU10 are scored as above.

6.2.8.3 Site Context (30%)

The site context characteristics for Yellow-bellied Glider are shown on **Plan 15B** and **Plan 15C** with scores summarised in **Table 50.**

Table 50: Yellow-bellied Glider context scores for the Offset Area

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Size of patch	10	10	10	10	10	10	10	10	10	10
Connectedness	2	2	2	2	2	2	2	2	2	2
Context	4	4	4	4	4	4	4	4	4	4
Ecological corridors	6	6	6	6	6	6	6	6	6	6
Role of the site location to species overall population in the state	5	5	5	5	5	5	5	5	5	5
Threats to species	7	7	7	7	7	7	7	7	7	7
Species mobility capacity	7	7	7	7	7	7	4	4	4	4
Total (out of 56)	41	41	41	41	41	41	38	38	38	38
Score out of 3	2.20	2.20	2.20	2.20	2.20	2.20	2.04	2.04	2.04	2.04

Size of patch

The Offset Area is connected to a patch of 200 ha therefore achieves a score of **10 out of 10**.

Connectedness

The Offset Area shares 35.6% of its boundary with Yellow-bellied Glider habitat therefore achieves a score of **2 out of 5**.

Context

The Offset Area includes habitat coverage of 44% within 1 km of the Offset Area and scores **4 out of 5**.

Ecological corridors

The Offset Area is located entirely within a Statewide corridor of regional significance (refer **Plan 6)** therefore achieves a score of **6 out of 6**.

Role of Site

The Offset Area is a suitable offset so scores **5 out of 5**.

Threats to species

The threats to the species attribute aims to quantify the risk to survival of the Yellow-bellied Glider on-site. Threats to Yellow-bellied Glider are present across the Willow Vale Offset Property and include potential for dog, fox and cat attacks, degradation of habitat through uncontrolled timber harvesting or weed infestations, mostly *Lantana camara* (Lantana), potential for barbed wire entanglement and uncontrolled wildfire.

Threat level was determined using a threats matrix. Methodology for scoring threats is outlined in **Section 3.3**. Refer to **Table 51** or Yellow-bellied Glider threats matrix scoring results and refer Plan 15d for threats.

Table 51: **Threats Matrix Assessment for the Yellow-bellied Glider**

Metric	Low	Moderate	High
Threat Thresholds			
Clearing and Degradation of Habitat	Apply one of the following options in order of priority: 1. Apply a current legal protective mechanism. 2. The site is zoned for conservation purposes or clearing is not permitted. 3. If ≤30% of the area within a 5 km buffer of the site is cleared or disturbed land.	In the absence of justification for scoring as high or low and if: >30% and <70% of the area within a 5km buffer of the site is cleared or disturbed land.	Apply one of the following options in order of priority: 1. The site is zoned for development 2. If ≥ 70% of the area within a 5 km buffer of the site is cleared or disturbed land.
Score Weighting	**4**	**1.8**	**0.25**

Metric	Low	Moderate	High
Inappropriate Fire Regimes Very High Risk	Current Government endorsed Bushfire Management Plan (BMP) to protect the Yellow-bellied Glider is in effect.	Non-Yellow-bellied Glider specific BMP in effect. or; Low fuel load and low fire risk.	Site has a high fuel load and/or high fire risk.
Score Weighting	**4**	**1.8**	**0.25**
Timber Harvesting Very High Risk	No timber harvesting on site.	Historical timber harvesting having occurred on site	Current timber harvesting occurring on site
Score Weighting	**4**	**1.8**	**0.25**
Feral Cat Attack Low Risk	No feral cats recorded on site.	Feral cats recorded on site and adequate refuge for Yellow-bellied Glider (>70% canopy cover).	Feral cats recorded on site and limited refuge for Yellow-bellied Glider (<70% canopy cover)
Score Weighting	**0.75**	**0.4**	**0.06**
Fox Attack Low Risk	No foxes recorded on site.	Foxes recorded on site and adequate refuge for Yellow-bellied Glider (>70% canopy cover).	Foxes recorded on site and limited refuge for Yellow-bellied Glider (<70% canopy cover)
Score Weighting	**0.75**	**0.4**	**0.06**
Barbed Wire Entanglement Low Risk	No barbed wire on or adjoining the site	Up to 50% of the site and boundary is traversed by barbed wire	More than 50% of the site and boundary is traversed by barbed wire
Score Weighting	**0.75**	**0.4**	**0.06**
Deer Degradation Low Risk	No deer recorded on site.	Deer recorded on site and adequate refuge for Yellow-bellied Glider (>70% canopy cover).	Deer recorded on site and limited refuge for Yellow-bellied Glider (<70% canopy cover)
Score Weighting	**0.75**	**0.4**	**0.06**
Threats to Species			
Threshold Analysis	≥10	>4 and <10	≤4
Score	**15**	**7**	**1**
Description	Low threat level (i.e. likely to survive)	Moderate threat level	High threat level (i.e. likely to result in death, irreversible damage)

Species mobility capacity

Species mobility capacity is varied across AU's depending on vegetation cover. AU1 to AU6 have relatively intact canopy cover and as a result had 'moderate restrictions' so scored 7 similar to the impact site, and AU's 7-10 were assessed as being 'highly restricted' (Score 4) as the ecological dominant layer was relatively patchy or absent and there is an absence of connected canopy for Yellow-bellied Glider dispersal.

6.2.8.4 Species Stocking Rate (40%)

The species stocking rate for Greater Glider scored **20 out of 70** for AU's where foraging and breeding habitat was present, **15 out of 70** where foraging habitat was present but hollows depauperate, 10 out of 70 where foraging habitat availability scored moderately and hollows were depauperate being dispersal habitat, and **5 out of 70** where very little to no canopy or habitat was present (refer **Table 47**). Further details on the assessment are provided below:

- Greater Glider have not been recorded on site or within nearby adjoining sites, therefore 'presence detected on or adjacent to site' was assigned a score of **0 out of 10** for all assessment units.
- No Greater Glider were recorded on site. Species usage score varied between AU's as prescribed earlier. AU's 1, 2, 4 and 6 scored a **10 out of 15** for dispersal habitat, AU3 scored a **15 out of 15** for breeding habitat, AU5 score a 10 for dispersal habitat and paddock AU's 7, 8, 9 and 10 scored a **0 out of 15** for non-habitat.
- The 'approximate density' for each assessment unit was scored as **0 out of 30** due to the absence of evidence of utilisation on site.
- Using the precautionary principle, the Offset Area is considered a key source for population for dispersal under 'role/importance of species population on-site' therefore was scored a **5 out of 15**.

Table 52: Yellow-bellied Glider species stocking rate scores within Offset Area assessment units

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Presence detected on or adjacent to site (neighbouring property with connecting habitat) (/10)	0	0	0	0	0	0	0	0	0	0
Species usage of the site (habitat type and evidenced usage) (/15)	10	10	20	10	5	10	0	0	0	0
Approximate density (per ha) (/30)	0	0	0	0	0	0	0	0	0	0
Role/importance of species population on site* (/15)	5	5	5	5	5	5	5	5	5	5
Total Species Stocking Rate Score (/70)	0.21	0.21	0.29	0.21	0.14	0.21	0.07	0.07	0.07	0.07
Species Stocking Rate Score – out of 4	0.86	0.86	1.14	0.86	0.57	0.86	0.29	0.29	0.29	0.29

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Key source population for breeding (/5)	0	0	0	0	0	0	0	0	0	0
Key source population for dispersal (/5)	5	5	5	5	5	5	5	5	5	5
Necessary for maintaining genetic diversity (/15)	0	0	0	0	0	0	0	0	0	0
Near the limit of the species range (/15)	0	0	0	0	0	0	0	0	0	0

Yellow-bellied Glider has not been recorded in the vicinity of the proposed Offset Area but connectivity to records is present (**Plan 15A**).

6.2.9 Swift Parrot Features

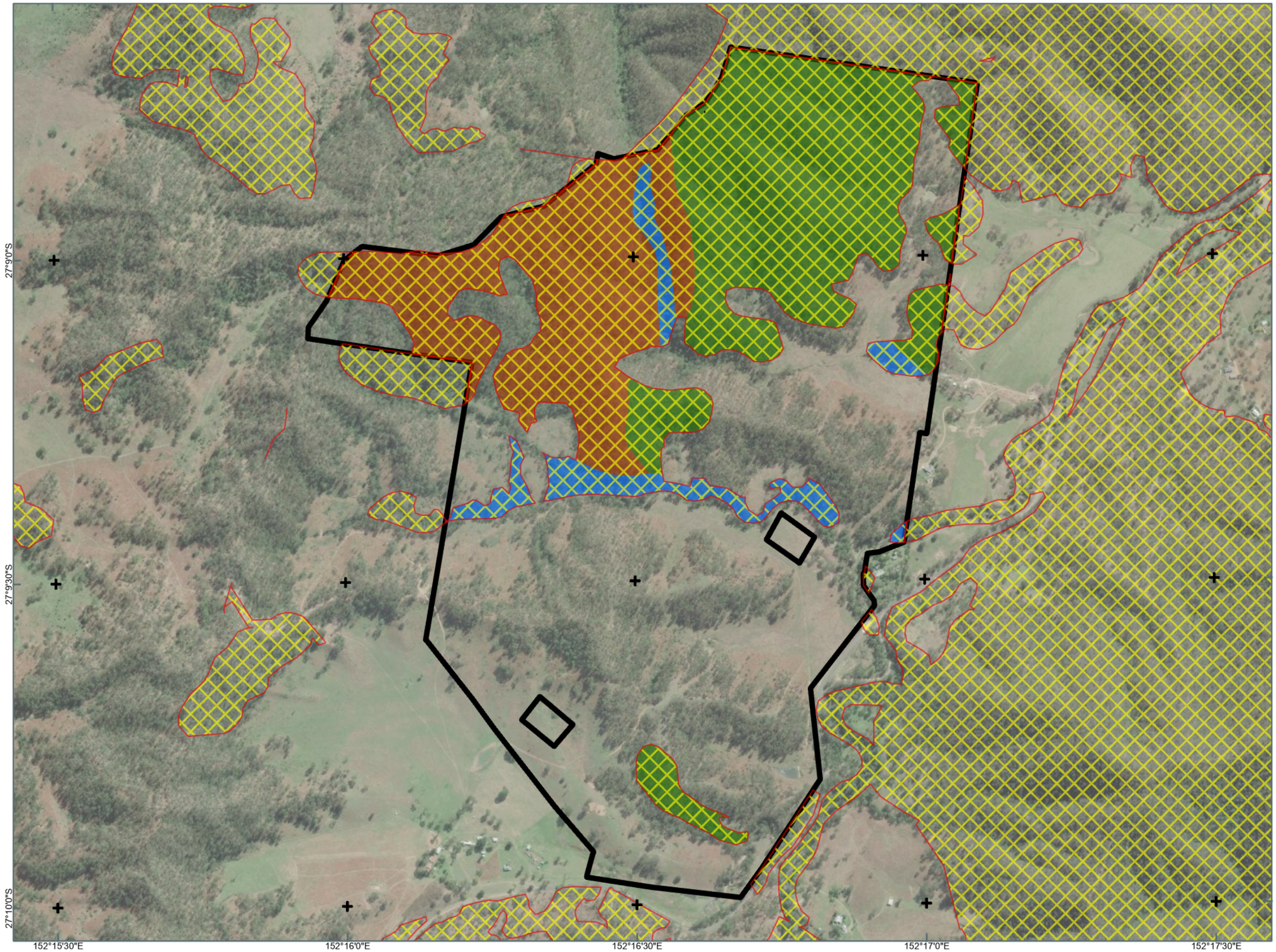
6.2.9.1 Features

Table 53 and **Plan 16A** set out the existing potential foraging habitat mapped for Swift Parrot on the Offset Area. Swift Parrot have not been recorded in the vicinity of the proposed Offset Area due largely to their rarity but are highly mobile and there is ample suitable habitat in the surrounding landscape (refer **Plan 16B**).

Table 53: Offset Area Swift Parrot potential foraging habitat

Assessment Unit	Existing Potential Foraging Habitat Area
1	57.06 ha
2	40.45 ha
3	10.23 ha

16A. SWIFT PARROT FORAGING HABITAT



Notes:
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LEGEND

- Offset Area

Assessment Units

- Assessment Unit 1: Regional Ecosystem 12.11.6 (Remnant Vegetation) [57.06 ha]
- Assessment Unit 2: Regional Ecosystem 12.12.5 (Remnant Vegetation) [40.45 ha]
- Assessment Unit 3: Regional Ecosystem 12.3.7 (Remnant Vegetation) [10.23 ha]
- Swift Parrot foraging habitat Within offset area

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PEET

WILLOW VALE OFFSET

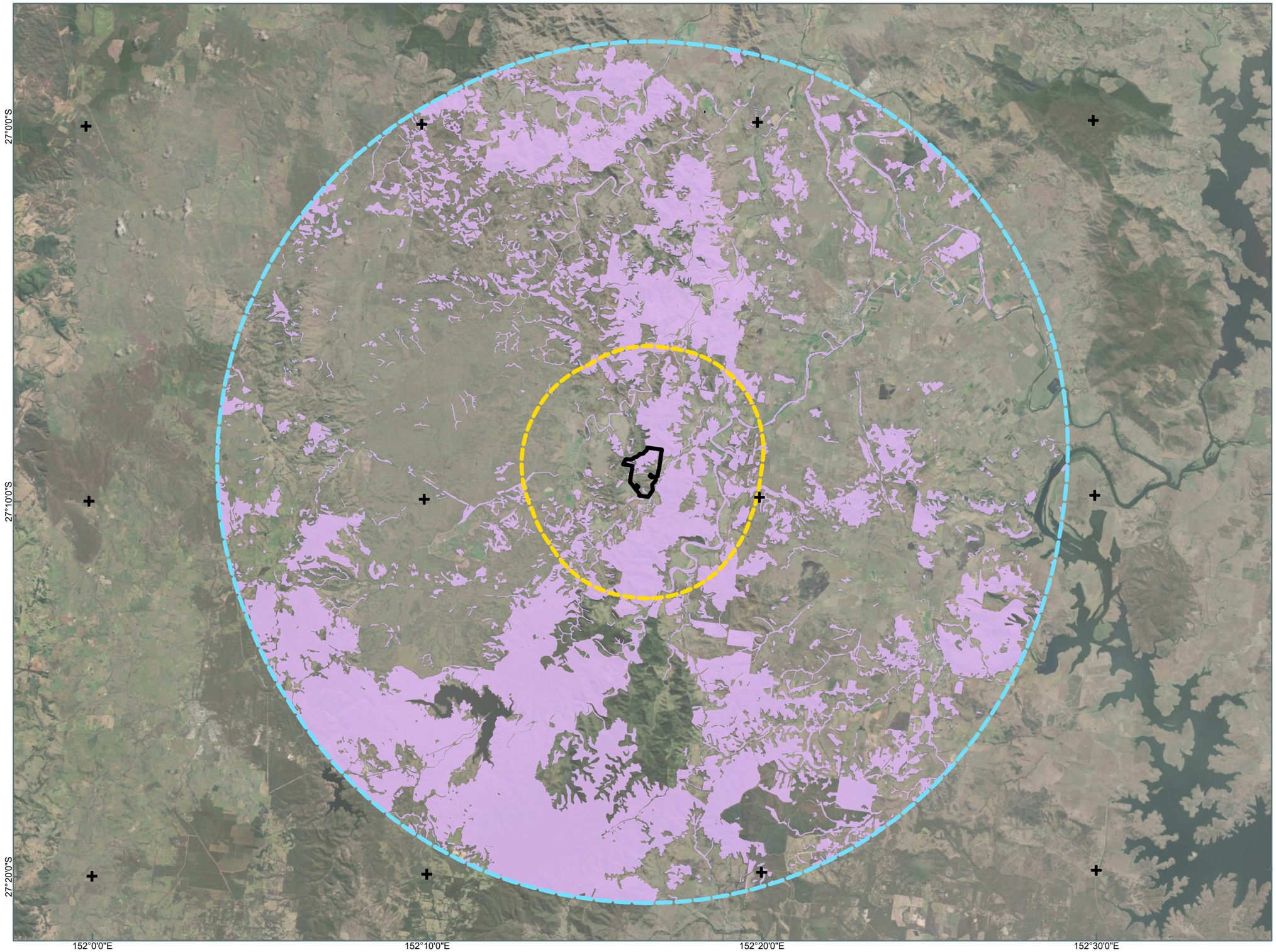
0 100 200 300 m
N
Transverse Mercator 1:11,000
GDA 2020 | Zone 56 @ A3

Address / RPD: Biarra, QLD

16/04/2026

8418 E 16a OMP_Esk SP Habitat A1

16B. SWIFT PARROT LANDSCAPE CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- Offset Site 5km buffer
- Offset Site 20km buffer
- Percentage of Swift Parrot foraging habitat within 20km of offset area (31%)

Swift Parrot ALA records 2025.10

- Swift Parrot (Lathamus discolors) Records within 20km of Offset Area [0]

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PEET

WILLOW VALE OFFSET

0 1 2 3 4 km

N

Transverse Mercator
GDA 2020 | Zone 56

1:190,000
@ A3

Address / RPD: Biarra, QLD

23/01/2026

8418 E 16b OMP_Esk SP Landscape A

6.2.10 Regent Honeyeater Features

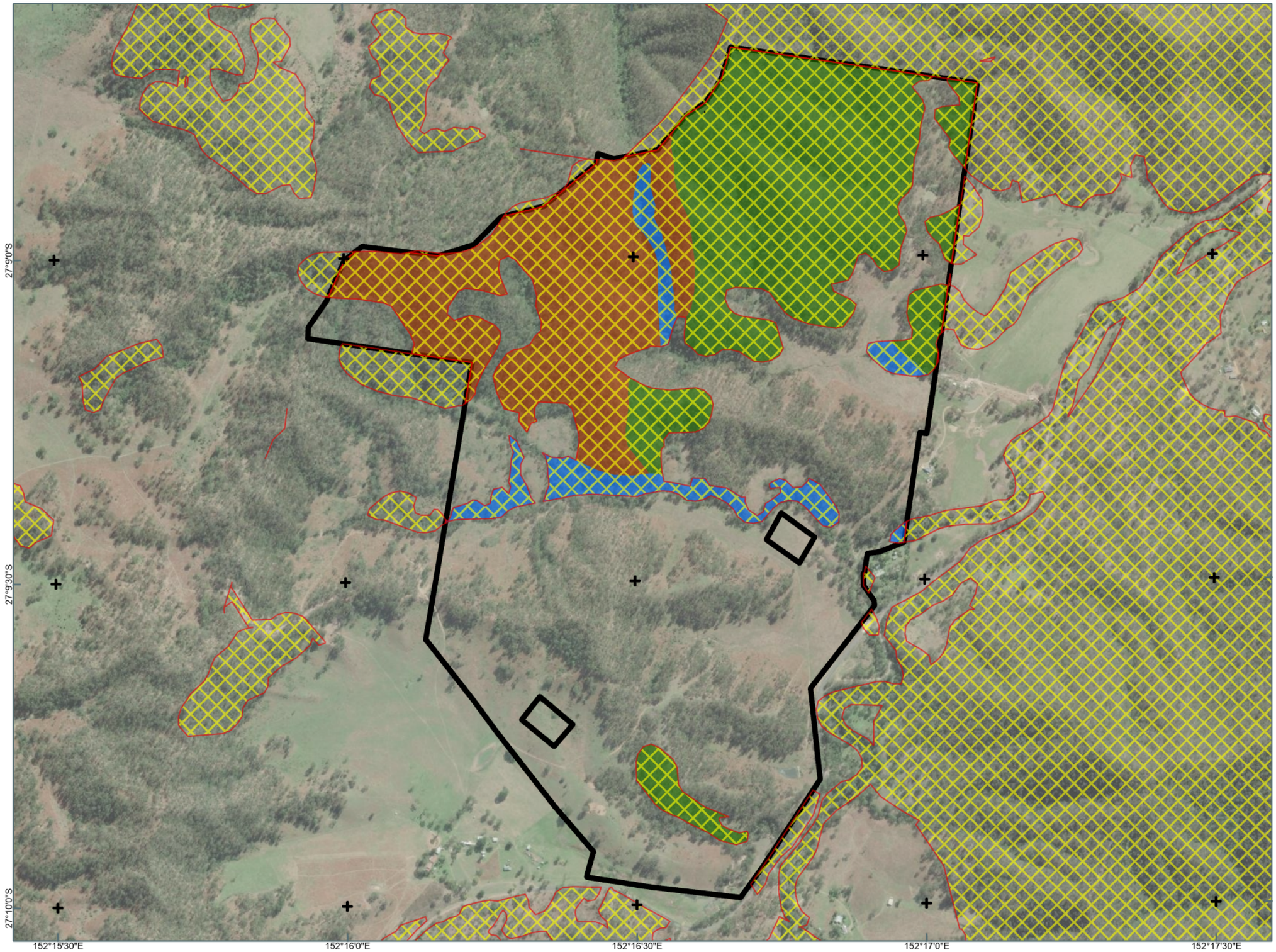
6.2.10.1 Features

Table 54 and **Plan 17A** set out the existing potential foraging habitat mapped for Regent Honeyeater on the Offset Area. Regent Honeyeater have not been recorded in the vicinity of the proposed Offset Area due largely to their rarity but are highly mobile and there is ample suitable habitat in the surrounding landscape (refer **Plan 17B**).

Table 54: Offset Area Regent Honeyeater key foraging species counts

Assessment Unit	Existing Potential Foraging Habitat Area
1	57.06 ha
2	40.45 ha
3	10.23 ha

17A. REGENT HONEYEATER FORAGING HABITAT



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LEGEND

- Offset Area
- Assessment Units
- Assessment Unit 1: Regional Ecosystem 12.11.6 (Remnant Vegetation) [57.06 ha]
- Assessment Unit 2: Regional Ecosystem 12.12.5 (Remnant Vegetation) [40.45 ha]
- Assessment Unit 3: Regional Ecosystem 12.3.7 (Remnant Vegetation) [10.23 ha]
- Regent Honeyeater foraging habitat Within offset area

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0 100 200 300 m
N

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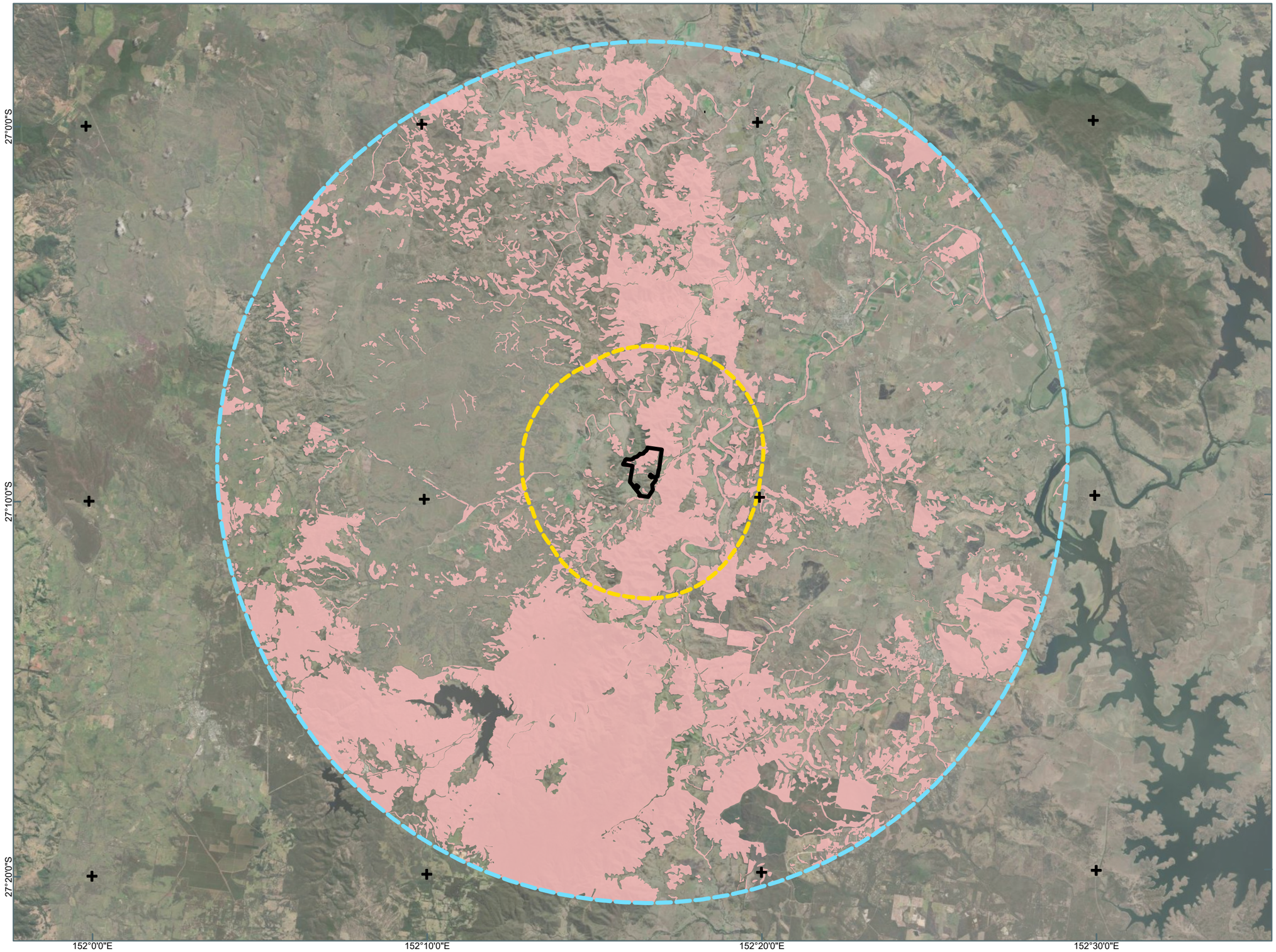
16/04/2026

8418 E 17a OMP_Esk RHE Habitat A1

17B. REGENT HONEYEATER LANDSCAPE CONTEXT ASSESSMENT



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LEGEND

- Offset Area
- Offset Site 5km buffer
- Offset Site 20km buffer
- Percentage of Regent Honeyeater foraging habitat within 20km of offset area (31%)

Regent Honeyeater ALA records 2025.10

- Regent Honeyeater (Anthochaera phrygia) Records within 20km of Offset Area [0]

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6.2.11 Summary of baseline scores for Offset Area

The overall baseline habitat quality scores for MNES at the Offset Area are presented in **Tables 55 to 59**.

Table 55: Offset Area MHQA score summary - TEC

Assessment Unit	AU3	AU6	AU9	AU10
Site Condition (/7)	4.55	3.98	1.79	3.19
Site Context (/3)	1.83	1.83	1.83	1.83
MHQA Score*	**6.38 (6)**	**5.81 (6)**	**3.62 (4)**	**5.02 (5)**

*number in parentheses is rounded score

Table 56: Offset Area MHQA score summary - Koala

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Site Condition (/3)	2.22	1.67	1.86	1.68	1.73	1.67	0.54	1.31	0.68	1.4
Site Context (/3)	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52
Species Stocking Rate (/4)	2.29	2.29	2.29	1.14	2.29	2.29	1.14	1.14	1.14	1.14
MHQA Score*	**7.02 (7)**	**6.47 (6)**	**6.66 (7)**	**5.34 (5)**	**6.53 (7)**	**6.47 (6)**	**4.20 (4)**	**4.97 (5)**	**4.34 (4)**	**5.06 (5)**

*number in parentheses is rounded score

Table 57: Offset Area FHA score summary – Grey-headed Flying-fox

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Site Condition (/3)	2.12	2.32	2.24	1.24	1.33	1.24	0.38	0.59	0.41	0.52
Site Context (/3)	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Species Stocking Rate (/3)	1.80	1.20	1.80	1.20	1.80	1.20	0.6	1.20	0.60	1.20
MHQA Score*	**5.67 (6)**	**5.27 (5)**	**5.79 (6)**	**4.19 (4)**	**4.88 (5)**	**4.19 (4)**	**2.73 (3)**	**3.54 (4)**	**2.76 (3)**	**3.47 (3)**

*number in parentheses is rounded score

Table 58: Offset Area MHQA score summary – Greater Glider

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Site Condition (/3)	1.53	1.40	2.58	1.41	1.13	1.88	0.42	0.68	0.49	0.97
Site Context (/3)	2.20	2.20	2.20	2.20	2.20	2.20	2.04	2.04	2.04	2.04
Species Stocking Rate (/4)	0.86	0.86	1.14	0.86	0.57	0.86	0.29	0.29	0.29	0.29
MHQA Score*	**4.58 (5)**	**4.46 (4)**	**5.92 (6)**	**4.46 (4)**	**3.90 (4)**	**4.94 (5)**	**2.74 (3)**	**3.00 (3)**	**2.81 (3)**	**3.29 (3)**

*number in parentheses is rounded score

Table 59: Offset Area MHQA score summary – Yellow-bellied Glider

Assessment Unit	AU1	AU2	AU3	AU4	AU5	AU6	AU7	AU8	AU9	AU10
Site Condition (/3)	1.53	1.40	2.58	1.41	1.13	1.88	0.42	0.68	0.49	0.97
Site Context (/3)	2.20	2.20	2.20	2.20	2.20	2.20	2.04	2.04	2.04	2.04
Species Stocking Rate (/4)	1.14	0.86	1.14	0.86	0.57	0.86	0.29	0.29	0.29	0.29
MHQA Score*	**4.58 (5)**	**4.46 (4)**	**5.92 (6)**	**4.46 (4)**	**3.90 (4)**	**4.94 (5)**	**2.74 (3)**	**3.00 (3)**	**2.81 (3)**	**3.29 (3)**

*number in parentheses is rounded score

7. Environmental Outcomes

This OMP identifies outcomes focused management actions pursuant to the EPBC Act, for the provision of SEFFW TEC, Koala (*Phascolarctos cinereus*), GHFF (*Pteropus poliocephalus*), Greater Glider (*Petauroides volans*), Yellow-bellied Glider (*Petaurus australis australis*), Swift Parrot (*Lathamus discolor*) and Regent Honeyeater (*Anthochaera phrygia*) habitat offset (target MNES). The management objectives for the Offset Area, in alignment with the Environmental Offsets Policy (EOP) will:

- Deliver an overall conservation outcome that improves the viability of habitat for the target MNES.
- Provide a direct offset that is in proportion to the level of statutory protection that applies to the target MNES.
- Be of a size and scale proportionate to the residual impacts on the target MNES.
- Effectively account for and manage the risks of the offset not being successful within the required management timeframe.
- Provide a conservation gain additional to what is already required by a duty of care or to any environmental planning laws at any level of Government.
- Be efficient, effective, timely, transparent, scientifically robust and reasonable with appropriate transparent governance arrangements in place for measuring, monitoring, auditing and enforcing the management of the Offset Area.

7.1. Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and Southeast Queensland bioregions – (Threatened Ecological Community - TEC)

A summary of the baseline and improvement scoring for each assessment unit within the Offset Area is outlined in **Table 60**. Detailed environmental outcomes showing the specific attributes which are improved by the offset actions including interim milestones are provided at **Appendix G**.

Table 60: TEC baseline MHQA and offset improvement scores

Assessment Unit	Site Condition		Site Context		Habitat Score		Rounded Score	
	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift
3	4.55	5.69	1.83	2.35	6.38	8.04	6	8
6	3.98	5.69	1.83	2.35	5.81	8.04	6	8
9	1.79	5.69	1.83	2.35	3.62	8.04	4	8
10	3.19	5.69	1.83	2.35	5.02	8.04	5	8

The proposal to regenerate Regional Ecosystems indicative of the TEC as listed in the conservation advice will meet the key diagnostic characteristics and condition categories as specified by creating interconnected TEC patches that each exceed 2 ha in size (large contiguous patches) with ≥ four native ground cover species and ≥ 30% of total perennial understorey vegetation comprised of native species, meaning at least Class C2 TEC patches will be reinstated within the offset management

period. In fact, these ground cover TEC indicators will be exceeded under the proposed Regional Ecosystem reinstatement meaning elevation beyond Class C2 is only limited by time and the eventual classification of plantings as large trees and recolonisation by arboreal mammals, which it is anticipated will occur beyond the offset management period with the offset site being secured in perpetuity.

7.2. Koala

A summary of the baseline and improvement scoring for each assessment unit within the Offset Area is outlined in **Table 61**. Detailed environmental outcomes showing the specific attributes which are improved by the offset actions including interim milestones are provided at **Appendix G**.

Table 61: Koala baseline MHQA and offset improvement scores

Assessment Unit	Site Condition		Site Context		Species Stocking Rate		Habitat Score		Rounded Score	
	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift
1	2.22	2.70	2.52	2.95	2.29	2.29	7.02	7.93	7	8
2	1.67	2.70	2.52	2.95	2.29	2.29	6.47	7.93	6	8
3	1.86	2.70	2.52	2.95	2.29	2.29	6.66	7.93	7	8
4	1.68	2.70	2.52	2.95	1.14	2.29	5.34	7.93	5	8
5	1.73	2.70	2.52	2.95	2.29	2.29	6.53	7.93	7	8
6	1.67	2.70	2.52	2.95	2.29	2.29	6.47	7.93	6	8
7	0.54	2.55	2.52	2.95	1.14	2.29	4.20	7.78	4	8
8	1.31	2.70	2.52	2.95	1.14	2.29	4.97	7.93	5	8
9	0.68	2.70	2.52	2.95	1.14	2.29	4.34	7.93	4	8
10	1.40	2.70	2.52	2.95	1.14	2.29	5.06	7.93	5	8

7.3. Grey-headed Flying-fox

A summary of the baseline and improvement scoring for each assessment unit within the Offset Area is outlined in **Table 62.** Detailed environmental outcomes showing the specific attributes which are improved by the offset actions including interim milestones are provided at **Appendix G**.

Table 62: GHFF baseline FHA and offset improvement scores

Assessment Unit	Site Condition		Site Context		Species Stocking Rate		Habitat Score		Rounded Score	
	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift
1	2.12	2.52	1.75	2.00	1.8	1.8	5.67	6.32	6	6
2	2.32	2.92	1.75	2.00	1.2	1.2	5.27	6.12	5	6
3	2.24	3.00	1.75	2.00	1.8	1.8	5.79	6.80	6	7
4	1.24	3.08	1.75	2.00	1.2	1.8	4.19	6.88	4	7
5	1.33	2.89	1.75	2.00	1.8	1.8	4.88	6.69	5	7
6	1.24	2.80	1.75	2.00	1.2	1.8	4.19	6.60	4	7
7	0.38	3.06	1.75	2.00	0.6	1.8	2.73	6.86	3	7
8	0.59	2.83	1.75	2.00	1.20	1.80	3.54	6.63	4	7
9	0.41	2.72	1.75	2.00	0.60	1.20	2.76	5.92	3	6
10	0.52	2.89	1.75	2.00	1.20	1.80	3.47	6.69	3	7

7.4. Greater Glider

A summary of the baseline and improvement scoring for each assessment unit within the Offset Area is outlined in **Table 63**. Detailed environmental outcomes showing the specific attributes which are improved by the offset actions including interim milestones are provided at **Appendix G**.

Table 63: Greater Glider baseline MHQA and offset improvement scores

Assessment Unit	Site Condition		Site Context		Species Stocking Rate		Habitat Score		Rounded Score	
	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift
1	1.53	2.85	2.20	2.79	0.86	1.14	4.58	6.78	5	7
2	1.40	2.85	2.20	2.79	0.86	1.14	4.46	6.78	4	7
3	2.58	2.85	2.20	2.79	1.14	1.14	5.92	6.78	6	7
4	1.41	2.85	2.20	2.79	0.86	1.14	4.46	6.78	4	7
5	1.13	2.85	2.20	2.79	0.57	1.14	3.90	6.78	4	7
6	1.88	2.85	2.20	2.79	0.86	1.14	4.94	6.78	5	7
7	0.42	2.78	2.04	2.79	0.29	1.14	2.74	6.70	3	7
8	0.68	2.85	2.04	2.79	0.29	1.14	3.00	6.78	3	7
9	0.49	2.85	2.04	2.79	0.29	1.14	2.81	6.78	3	7
10	0.97	2.85	2.04	2.79	0.29	1.14	3.29	6.78	3	7

For the features uplift, calculations using Offset Area tree values and suitability for hollow carving based on expert advice were compiled. From survey results, the number of hollows that can potentially be carved on site was utilised to determine required hollow augmentation to achieve 2 hollows per hectare, which is the upper limit of the suitability range for the species as per the conservation advice (2 to 4 hollows per 2 hectares). A proportion of 0.3 of the recorded trees over 500 mm DSH (625, **Plan 14A**) was applied as a conservative estimate of trees suitable for carving based on detailed assessments conducted by Arborists for other offset areas, with at least two hollows to be carved per suitable tree. Hollows that occur within non-remnant assessment units with poor canopy cover were considered to be feature gains once the canopy is restored (**Plan 14A**). On occasions where tree count and structure is not suitable for enough hollow carving or access to achieve 2 hollows per hectare, nest boxes are proposed to achieve target denning opportunities based on recent evidence of their utility provided the nest boxes are suitable and appropriately installed (Gracanin et al. 2025). **Table 64** provides a summary of the features uplift achieved for the Offset Area.

Table 64: Greater Glider features-based uplift summary

Hollow Count	Estimated Hollows*	Accessible Hollows	Hollows Count for 2 per ha Target	Hollow Gain from Canopy Restoration	Carving Options**	Estimated Nest Boxes Required
110	132	79	531	53	375	24

*Hollow count plus 20% margin for sample error
**30% of 625 Trees 500 DSH+ with at least 2 hollows carved per tree

7.5. Yellow-bellied Glider

A summary of the baseline and improvement scoring for each assessment unit within the Offset Area is outlined in **Table 65**. Detailed environmental outcomes showing the specific attributes which are improved by the offset actions including interim milestones are provided at **Appendix G**.

Table 65: Yellow-bellied Glider baseline MHQA and offset improvement scores

Assessment Unit	Site Condition		Site Context		Species Stocking Rate		Habitat Score		Rounded Score	
	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift	Baseline	Uplift
1	1.53	2.85	2.20	2.79	0.86	1.14	4.58	6.78	5	7
2	1.40	2.85	2.20	2.79	0.86	1.14	4.46	6.78	4	7
3	2.58	2.85	2.20	2.79	1.14	1.14	5.92	6.78	6	7
4	1.41	2.85	2.20	2.79	0.86	1.14	4.46	6.78	4	7
5	1.13	2.85	2.20	2.79	0.57	1.14	3.90	6.78	4	7
6	1.88	2.85	2.20	2.79	0.86	1.14	4.94	6.78	5	7
7	0.42	2.78	2.04	2.79	0.29	1.14	2.74	6.70	3	7
8	0.68	2.85	2.04	2.79	0.29	1.14	3.00	6.78	3	7
9	0.49	2.85	2.04	2.79	0.29	1.14	2.81	6.78	3	7
10	0.97	2.85	2.04	2.79	0.29	1.14	3.29	6.78	3	7

For the features uplift, calculations using Offset Area tree values and suitability for hollow carving based on expert advice were compiled. From survey results, the number of hollows that can potentially be carved on site was utilised to determine required hollow augmentation to achieve 2 hollows per hectare, which is the upper limit of the suitability range for the species as per the conservation advice (2 to 4 hollows per 2 hectares). A proportion of 0.3 of the recorded trees over 500 mm DSH (625, **Plan 14A**) was applied as a conservative estimate of trees suitable for carving based on detailed assessments conducted by Arborists for other offset areas, with at least two hollows to be carved per suitable tree. Hollows that occur within non-remnant assessment units with poor canopy cover were considered to be feature gains once the canopy is restored (**Plan 14A**). On occasions where tree count and structure is not suitable for enough hollow carving or access to achieve 2 hollows per hectare, nest boxes are proposed to achieve target denning opportunities based on recent evidence of their utility provided the nest boxes are suitable and appropriately installed (Gracanin et al. 2025). **Table 66** provides a summary of the features uplift achieved for the Offset Area.

Table 66: Yellow- bellied glider features-based uplift summary

Hollow Count	Estimated Hollows*	Accessible Hollows	Hollows Count for 2 per ha Target	Hollow Gain from Canopy Restoration	Carving Options**	Estimated Nest Boxes Required
110	132	79	531	53	375	24

*Hollow count plus 20% margin for sample error
**30% of 625 Trees 500 DSH+ with at least 2 hollows carved per tree

7.6. Swift Parrot

The intent for the features-based uplift for Swift Parrot is to deliver at least 130% of the offset requirement within the Offset Area to allow a buffer of 30% for planting losses, which is well above the acceptable margin of 10% losses under the South East Queensland Ecological Restoration Framework. **Table 67** summarises the number of plantings required at the Offset Area to achieve this goal.

Table 67: Swift Parrot features summary

Impacted Features	Planted Features	Offset Achieved	EMZ Areas** -

			Offset Area (ha)
187	930	100.06%	156.9
	1209	130.08%	

**Refer Plan 18

In essence, from **Table 67** at least 930 and 1,209 features need to be planted at the Offset Area to achieve 100% and 130%, respectively, of the OAG requirements for features in the available Offset Area for the target species *Eucalyptus tereticornis* and *Corymbia citriodora* (refer **Appendix H** for OAG features reference showing 930 features achieves 100.06% of the offset requirement).

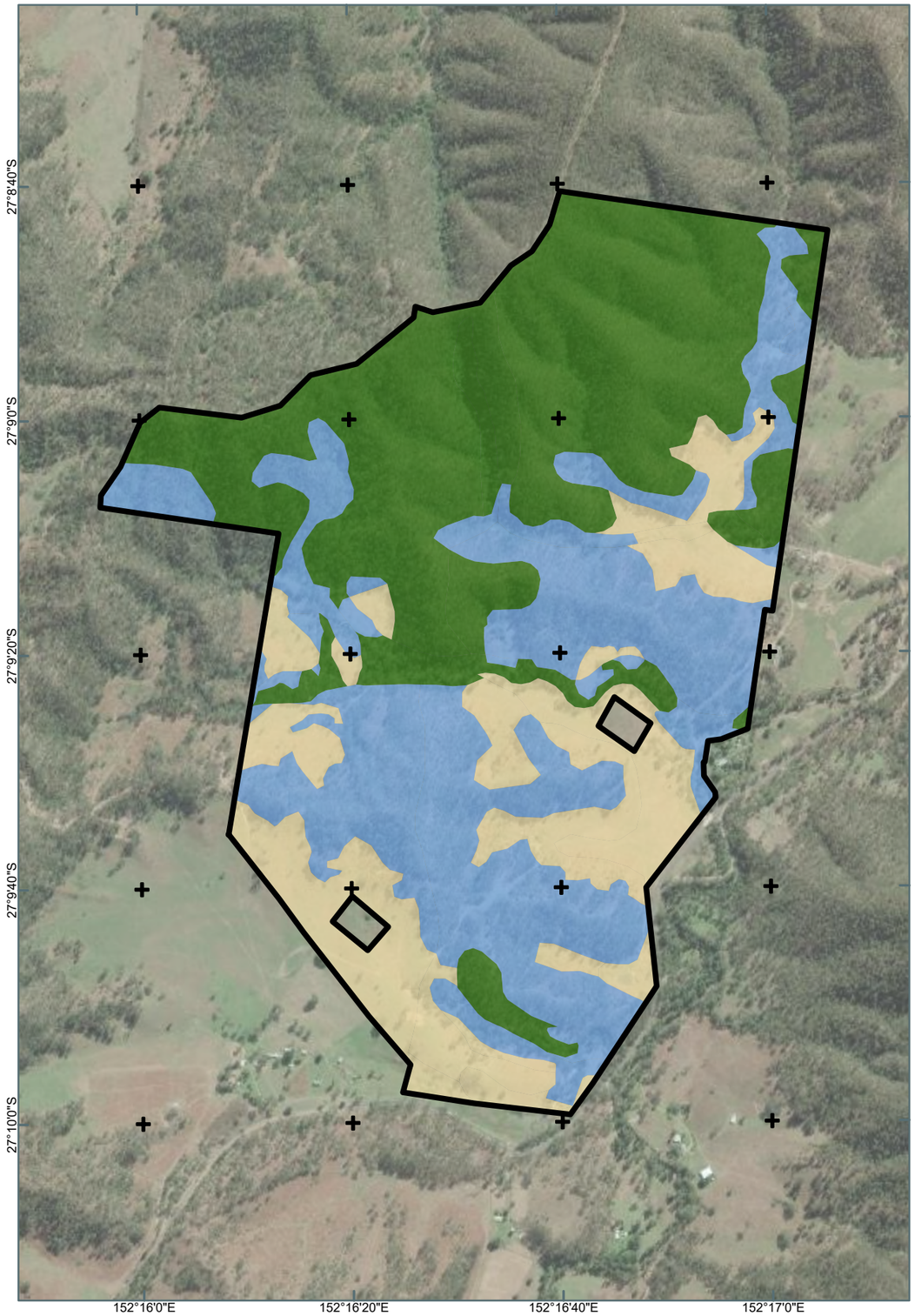
Further analysis shows that, when the Offset Area is broken into Environmental Management Zones (EMZs) for rehabilitation (refer **Plan 18** and **Section 9.7** for further details), 156.9 ha of the Offset Area is suitable for restoration works including plantings (**Table 67**). Planting percentages outlined in **Table 68** are based on a review of the Regional Ecosystem technical descriptions across EMZs. If we assume for the purpose of this analysis that for EMZ1 open paddock trees can be planted at 1/10 m^2 as per the South East Queensland Ecological Restoration Framework and for EMZ2 dense regrowth trees can be planted at the lower density of 1/100 m^2 and no trees will be planted in EMZ3 that is relatively vegetated, then it is feasible that an estimated 23,277 *E. tereticornis* and *C. citriodora* could be planted at the Offset Area to achieve expected tree species richness and relative abundance as per the Regional Ecosystem technical descriptions (refer **Table 68**).

Table 68: Swift Parrot potential Offset Area tree planting rates analysis

EMZ	AU	Area (ha)	Status	Planting Rate	Total Plantings	Average Cover		Combined Proportion	AU Count	Total Count
						E. tereticornis	C. citriodora			
1	7	25.2	Paddock	1/10 m^2	25,200	0.03	0.20	0.23	5,796	23,227
	8	20.9			20,900	0.09	0.45	0.54	11,286	
	9	2.90			2,900	0.05	NA	0.05	145	
	10	11.6			11,600	0.27	NA	0.27	3,132	
2	4	58.8	Dense Regrowth	1/100 m^2	5,880	0.03	0.20	0.23	1,352	
	5	27.1			2,710	0.09	0.45	0.54	1,463	
	6	10.4			1,040	0.05	NA	0.05	52	

In summary, ecological restoration of the Offset Area targeting rehabilitation and re-establishment of inherent Regional Ecosystems will ably allow for the required number of offset plantings as set out in **Table** 67(at least 1,209).

18. MANAGEMENT ZONES



Environmental Management Zones (EMZ)

EMZ 1 (Open paddocks)– Predominantly Restoration Planting
Existing native trees, shrubs and groundcovers to be protected and retained.
Appropriate weed management methodology within this zone initially to encourage natural regeneration. The management methodology must utilise sensitive techniques that will stabilise soil and minimise damage to existing native vegetation.
Entire zone to be reconstructed though full restoration planting of a mixture of trees, shrubs and groundcovers, following weed management works at densities appropriate for providing foraging habitat MNES species. Where possible, trees, shrubs and groundcovers species to be of local provenance and consistent with native species occurring naturally on site and/or EMZ's Preclear regional ecosystems.

EMZ 2 (Regrowth and Vegetated Areas)- Predominantly Weed Management with Infill Planting
Existing native trees, shrubs and groundcovers to be protected and retained.
Appropriate weed management methodology within this zone initially to encourage natural regeneration. Planting in drainage lines and waterways must utilise sensitive techniques that will stabilise soil, minimise damage to existing native vegetation, drainage feature banks and minimise impacts to aquatic / semi-aquatic fauna.
Infill planting only within areas heavily disturbed from weed management works and where natural regen is not possible. Infill planting is to occur utilising seedling trees, shrubs and groundcovers where required to supplement density of foraging tree species for MNES species. Trees to be planted at locations > 3m from existing tree trunks. Where possible, species to be of local provenance and consistent with native species occurring naturally on site and/or EMZ's Preclear regional ecosystems.

EMZ 3 (Remnant Vegetation)- Weed Management
Existing native trees, shrubs and groundcovers to be protected and retained.
Appropriate weed management methodology within this zone initially to encourage natural regeneration. The management methodology must utilise sensitive techniques that will stabilise soil and minimise damage to existing native vegetation.

Notes:
The information on this plan is not suitable for any purpose other than the expressed use of the Client. Property dimensions, areas, numbers of lots and contours and other physical features may need verification if the development application is approved and development proceeds, and may change when a full survey is undertaken or in order to comply with development approval conditions. No reliance should be placed on the information on this plan for detailed design or for any financial dealings involving the land. Saunders Havill therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying a development application and which may be subject to alteration beyond the control of Saunders Havill.Unless a development approval states otherwise, this is not an approved plan.
Layer Sources
World Imagery: Vantor
World Imagery: Earthstar Geographics
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Updated data available at
http://qldspatial.information.qld.gov.au/catalogue/
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LEGEND

- Offset Area

Assessment Units

- EMZ 1 - Paddock [60.6 ha]
- EMZ 2 - Regrowth/Vegetated [96.3 ha]
- EMZ 3 - Vegetated [108.7 ha]

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PEET

WILLOW VALE OFFSET

0 100 200 300 m
Transverse Mercator
GDA 2020 | Zone 56
1:14,000 @ A3

Address / RPD: Biarra, QLD
29/01/2026
8418 E 18 OMP_Esk EMZ A

7.7. Regent Honeyeater

The intent for the features-based uplift for Regent Honeyeater is to deliver at least 130% of the offset requirement across the Offset Area to allow a buffer of 30% for planting losses, which is well above the acceptable margin of 10% losses under the South East Queensland Ecological Restoration Framework. **Table 69** summarises the number of plantings required at the Offset Area to achieve this goal.

Table 69: Regent Honeyeater features summary

Impacted Features	Planted Features	Offset Achieved	EMZ Areas** - Offset Area (ha)
33	165	100.60%	156.9
	214	130.48%	

**Refer Plan 18

In essence, from **Table 69** at least 165 and 214 *Corymbia citriodora* need to be planted at the Offset Area to achieve at least 100% and 130%, respectively, of the OAG requirements for (refer **Appendix H** for OAG features reference showing 165 features archives 100.60% of the offset requirement).

Further analysis shows that, when the Offset Area is broken into Environmental Management Zones (EMZs) for rehabilitation (refer **Plan 18** and **Section 9.7** for further details), 156.9 ha of the Offset Area is suitable for restoration works including plantings (**Table 69**). Planting percentages outlined in **Table 70** are based on a review of the Regional Ecosystem technical descriptions across EMZs. Review of the Regional Ecosystem technical descriptions across EMZs suggests the number of plantings that will be *Corymbia citriodora*. If we assume for the purpose of this analysis that for EMZ1 open paddock trees can be planted at 1/10 m^2 as per the South East Queensland Ecological Restoration Framework and for EMZ2 dense regrowth trees can be planted at the lower density of 1/100 m^2 and no trees will be planted in EMZ3 that is relatively vegetated, then it is feasible that an estimated 16,841 *C. citriodora* could be planted within the Offset Area to achieve expected tree species richness and relative abundance as per the Regional Ecosystem technical descriptions (refer **Table 70**).

Table 70: Regent Honeyeater potential Offset Area tree planting rates analysis

EMZ	AU	Area (ha)	Status	Planting Rate	Total Plantings	Average Cover C. citriodora	AU Count	Total Count
1	7	25.2	Paddock	1/10 m^2	25,200	0.20	5,040	16,841
	8	20.9			20,900	0.45	9,405	[redacted]
	9	2.90			2,900	NA	0	
	10	11.6			11,600	NA	0	
2	4	58.8	Dense Regrowth	1/100 m^2	5,880	0.20	1,176	
	5	27.1			2,710	0.45	1,220	
	6	10.4			1,040	NA	0	

In summary, ecological restoration of the Offset Area targeting rehabilitation and re-establishment of inherent Regional Ecosystems will ably allow for the required number of offset plantings as set out in **Table 69** (at least 214).

7.8. Offset Assessment Guide – Calculator

Tables 71 to 77 outline summaries of the MNES offset compensation associated with the impacts. The offset compensation for the impacts on MNES is derived from the OAG calculator and habitat quality gains achieved from the successful implementation of the management actions.

Refer to **Appendix I** for the detailed EPBC offset calculator sheets and **Appendix G** for uplift justifications.

Table 71: Summary of TEC offset compensation

Impact Area			Offset Area		
Impact Area	**Impact Score**	**Quantum Impact (QI) Area**	**Habitat Quality Gain**	**Offset Area (ha)**	**% of Impact Offset**
			AU3		
1.5 ha	5/10	0.75 QI ha	6/10 to 8/10	10.8	192.84%
			AU6		
			6/10 to 8/10	10.4	163.85%
			AU9		
			4/10 to 8/10	2.9	91.38%
			AU10		
			5/10 to 8/10	11.6	274.14%
			Combined Total		**722.21%**

Table 72: Summary of Koala offset compensation

Impact Area			Offset Area		
Impact Area	**Impact Score**	**Quantum Impact (QI) Area**	**Habitat Quality Gain**	**Offset Area (ha)**	**% of Impact Offset**
			AU1		
23.3 ha	6/10	13.98 QI ha	7/10 to 8/10	57.1	27.35%
			AU2		
			6/10 to 8/10	40.8	39.08%
			AU3		
			7/10 to 8/10	10.8	5.17%
			AU4		
			5/10 to 8/10	58.8	74.55%
			AU5		
			7/10 to 8/10	27.1	11.45%
			AU6		
			6/10 to 8/10	10.4	8.79%
			AU7		
			4/10 to 8/10	25.2	42.60%
			AU8		
			5/10 to 8/10	20.9	26.50%
			AU9		
			4/10 to 8/10	2.9	4.90%
			AU10		
			5/10 to 8/10	11.6	14.71%

Impact Area	Offset Area	
[redacted]		
	Combined Total	255.10%

Table 73: Summary of GHFF offset compensation

Impact Area			Offset Area		
Impact Area	Impact Score	Quantum Impact (QI) Area	Habitat Quality Gain	Offset Area (ha)	% of Impact Offset
			AU1		
18.9 ha	6/10	11.34 QI ha	6/10 to 6/10	57.1	0%
			AU2		
			5/10 to 6/10	40.8	29.38%
			AU3		
			6/10 to 7/10	10.8	7.78%
			AU4		
			4/10 to 7/10	58.8	112.10%
			AU5		
			5/10 to 7/10	27.1	34.44%
			AU6		
			4/10 to 7/10	10.4	19.83%
			AU7		
			3/10 to 7/10	25.2	64.06%
			AU8		
			4/10 to 7/10	20.9	39.84%
			AU9		
			3/10 to 6/10	2.9	5.53%
			AU10		
			3/10 to 7/10	11.6	29.49%
[redacted]					
			Combined Total		342.44%

Table 74: Summary of GG offset compensation

Impact Area			Offset Area			
Impact Area	Impact Score	Quantum Impact (QI) Area	Habitat Quality Gain	Offset Area (ha)	% of Impact Offset - MHQA	% of Impact Offset - Features
			AU1			
75.3 ha	5/10	37.65 QI ha	5/10 to 7/10	57.1	20.31%	
			AU2			
			4/10 to 7/10	40.8	21.77%	
			AU3			
			6/10 to 7/10	10.8	1.92%	
			AU4			
			4/10 to 7/10	58.8	27.68%	
			AU5			
			4/10 to 7/10	27.1	12.76%	

Impact Area			Offset Area			
			AU6			
			5/10 to 7/10	10.4	3.26%	
			AU7			
			3/10 to 7/10	25.2	15.82%	
			AU8			
			3/10 to 7/10	20.9	13.12%	
			AU9			
			3/10 to 7/10	2.9	1.82%	
			AU10			
			3/10 to 7/10	11.6	7.28%	
			Combined Total		**125.74%**	**109.00%**

Table 75: Summary of YBG offset compensation

Impact Area			Offset Area			
Impact Area	**Impact Score**	**Quantum Impact (QI) Area**	**Habitat Quality Gain**	**Offset Area (ha)**	**% of Impact Offset - MHQA**	**% of Impact Offset - Features**
			AU1			
75.3 ha	5/10	37.65 QI ha	5/10 to 7/10	57.1	24.77%	
			AU2			
			4/10 to 7/10	40.8	26.55%	
			AU3			
			6/10 to 7/10	10.8	2.34%	
			AU4			
			4/10 to 7/10	58.8	33.76%	
			AU5			
			4/10 to 7/10	27.1	15.56%	
			AU6			
			5/10 to 7/10	10.4	3.98%	
			AU7			
			3/10 to 7/10	25.2	19.29%	
			AU8			
			3/10 to 7/10	20.9	16.00%	
			AU9			
			3/10 to 7/10	2.9	2.22%	
			AU10			
			3/10 to 7/10	11.6	8.88%	
			Combined Total		**153.37%**	**132.95%**

Table 76: Summary of Swift Parrot offset compensation

Impact Features	Baseline Features*	Additional Features	Total Features	% of Impact Offset - Features
187	357	1209	1,566	130.08%

Impact Features	Baseline Features*	Additional Features	Total Features	% of Impact Offset - Features

*Very large foraging tree (>500 mm DSH) count only

Table 77: Summary of Regent Honeyeater offset compensation

Impact Features	Baseline Features*	Additional Features	Total Features	% of Impact Offset - Features
33	289	214	503	130.48%

*Very large foraging tree (>500 mm DSH) count only

7.8.1 Completion Criteria

The management framework designed to achieve the proposed environmental outcomes summarised above are detailed in **Section 9** of this OMP.

A summary of the management actions and their completion criteria required to achieve the environmental outcomes are provided in **Table 78.** The management actions will result in a net gain of the overall habitat quality for the MNES over the period of effect of the offset through active management, maintenance, monitoring and reporting.

This OMP includes completion criteria and performance targets that evidence protection or improvement of MNES habitat. For the purpose of the plan:

a) **completion criteria** are longer term time-bound values, specified for measurable parameters, that if attained and maintained ensure the plan's environmental outcomes are achieved; and

b) **performance targets** are time-bound short- and medium-term targets guided by prescribed management measures, for management interventions and environmental condition, that are used to monitor, evaluate, review and improve the effectiveness of the plan to offset impacts.

Refer to **Appendix G** for species specific milestone frameworks. Here the intended goals for each assessment period have been provided at 5-yeraly intervals (Years 5, 10, 15 and 20) for each of the MHQA and FHA criteria, including justification for scoring uplift framed around specific management actions, milestone reporting and adaptive management criteria. It is understood these tables are typically incorporated into the EPBC Act approval.

Tracking of progress against the environmental outcomes will be measured at milestone monitoring years using the baseline survey methodologies detailed in **Section 6.1**. A schedule of monitoring and reporting is provided in **Section 8**.

Table 78: Completion criteria and performance targets

Management Action	OMP Section	Performance Targets	Completion criteria
Management Action 1 – Legally Secure Offset Area	9.3	Not applicable	• The Offset Area is legally secured for conservation via a suitable method. It is anticipated that this will be via a Voluntary Declaration (VDEC) process administered under the Queensland *Vegetation Management Action 1999* in the interim prior to commencement of the action followed by a permanent securing method agreed with the Department. • The Department is notified of the legal securement within 5 business days of securing the Offset Area. • The Offset Area is not used for other purposes – site access is restricted.
Management Action 2 – Non-native Vertebrate Pest Management	9.4	• Development and implementation of a property-wide feral animal management program specifying techniques (trapping, baiting, shooting) and ongoing monitoring methods (including datasheets) to be utilised will be completed within Year 1 of the offset. • A suitably qualified pest management contractor will be engaged to manage pests within the Offset Area for the life of the offset.	• Non-native vertebrate pests and evidence of pests are suppressed within the Offset Area.
Management Action 3 – Management of Weeds	9.5	• Establish photo monitoring locations in Year 1 of the offset to monitor any increase in weeds extent • All weeds will receive on-going maintenance • Follow-up treatment of weeds will occur annually or as needed, determined by the suitably qualified regeneration contractor.	• The management actions must maintain the extent of weed cover below 5% of the Offset Area once achieved for the life of the offset (20 years).
Management Action 4 – Bushfire Management Plan	9.6	• A Bushfire Management Plan (BMP) will be developed and implemented in accordance with relevant Queensland guidelines and endorsed by an experienced bushfire practitioner to reduce potential threats from fires to Koala.	• Firebreaks and fuel loads are maintained through the life of the offset • Vegetation composition and restoration regime is not negatively affected by prescribed fire regimes.
Management Action 5 – Habitat Creation and Regeneration	9.7	• By the end of Year 5, 10, 15 and 20 site condition metrics have improved in accordance with environmental outcomes (**Appendix G**).	• Rehabilitated areas are established, regenerated and mapped as remnant vegetation under Queensland's *Vegetation Management Act 1999* (VMA) successor legislation by Year 20 which requires 70% of canopy height and 50% of expected cover according to the relevant Regional Ecosystem benchmark to be reached. • Site condition metrics in accordance with environmental outcomes (**Appendix G**).

Management Action	OMP Section	Performance Targets	Completion criteria
Management Action 6 – Fencing and Signage	9.8	• Fencing and signage is installed and retrofitted by the end of Year 1 of the offset and maintained for the life of the offset (20 years).	• All fencing and signage has been installed, retrofitted and maintained for the life of the offset • Risk of mortalities or injury to MNES as a result of barbed-wire fencing is mitigated. • Fencing enables MNES to move through he Offset Area and into surrounding land. • Risk of stock breaches or unauthorised access mitigated. If stock breaches or unauthorised access is observed, fencing is rectified within 2 weeks
Management Action 7 – Hollow Monitoring and Management Plan	9.9	• The Hollow Monitoring and Management Plan (HMMP) is implemented from commencement of the OMP. • A target of 2 hollows per hectare are created or reconnected.	• Foraging habitat is established. • At least 2 hollows per hectare are created or reconnected and maintained.

8. Monitoring and Reporting Schedule

The timing and frequency of monitoring and reporting actions, corrective actions and responsibilities for the proposed Offset Area are provided in **Table 79**. The monitoring schedule is considered appropriate to allow the Proponent, Offset Provider and appointed suitably qualified person to assess the quality of the proposed Offset Area and success of management actions. In addition, if any non-compliances or ineffectiveness of management action are identified, adaptive management strategies can be implemented to ensure the proposed Offset Area will increase in quality for the MNES.

Table 79: Timeline for monitoring and reporting actions

Management Action	Monitoring action(s)	Reporting Action and Timing	Responsible person(s) for activity/reporting
1. Legally secure Offset Area	The Offset Area will be secured via a suitable method. This will be completed via a Voluntary Declaration administered under the Queensland *Vegetation Management Act 1999* in the interim prior to impacts occurring followed by a permanent securing method agreed with the Department.	The Department will be notified that the Offset Area has been secured. Evidence in the form of the shapefiles and confirmation of declaration from the Queensland Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development will be provided with the notification. Details will be included in the Annual Compliance Report (ACR).	Offset Provider
2. Pest management	Monitoring will occur annually for a period of at least 22 trapping nights (i.e., motion triggered detection camera deployment) and sightings (direct and indirect) with evidence of non-native predators GPS recorded. Evidence of pest presence within the Offset Area and pest management implementation will be extracted from the Offset Area Annual Report (OAAR) and will be	An Offset Area Annual Report (OAAR) will be completed annually within one (1) month of the end of each offset year detailing pest management implementation. Milestone Reports will be prepared three (3) months after the completion of milestone surveys at Years 5, 10, 15, and 20 of the offset and included in the ACR.	Pest management and OAAR - Offset Provider and / or suitably qualified contractor as appointed by the Offset Provider. Monitoring and milestone reports - Suitably qualified Ecologist appointed by the Proponent.

Management Action	Monitoring action(s)	Reporting Action and Timing	Responsible person(s) for activity/reporting
	used in assessments of the relative success of the management of threats and progress towards the environmental outcomes and milestone criteria.		
3. Weeds management	Weed photo monitoring annually for first three years and then at Years 5, 10, 15, and 20. Weed cover surveys and mapping, and MHQA surveys will be conducted before the end of Years 5, 10, 15, and 20 of the offset in accordance with baseline survey methodologies to track progress against interim milestone targets and completion criteria, and identify any issues for rectification. The monitoring will be undertaken during the same time of year at every monitoring event, to ensure that the timing is consistent and aligns with the baseline assessment.	An OAAR will be completed within one (1) month of the end of each offset year detailing weeds management implementation, where required, and progress against the performance targets. OAARs will be included in the ACR. Milestone Reports will be prepared three (3) months after the completion of milestone surveys at Years 5, 10, 15, and 20 of the offset and included in the ACR.	Offset Provider and / or suitably qualified weed management contractor as appointed by the Offset Provider. Suitably qualified Ecologist appointed by the Proponent.
4. Bushfire Management Plan	Annual monitoring requirements to review access tracks, fire breaks, seasonal fuel loads and outcomes of controlled burns or other management in accordance with the associated Bushfire Management Plan.	An OAAR will be completed within one (1) month of the end of each offset year which documents bushfire management actions undertaken under the direction of the local authority. OAARs will be included in the ACR.	Offset Provider and suitably qualified bushfire management contractor as appointed by the Offset Provider.
5. Habitat creation and regeneration	Photo monitoring will be completed annually during the first three (3) years of the offset and documented in the OAAR. Photo monitoring will encompass areas of assisted natural regeneration and	An OAAR will be completed within one (1) month of the end of each offset year with input from the Offset Provider to document: • Planting/seedling events	Offset Provider and suitably qualified bush regeneration contractor as appointed by the Offset Provider. Suitably qualified Ecologist appointed by the Proponent.

Management Action	Monitoring action(s)	Reporting Action and Timing	Responsible person(s) for activity/reporting
	reconstruction to document on-ground progress. Photo monitoring coordinates are to be recorded and occur in the same location each survey period. **Reconstruction areas** subject to infill planting will be annually monitored after the completion of planting works until establishment is reached. The monitoring timing is dependent on the planting cycle of the engaged bush regeneration contractor. Monitoring will occur regularly after initial planting in accordance with watering schedules. MHQA surveys will be conducted before the end of Years 5, 10, 15, and 20 of the offset in accordance with baseline survey methodologies to track progress against interim milestone targets and completion criteria and identify any issues for rectification.	• Watering schedule • Implemented corrective actions • Success/failure rates within initial maintenance period/watering period until establishment • Certificate of practical completion of planting works; and • Certificate/sign off that establishment has been reached. OAARs will be included in the ACR. Milestone Reports prepared three (3) months after the completion of milestone surveys at Years 5, 10, 15, and 20 of the offset and will be included in the ACR.	
6. Fencing and signage	Status of fencing and signage and any issues requiring rectification will be identified through regular site inspections to be determined by the Offset Provider.	Installation and maintenance of fencing will be reported in the Year 1 OAAR. Ongoing status of fencing/signage and any rectification works will be reported in OAARs for the relevant offset year and subsequently in the Annual Compliance Report (ACR) for the project period.	Offset Provider

Management Action	Monitoring action(s)	Reporting Action and Timing	Responsible person(s) for activity/reporting
7. Hollow Monitoring and Management	Hollow Monitoring and Management Plan to be implemented.	Audit of hollows to be completed at Years 5, 10, 15 and 20 will be included in the ACR. Hollows to be installed in suitable host trees targeting 2 hollows per hectare.	A Hollow Monitoring and Management Plan to be implemented by the Proponent in Year 1. Proponent and suitably qualified Arborist/Contractor as appointed by the Proponent to implement.

Monitoring Summary								
Monitoring action	Year 1	Year 2	Year 3	Year 4	Year 5	Year 10	Year 15	Year 20
Pest monitoring	Annually for the life of the offset							
Weed photo monitoring	✓	✓	✓	✓	✓	✓	✓	✓
Weed mapping	✓	×	×	×	✓	✓	✓	✓
MHQA	×	×	×	×	✓	✓	✓	✓
Planting	×	✓	✓	×	×	×	×	×
Hollow monitoring	×	×	×	×	✓	✓	✓	✓
Bushfire monitoring	Annually for the life of the offset							
Fencing and signage	Annually for the life of the offset							

9. Management Framework

This section outlines the management framework to be implemented for the life of the offset (20 years) including management measures to be implemented by the Offset Provider or appointed contractor, annual monitoring requirements, and interim milestone monitoring of environmental outcomes for relevant management actions to be completed by a suitably qualified person at Years 5, 10, 15, and 20 of the offset. These management actions are designed to minimise the risks associated with key threatening processes to the MNES and enhance the quality of the habitat within the proposed Offset Area. The proposed monitoring actions are summarised in a monitoring and reporting schedule in **Section 8.**

9.1. Management Approach

The measures outlined in the following subsections are considered effective for the listed status of the MNES in addition to the size and scale of the offset and the focus on priority management actions, which are efficient, timely and transparent (*i.e.,* able to be monitored and are auditable). Additionally, a number of these measures correspond to Priority Management Actions outlined in the following documents:

- *Conservation advice for Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions*
- *Conservation Advice for Phascolarctos cinereus (combined populations of Queensland, New South Wales and the Australian Capital Territory) (Koala Northern Designable Unit*)
- *National Recovery Plan for the Koala Phascolarctos cinereus*
- *National Recovery Plan for the Grey-headed Flying-fox (Pteropus poliocephalus)*
- *Conservation advice for Petauroides volans (Greater Glider (southern and central))*
- *Conservation advice for Petaurus australis australis (Yellow-bellied Glider (south-eastern))*
- *National Recovery Plan for the Swift Parrot Lathamus discolor*
- *Conservation Advice for Anthochaera phrygia (Regent Honeyeater)*

Although the measures have been developed to achieve the required offset environmental outcomes as a priority, they will deliver an overall improvement in the condition and quality of a wide range of native species present within the Offset Area.

9.2. Operational Management Units

For the purpose of the management framework, the Assessment Units are termed Operational Management Units (OMUs). Details for the proposed Offset Area is provided in **Table 80**.

Table 80: Offset Area operational management units

OMU	Assessment Unit	VMA Status	Regional Ecosystem	Area (ha)
OMU1	AU1	Remnant	RE12.11.6	57.1 ha
OMU2	AU2	Remnant	RE12.12.5	40.8 ha

OMU	Assessment Unit	VMA Status	Regional Ecosystem	Area (ha)
OMU3	AU3	Remnant	RE12.3.7	10.8 ha
OMU4	AU4	Non-remnant - Preclear	RE 12.11.6	58.8 ha
OMU5	AU5	Non-remnant - Preclear	RE 12.12.5	27.1 ha
OMU6	AU6	Non-remnant - Preclear	RE 12.3.7	10.4 ha
OMU7	AU7	Non-remnant - Preclear	RE12.11.6	25.2 ha
OMU8	AU8	Non-remnant - Preclear	RE12.12.5	20.9 ha
OMU9	AU9	Non-remnant - Preclear	RE12.3.7	2.9 ha
OMU10	AU10	Non-remnant - Preclear	RE12.3.3	11.6 ha

9.3. Management Action 1 – Legally Secure Offset Area

The proposed Offset Area must be protected and managed against known and potential threats for the MNES in perpetuity to attain a conservation gain. As such, the proposed Offset Area will be legally secured for conservation prior to impacts occurring via a VDEC process administered under the Queensland VMA and then additionally via a permanent securing method agreed with the Department. Notification of declaration will be supplied to DCCEEW.

The Offset Area will be recognised as making significant contribution to the conservation of biodiversity. The Offset Provider will continue to manage the proposed Offset Area for the life of the offset, whilst reporting required milestones and data to the proponent annually. Legally securing the proposed Offset Area is listed in the Conservation Advice as a Priority Management Action, under "Habitat Loss, Disturbance and Modification".

Demonstration of this management action will be further provided in the Annual Compliance Report.

9.4. Management Action 2 – Non-native Vertebrate Pest Management

9.4.1 Justification

Feral or unwanted domestic dogs have been identified as a key threatening process under the EPBC Act and are confirmed as a direct predation risk to MNES. Managing animal predation is listed as a Priority Management Action under the Koala Conservation Advice.

Additionally, the presence of other non-native species which may pose a level of threat, such as *Sus scrofa (Feral Pig)*, Cat (*Felis catus*, Greater Glider and Yellow-bellied Glider), Fox (*Vulpes vulpes*, Greater Glider and Yellow-bellied Glider) and various species of feral Deer (Yellow-bellied Glider) have the potential under relevant conservation advices to attack MNES and indirectly stress them making them more susceptible to disease. Predation rates by wild dogs are difficult to quantify because it often occurs in locations infrequently visited by people and the carcasses of the killed animals are buried, eaten or may go undetected (Beyer *et al*. 2018). Wild dog attack is routinely cited as one of the main causes of mortality of Koalas (Rhodes *et al*. 2011; Gonzalez-Astudillo *et al.* 2017; Beyer *et al.* 2018). Wild dogs are also identified as regional pest species by Somerset Regional Council.

Removal of the wild dog threat produced significant gains in the survival of Koalas in a study where the causes of mortality of 291 Koalas were tracked over four years (Beyer *et al.* 2018). Wild dogs were confirmed as the cause of death for 117 (40.2% of total) deaths during the study. In addition, wild dogs were attributed to another 38 (13.1% of the total) deaths but were not confirmed. Population growth rates of Koala in the study increased from 0.659 in the first year to 1.20 in the fourth year of the project through a combination of reduction in predation and disease treatment. Modelling indicated that the population would increase in size by 21% within a decade with continued management (Beyer *et al.* 2018).

Key species assessed as high priority to receive management measures, and their associated risks, are presented in **Table 81**.

Table 81: Predator species management priorities

Priority (category)	Scientific name (Common name)	Queensland Biosecurity Act 2014 status	Risks (potential and actual)	Distribution and prevalence	Objective
1 (high)	*Canis familiaris* (Wild Dog)	Category 3,4,6	Actual impacts on agricultural production values – HIGH Actual impacts on native fauna – MEDIUM	Widespread and common	Control
2 (medium)	*Felis catus* (Feral Cat)	Category 3,4,6	Actual impacts on native fauna – HIGH	Widespread in unknown densities	Control
3 (medium)	*Vulpes vulpes* (Red Fox)	Category 3,4,5,6	Actual impacts on native fauna – MEDIUM Actual impacts on agricultural production values – LOW	Widespread and common	Control
4 (low)	*Cervus elaphus* (Feral Red Deer)	Category 3,4,6	Actual impacts on native fauna – LOW Actual impacts on agricultural production values – MEDIUM	Abundant Locally	Control
5 (low)	*Sus scrofa* (Feral Pig)	Category 3,4,6	Actual impacts on native fauna – LOW Actual impacts on agricultural production values – MEDIUM	Locally common	Control

*Information from Biosecurity Queensland pest distribution maps and Biosecurity Act 2014 (Qld), Schedule 2 Part 1.

9.4.2 Baseline surveys

Wild dog presence within the proposed Offset Area was targeted through the use of motion-triggered baited camera traps. Camera trapping involves setting up a fixed digital camera to capture images or video of animals that pass in front of a camera with an infrared trigger. This survey technique identifies fauna activity beyond the scope of direct observational studies and with the absence of potential observer impacts.

Cameras were attached 30-100 cm from the ground on a tree or post and directed towards landscape features. Seven (7) camera traps were installed on 10th November 2025 and collected on 8th December 2025, for a period of 28 days. Multiple wild dogs were recorded within the proposed Offset Area on several occasions indicating a real risk to MNES. Feral deer and pigs have also been recorded during survey efforts across the broader offset property.

Baseline surveys and results are detailed in **Sections 6.1** and **Section 6.2**.

9.4.3 Project and management measures

Pest management will be carried out on a property wide basis due to the highly mobile nature of pest fauna. Before the end of Year 1 of the offset, the Offset Provider will develop and implement a property wide Pest Management Plan (PMP). The following sections detail the overarching management approach to be taken, monitoring activities and reporting requirements.

The pest animal management approach for the property is illustrated below.

It involves the implementation of a range of activities that will:

- Identify & monitor pest animal presence & relative abundance at the offset site
- Control & reduce the abundance of pest animals at the offset site.
- Report & review progress to achieving the PMP objectives and outcomes); and
- Corrective actions to be implemented if objectives and outcomes are not being achieved.

The control and prevention of invasive animal incursions will be undertaken in accordance with the relevant legislation (such as the Commonwealth *Biosecurity (Consequential Amendments and Transitional Provisions) Act 2015* and the *Queensland Biosecurity Act 2014*) and include the control of non-native predators by legal methods by suitably qualified pest management contractor(s). Any required hazardous materials must be handled and stored in accordance with the material's safety data sheets and the *Approved Code of Practice for the Storage and Handling of Dangerous Goods*. Non-native predator control will be undertaken in a humane manner.

Effective management of pest animals integrates several methods and requires coordination between many stakeholders. One method cannot be used to the exclusion of all others. The following pest control methods will likely be used within the Offset Property to control pests:

- Shooting: Shooting is the preferred initial method of control for all pest animal species within the Offset Property and will be employed first. Shooting must be carried out by skilled, experienced and responsible shooters. Shooters will be appropriately licensed and copies of their valid licences will be obtained before activities commence. Only approved shooters will be allowed on the Offset Property.
- Trapping: Trapping is a common alternative to shooting if unsuccessful and baiting in areas where baiting poses a high risk to humans, livestock or domestic animals.
- Lethal baiting: Where deemed appropriate, use of lethal baiting (1080) will be employed for the control of wild dogs, cats, foxes, pigs and rabbits where shooting has proved unsuccessful (i.e. target individuals cannot be located or numbers are getting out of control). This method will however only be used as a last resort and in consultation with surrounding landowners.

The Offset Provider will also participate in larger coordinated pest control events with local Councils. It is anticipated that these pest control events will be guided by the local Council and control will be done in line with their recommendations and Standard Operating Procedures.

Further detail regarding these methods and their application are detailed in **Table 82**.

The implementation of the non-native vertebrate pest management actions will be reported annually by the Offset Provider in the OAAR and provide detail on detected species, control efforts, and total trapped/baited individuals during the given management period.

Table 82: Summary of control methods

Pest animal	Trigger	Corrective actions/ control techniques	Associated policies/guidelines	Licenses/ permits required	Control frequency
Wild Dog (***Canis lupis familiaris***)	A single dog detected within the Offset Property	Control techniques will be implemented in the following hierarchy: 1. Shooting 2. Trapping 3. Baiting	Control techniques for wild dogs will be carried out in accordance with: • *National Code of Practice for the humane control of wild dogs* (Centre for Invasive Species Solutions, 2017c). • *NATSOP-DOG003 National Standard Operating Procedure: Ground shooting of wild dogs* (Centre for Invasive Species Solutions, 2017i). • *NATSOP-DOG002 National Standard Operating Procedure: Trapping of wild dogs using cage traps* (Centre for Invasive Species Solutions, 2017h). • *NATSOP-DOG001 National Standard Operating Procedure: Trapping of wild dogs using padded-jaw traps* (Centre for Invasive Species Solutions, 2017g). • *NATSOP-DOG004 National Standard Operating Procedure: Ground baiting of wild dogs with sodium fluoroacetate*	• Firearm license • Baits containing the toxin 1080 need a Restricted Chemical Product (RCP) permit application to the DPI.	Ongoing/all year

Pest animal	Trigger	Corrective actions/ control techniques	Associated policies/guidelines	Licenses/ permits required	Control frequency
			(1080) (Centre for Invasive Species Solutions, 2017j).		
Feral Cat (*Felis catus*)	A single cat detected within the Offset Property	Control techniques will be implemented in the following hierarchy: 1. Shooting 2. Trapping 3. Baiting	Control techniques for cats will be carried out in accordance with: • National Code of Practice for the humane control of cats (Centre for Invasive Species Solutions, 2017a). • NATSOP-CAT001 National Standard Operating Procedure: Ground shooting of feral cats (Centre for Invasive Species Solutions, 2017d). • NATSOP-CAT002 National Standard Operating Procedure: Trapping of feral cats using cage traps (Centre for Invasive Species Solutions, 2017e). • NATSOP-CAT003 National Standard Operating Procedure: Trapping of feral cats using padded-jaw traps (Centre for Invasive Species Solutions, 2017f).	• Firearm license • Baits containing the toxin 1080 need an RCP permit application to the DPI.	
European Red Fox	A single fox detected within the	Control techniques will be implemented	Control techniques for foxes will be carried out in accordance with:	• Firearm license	

Pest animal	Trigger	Corrective actions/ control techniques	Associated policies/guidelines	Licenses/ permits required	Control frequency
(***Vulpes vulpes***)	Offset Property	in the following hierarchy: 1. Shooting 2. Trapping 3. Baiting	• National Code of Practice for the humane control of foxes (Centre for Invasive Species Solutions, 2017b) • NATSOP-FOX003 National Standard Operating Procedure: Ground shooting of foxes (Centre for Invasive Species Solutions, 2017l) • NATSOP-FOX006 National Standard Operating Procedure: Trapping of foxes using cage traps (Centre for Invasive Species Solutions, 2017n) • NATSOP-FOX005 National Standard Operating Procedure: Trapping of foxes using padded-jaw traps (Centre for Invasive Species Solutions, 2017m) • NATSOP-FOX001 National Standard Operating Procedure: Ground baiting of foxes with sodium fluoroacetate (1080) (Centre for Invasive Species Solutions, 2017k)	• Baits containing the toxin 1080 need an RCP permit application to the DPI.	

Pest animal	Trigger	Corrective actions/ control techniques	Associated policies/guidelines	Licenses/ permits required	Control frequency
Feral Rusa Deer ***(Rusa timorensis)*** **Feral Red Deer** ***(Cervus elaphus)*** **Feral Chital Deer** ***(Axis axis)*** **Feral Fallow Deer** ***(Dama dama)***	A single deer detected within the Offset Property	Only shooting will be employed to control deer within the Offset Property.	Control techniques for deer will be carried out in accordance with: • National Code of Practice for the Effective and Humane Management of Feral and Wild Deer (Centre for Invasive Species Solutions, 2024a). • NATSOP-DEER002 National Standard Operating Procedure: Ground shooting for feral and wild deer (Centre for Invasive Species Solutions, 2024b).	Firearm license	
Feral Pigs ***(Sus scrofa)***	A single pig within the Offset Property.	Control techniques will be implemented in the following hierarchy: 1. Shooting 2. Trapping 3. Baiting	Control techniques for pigs will be carried out in accordance with: • *National Code of Practice for the Effective and Humane Management of Feral pigs* (Centre for Invasive Species Solutions, 2024f). • *NATSOP-PIG003 National Standard Operating Procedure: Ground Shooting of Feral Pigs*	• Firearm license • Baits containing the toxin 1080 need an RCP permit application to the DPI.	

Pest animal	Trigger	Corrective actions/ control techniques	Associated policies/guidelines	Licenses/ permits required	Control frequency
			(Centre for Invasive Species Solutions, 2024d). • *NATSOP-PIG001 National Standard Operating Procedure: Trapping of Feral Pigs* (Centre for Invasive Species Solutions, 2024c). • *NATSOP-PIG004 National Standard Operating Procedure: Poisoning of Feral Pigs with Sodium monofluoroacetate (1080)* (Centre for Invasive Species Solutions, 2024e).		

9.4.4 Adaptive management for non-native predator species

This framework has been based on the current state of knowledge of species ecology and best practice habitat management approaches for MNES habitat. It is anticipated that new techniques will become available over the course of the management period to monitor environmental values through indicators including vegetation composition, MNES absence, presence and abundance, and weed presence or density (including level of infestation). In addition, given the variable nature of pest management, an adaptive management approach has been adopted to ensure the Pest Management Plan works effectively for any species over the area, as well as integrating future research and insights into management and monitoring actions. This will ensure best practice techniques can be adopted as new information becomes available over time via an adaptive management approach, ensuring the anticipated delivery and measurement of offset outcomes.

Adaptive management refers to a way of managing natural resources where management actions are regularly reviewed and, if necessary, modified, based on observed changes in environmental condition and/or updates in knowledge which underpins the original management approach.
Adaptive management will be used to incorporate changes into management processes across the proposed Offset Area, and will include the following:

- Assimilation of new data or information – such as updates to conservation advice or new threat abatement plans relevant to the Koala.
- Annual review of risks – to reassess existing risks/threats to the Offset Area and ensure best practice methodology is implemented to achieve effective management of target species.
- Annual review of management measure effectiveness – to reassess management actions where monitoring performance criteria are not met.

9.4.5 Monitoring

A suitably qualified person will complete monitoring for non-native vertebrate pests annually.

The following non-native predator monitoring methodology will be implemented by a suitably qualified person:

- Desktop Assessment
    - Review previous survey mapping and camera locations, field datasheets, photos and notes.
- Field Survey
    - 1 km grid-based motion detection camera deployment annually for at least 22 trap nights. Motion detection camera locations are to be recorded with hand-held GPS. GPS coordinates and photos to be recorded.
    - Field datasheet will detail the time of year of the monitoring event, record observed scats or tracks, photo location and notes of any evidence of positive and/or negative changes in non-native predator occurrence.
    - A GPS will be used to locate the presence of non-native predator species, with a focus on species identified during baseline field surveys via notable tracks or scats.
    - Transfer GPS data to spatial data programs to generate non-native predator occurrences and collate all data in excel spreadsheets and save all digital photos to file for ongoing monitoring and reporting purposes.

- Where non-native predator presence is detected, targeted trapping and baiting programs, will be implemented on completion of the monitoring program.

Annual survey results will be reported in ACRs. Milestone monitoring summaries will be reported by the suitably qualified person in the Year 5, 10, 15, and 20 Milestone Reports and included in the ACRs. This will provide detail on survey methodologies and detected predator abundance.

9.5. Management Action 3 – Management of Weeds

9.5.1 Justification

The listing and prioritisation of Weeds of National Significance (WONS) is a joint initiative of the States, Territories and Australian Government and their long-term control is of national interest. *L. camara* and its impact on Koala movement is listed as a key threatening process, prolonging time spent on the ground and therefore increasing susceptibility to predators (Paull *et al.* 2019, The Honourable Leeanne Enoch 2019). The Queensland Koala Strategy 2019-2024 lists Koala habitat restoration, including removal of weeds, as a key priority, and these recommendations were developed at the advice of the Koala expert panel (Queensland Government 2019).

As well as limiting movement for Koalas and other MNES, *L. camara* also changes the structure and health of the ecosystem, which can lead to a decline in the health and quality of Koala food and habitat. *L. camara* is a transformer weed, altering wildfire behaviour, potentially resulting in destruction of native trees on a larger scale (Berry et al 2011, DAF 2016). *L. camara* also supresses eucalypt recruitment, both through its allelopathic properties and its capacity to shade out other species. Without management intervention this leads to an overall decline in habitat health (Threatened Species Scientific Committee, 2010). If eucalypt species cannot recruit the succession of vegetation is interrupted, threatening the future health of the ecosystem.

Weed control is fundamental to improving biodiversity and the ecological condition of the habitat within the Offset Area. Historical land uses across the proposed Offset Area have resulted in the introduction and spread of a variety of environmental weeds. Weeds recorded on-site are generally confined to ground cover species such as pasture grasses which dominate the area. *Lantana camara* (Lantana), a WONS, is a persistent weed in SEQ and is widespread across the broader Willow Vale Offset Property. The ongoing maintenance of <5% weeds is considered relevant, particularly given the potential for *Lantana camara* (Lantana) to seed from adjacent dense patches and quickly spread. Germination can occur rapidly after wet weather or when a parent plan is removed. Therefore, on-going repeat visits to the Offset Area following are required to maintain low abundance of *Lantana camara* (lantana).

9.5.2 Proposed action

The majority of weeds recorded on-site are ground cover species reflective of maintained paddock. As such, the suppression of weeds will likely occur following the reinstatement of native vegetation and canopy cover. Direct weed control will be implemented where necessary to achieve the scoring as proposed. Given the potential for *Lantana camara* (Lantana) infestation to occur, future works will be adaptive and any new infestations of *Lantana camara* (Lantana), or any other WONS, will be prioritised. Weed management strategies for Lantana specifically are listed in **Table 83** and other WONS in **Table 84**.

The management actions must maintain weed cover at or below 5% over the entire Offset Area by Year 10 of the offset, as detailed in the environmental outcomes (**Appendix G**). The timing for the implementation of management measures includes:

- Establish photo monitoring locations
- Treatment of WONS and other weeds will occur annually and when needed.

Table 83: Lantana management methods

Type of infestation	Physical	Mechanical	Chemical	Fire	Biological
Small (few plants, small area)	Hand grubbing only suitable for seedlings. Wear gloves for protection from thorns.	Not suitable.	Spot spray plants less than 2 m in height between summer and autumn with a registered herbicide.	Not suitable.	There are four useful biological control agents. They are already distributed throughout their potential range.
Medium (medium density, medium total area)		Bulldoze, plough, stick-rake or slash infestations. Soil disturbance will lead to mass seed germination, so follow up with further controls. Do not use mechanical control in areas susceptible to erosion. A permit may be required.	Spraying is uneconomical for medium or large infestations. Helicopter spraying is used when there is no access for mechanical control, eg very steep slopes.	Under permit, burn in summer with good fuel load of grass and/or mechanically cleared lantana. Also use as follow-up. Do not burn in rainforests.	
Large (many plants, many ha)					

Note: table extracted from CRC for Australian Weed Management, 2003, *Weed Management Guide, Lantana – Lantana camara*, Commonwealth Department of the Environment and Heritage.

Table 84: Weed treatment and removal methods

No.	Family	Scientific name	Common name	Non-chemical control	Chemical control
1	Amaranthaceae	*Alternanthera philoxeroides*	Alligator Weed	Refer to Business Queensland: Invasive Plants at https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/landmanagement/health-pests-weeds-diseases/weeds-diseases/invasive-plants for additional guidance. Or WONS weed management guides available at https://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html	Herbicides must be applied by appropriately qualified / supervised persons in accordance with the Agricultural Chemicals and Distribution Control Act 1966 at rates identified on registered product labels, or on an Australian Pesticides and Veterinary Medicines Authority issued off-label permit where applicable. Also refer to: Business Queensland: Invasive Plants at https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/landmanagement/health-pests-weeds-diseases/weeds-diseases/invasive-plants for additional guidance.
2	Gramineae	*Andropogon gayanus*	Gamba Grass		
3	Annonaceae	*Annona glabra*	Pond Apple		
4	Basellaceae	*Anredera cordifolia*	Madeira Vine		
5	Asparagaceae	*Asparagus aethiopicus cv. Sprengeri*	Asparagus Ground Fern		
6	Asparagaceae	*Asparagus africanus*	Ornamental Asparagus, Asparagus Fern		
7	Asparagaceae	*Asparagus asparagoides*	Bridal Creeper		
8	Asparagaceae	*Asparagus declinatus*	Bridal Veil, South African Creeper		
9	Asparagaceae	*Asparagus plumosus*	Asparagus Fern		
10	Asparagaceae	*Asparagus scandens*	Climbing Asparagus Fern		
11	Cactaceae	*Austrocylindropuntia spp.*	Prickly Pears		
12	Cabombaceae	*Cabomba caroliniana*	Cabomba		
13	Asteraceae	*Chrysanthemoides monilifera subsp. Monilifera*	Boneseed		
14	Asteraceae	*Chrysanthemoides monilifera subsp. rotundata*	Bitou Bush		
15	Asclepiadaceae	*Cryptostegia grandiflora*	Rubber Vine		

No.	Family	Scientific name	Common name	Non-chemical control	Chemical control
16	Cactaceae	*Cylindropuntia spp.*	Prickly Pears		Southeast Queensland Ecological Restoration Framework WONS weed management guides available at https://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html
17	Fabaceae	*Cytisus scoparius*	Common Broom		
18	Bignoniaceae	*Dolichandra (Macfadyena) unguis-cati*	Cat's Claw Creeper		
19	Pontederiaceae	*Eichhornia crassipes*	Water Hyacinth		
20	Fabaceae	*Genista linifolia*	Flax-leaved Broom, Mediterranean Broom		
21	Fabaceae	*Genista monspessulana*	Montpellier Broom, Cape Broom, Canary Broom		
22	Poaceae	*Hymenachne amplexicaulis*	Hymenachne		
23	Euphorbiaceae	*Jatropha gossypifolia*	Bellyache Bush		
24	Verbenaceae	*Lantana camara var. camara*	Lantana		
25	Solanaceae	*Lycium ferocissimum*	African Boxthorn		
26	Mimosaceae	*Mimosa pigra*	Giant Mimosa		
27	Gramineae	*Nassella neesiana*	Chilean Needle Grass		
28	Gramineae	*Nassella trichotoma*	Serrated Tussock		
29	Cactaceae	*Opuntia spp.*	Prickly Pears		
30	Cactaceae	*Parkinsonia aculeata*	Parkinsonia		
31	Asteraceae	*Parthenium hysterophorus*	Parthenium Weed		
32	Mimosaceae	*Prosopis pallida*	Algaroba		
33	Rosaceae	*Rubus fruticosus aggregate*	Blackberry		

No.	Family	Scientific name	Common name	Non-chemical control	Chemical control
34	Alismataceae	*Sagittaria platyphylla*	Delta Arrowhead, Arrowhead, Slender Arrowhead		
35	Salicaceae	*Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii*	Willows (except Weeping Willow, Pussy Willow and Sterile Pussy Willow)		
36	Salviniaceae	*Salvinia molesta*	Salvinia		
37	Asteraceae	*Senecio madagascariensis*	Fireweed		
38	Solanaceae	*Solanum elaeagnifolium*	Silver Nightshade		
39	Tamaricaceae	*Tamarix aphylla*	Athel Pine		
40	Fabaceae	*Ulex europaeus*	Gorse, Furze		

Weed notes

Weed management typically comprises a major part of rehabilitation site works. Weed management provides the basis of aiding natural regeneration and assisted natural regeneration.

Weed Management will be undertaken in accordance with the SEQERF Primary, Follow-up and Maintenance works notes.

Critical skills for Weed Management include:

- Knowledge of relevant legislation.
- Plant Identification skills.
- Knowledge of different weed management techniques.

Knowledge of different weed management techniques

A range of weed management techniques are available to combat varying weed species and scenarios. Refer to the following **Table 85** for a summary of contemporary weed management techniques extracted from the SEQERF.

Table 85: Weed treatment schedules (source: SEQERF)

Method	Description
Herbicide	The herbicide weed control techniques described below provide a range of proven methods that can be used on a restoration site
Cut- scrape - paint	Cut the stem of the plant close to the ground (approximately 1-2cm) ensuring that soil does not come in contact with the cut surface. The cut can be made at a slight angle in order to increase the surface area that is exposed to the chemical. Apply herbicide immediately to the cut stump using poison pot and brush or dripper bottle. Using a knife, scrape the sides of the stump thoroughly to expose the green tissue. Apply herbicide to the scraped stump. The chemical must be applied within 10 seconds of the cut or scrape being made in order for it to be fully effective.
Cut– paint	Cut the stem of the plant close to ground level. Apply herbicide to the cut stump using poison pot and brush or dripper bottle. This method is best suited to easy-to-treat weeds such as small-leaved privet (*Ligustrum sinense*), provided that the diameter of the stem at ground level is less than approximately three centimetres. If a glyphosate-/ metsulfuron methyl herbicide mix is being used in the poison pot, a greater range of weeds can be controlled using this method e.g., Easter cassia.
Scrape - paint	Scrape as much of the stem as possible (one side of the stem) using a knife and apply herbicide to the scrape. Leave a small section of the vine unscraped, and then twist the vine so that the next scrape is made on the opposite side of the stem to the preceding scrape. Continue along the length of the vine, scraping and painting as much of the stem as possible, with scraping to be concentrated along the thicker stems close to the root of the plant. This is the best method to use for madeira vine, as it allows the chemical to translocate to the underground storage organs and aerial tubers which may be hanging in large clusters above head height. This avoids the potential problem of tubers from cut stems left hanging in the trees from dropping to the ground and sprouting. When scraping madeira vine stems a deep scrape is advisable - scrape right through to the fibrous, stringy

Method	Description
	section of the stem, taking care not to sever the vine. This method is also suitable for treatment of ochna.
Over-spraying	Over-spraying involves the use of knapsacks or power sprayers to treat large expanses of weed such as lantana thickets. The foliage must be covered with herbicide but not to the point of running off the plant. The dead plants remain in place and can be cut down at a later stage. Prior to over-spraying, any weeds that are growing closely around established native plants must be hand removed or treated by cut-scrape-paint.
Oil-hang	Vines such as mile-a-minute (*Ipomoea cairica*) which produce long stolons extending many metres along the surface of the ground, are suited to the oil- hang method. Locate the base of the plant and carefully pull up the runners and roll them up. The resulting roll of vine is then hung in the fork of a tree to dry out as if it is left on the ground it is likely to re-shoot. Where runners are climbing up into a tree they are cut off at head height prior to the runner being rolled up - there is no need to pull cut vines down from trees as this action is likely to damage the tree. The base of the vine is treated using the cut scrape- paint method.
Gouge-paint	This method applies to plant species that have a fleshy underground storage organ, such as the large tuber that is often found at the base of madeira vine. It is also particularly appropriate for the treatment of climbing asparagus (*Protasparagus plumosus*). If using this technique on climbing asparagus, first cut the stems that are growing into the canopy at head height and also at the base. The fleshy rhizome can then be gouged, or alternatively in the case of climbing asparagus, it may be struck several times firmly with the head of a pair of loppers, allowing the brown outer covering of the crown to peel away exposing the white fleshy inner section of the rhizome for application of herbicide. Gouge out sections of the fleshy base with a knife and apply herbicide using a paint pot and brush or dripper bottle within 10 seconds
Basal Barking	This method involves mixing an oil soluble herbicide in diesel/kerosene and painting or spraying the full circumference of the trunk or stem of the plant from ground level to a height of approximately 45cm. Basal bark application is suitable for thin-barked woody weeds including saplings, regrowth and multi- stemmed shrubs. The method will usually result in the mortality of difficult-to- control woody weeds at any time of the year, provided the bark is not wet or too thick to enable the herbicide to penetrate. The method is not to be used in wet weather, adjacent to waterways or in areas where native trees and shrubs are located. The use is restricted to situations where a weed is particularly difficult to control e.g., cherry guava and where other methods have been unsuccessful.
Splatter Gun	This small gas-powered injector kit is fitted into a knapsack for easy carrying and delivers large droplets in a stream over the weed. The gun is used to deliver a concentrated herbicide (glyphosate or metsulfuron methyl) across large dense expanses of weed. This method is used for species such as lantana (ratio of 1:9 of glyphosate water). Splatter gun involves spraying strips at one to two meter intervals over the thicket. The herbicide is then translocated throughout the entire plant. The method does not require the whole plant to be covered as in over-spray

Method	Description
Spot-spraying	A knapsack filled with an appropriate herbicide mix is used by the operator to selectively control environmental weeds. A keen eye and an ability to distinguish between the native and weed species likely to be present, especially at seedling stage, is essential. Marker dye is added to the chemical mix to allow the operator to see what has already been sprayed, thus covering the ground weeds comprehensively and thoroughly Glyphosate and metsulfuron methyl are the main herbicides used for spot-spraying in ecological restoration, together with the addition of a penetrant and/or surfactant and marker dye
Stem Injection	Large woody weeds such as camphor laurel, coral trees (*Erythrina spp.*, *Privet Ligustrum spp.*) and umbrella trees are generally treated by stem-injection. Holes are drilled at regular intervals around the base of the tree and exposed roots using a drill. A tree injection syringe attached to a small capacity knapsack is used to fill the holes with herbicide. Stem-injection of trees can also be undertaken using a hatchet to create cuts in a brickwork pattern in trunks of trees for the application of herbicide (known as tree filling). Frilling is more labour intensive than drilling. The greatest benefit of stem injection is that the trees can be left standing in situ as they die, provided there is no risk to humans or infrastructure from falling limbs. This creates convenient roosts for birds and other animals and prevents the formation of large amounts of debris on the ground and damage to understorey plants which would result if the trees were to be cut down using a chainsaw.
Wick Wiping	Wick wipers can be manually used with a sponge or wick applicator, attached to a container filled with herbicide or as an attachment towed by a tractor. The manual method can be used to selectively apply herbicide to the leaves of weeds growing in sensitive situations. The hand held container can leak, and generally spot spraying would be recommended. The use of a tractor drawn wick wiper is used to control taller growing species such as introduced grasses and to encourage the growth of lower growing species. This method could be used in preparation for planting.
Mechanical	Mechanical weed control involves the use of powered and non-powered equipment such as brushcutters, chainsaws, slashers, shovels, pruners, saws, etc. These methods are best used in situations where there is a large, uninterrupted stand of weeds.
Dig and Bag	Dig and remove tuberous/ rhizomatous root systems. Remove roots or whole plant in hard/ compacted soils. Place in suitable container and remove from site, dispose of by deep burial, burn or burial at a land fill, must not place declared weed species in recycling (mulch).
Hand-pull	Remove totally from ground by hand (human). Perform when soil is moist. Applicable to small infestations or areas of environmental sensitivity (including sensitive watercourses, when frogs are breeding, or presence of threatened species).
General Mechanical	May involve use of machinery (e.g., brushcutter, chainsaw, slasher, dozer, excavator). Suitable for large infestations and weed trees. Initially cost-effective, but requires immediate revegetation of site or matting/ mulch application and

Method	Description
	extensive maintenance periods, Generates excessive soil and vegetation disturbance

The priority species for management at the offset site are lantana (*Lantana camara*), WONS and restricted invasive plants under the Biosecurity Act 2014 (Qld). Following baseline surveys in Year 1, additional specific target species will be identified, and a species list will be incorporated into the Weed Management Plan.

9.5.3.1 Approach

Weed control activities will be undertaken generally in accordance with the relevant sections of the South East Queensland Ecological Restoration Framework Manual (SEQERF) (Chenoweth EPLA and Bushland Restoration Services, 2012) and must include primary, follow-up and maintenance activities as described in Section 5.1.5 of the SEQERF:

- Primary: Initial site works to control ground cover weeds, woody weeds in the understorey and vines. These works typically create large site disturbance stimulating growth of new native and weed species. These works will begin in Year 1 of the offset.
- Follow-up: Multiple intervals of follow-up control will be required to treat newly germinating and resprouting weeds once primary works are completed (timing dependent on growth rates of weeds and weather); and
- Maintenance: Weed density, and treatment frequency, will be decreasing at this stage.

9.5.3.2 Techniques

Weed control techniques will be species dependent and include physical, mechanical, chemical, fire or biological techniques. There are a wide range of publicly available resources providing guidance on best practice management techniques for WONS and restricted invasive plants. Following baseline surveys in Year 1, target species for control will be identified and the following resources will be consulted to determine the most appropriate control techniques:

- Weed profiles - Weeds Australia (Centre for Invasive Species Solutions, 2025a); and
- Controlling weeds (invasive plants) on your property (Business Queensland, 2025)

Section 5.3 of the SEQERF provides guidance on weed control techniques and includes detailed guidance on herbicide use including chemical mixing rates. Appendix C of the SEQERF includes control techniques and herbicide application rates for particular weed species. These resources will be consulted prior to any herbicide application in the Offset Area. All herbicide use must be in accordance with directions on the label and Material Safety Data Sheets (MSDS). Up-to-date product information is available on the Public Chemical Registration Information System (Australian Pesticides and Veterinary Medicines Authority, 2026).

9.5.3.3 Lantana control

Lantana control is seen as the highest priority for the first few years of the offset. Lantana control will begin in Year 1 of the offset and will be undertaken generally in accordance with the techniques and timeframes presented in the Weed Management Guide, Lantana – Lantana camara (CRC for Australian Weed Management, 2003) (the Guide). As outlined in the Guide, an integrated management approach

is most effective when treating lantana. A summary of the control options recommended in the Guide are presented In **Table 86**.

Table 86: Lantana control options

Infestation type	Physical	Mechanical	Chemical	Fire	Biological
Small (few plants, small area)	Hand grubbing on suitable for seedlings. Wear gloves for protection from thorns.	Not suitable	Spot spray plants less than 2 m in height between summer and autumn with a registered herbicide.	Not suitable.	There are four useful biological control agents. They are already distributed throughout their potential range.
Medium (medium density, medium total area)		Bulldoze, plough, stick rake or slash infestations. Soil disturbance will lead to mass seed germination, so follow up with further controls. Do not use mechanical control in areas susceptible to erosion. A permit may be required.	Spraying is uneconomical for medium or large infestations. Helicopter spraying is used when there is no access for mechanical control, e.g. very steep slopes.	Under permit, burn in summer with good fuel load of grass and/or mechanically cleared lantana. Also use as follow up. Do not burn in rainforests.	
Large (many plants, many hectares)					

9.5.4 Milestone monitoring and reporting

A suitably qualified person will complete monitoring for weeds annually for the first 4 years and before the end of Years 5, 10, 15, and 20 of the offset to track against the interim milestone and completion criteria in the environmental outcomes as outlined in **Appendix G**. The methodology for non-native plant survey will be repeated by the suitably qualified person in accordance with the monitoring and reporting schedule in **Section 6**.

Weed monitoring aims to record the presence and abundance (using cover indices) of weed species within the Offset Area, before and after control, and over the life of the offset. Data obtained through monitoring is critical to assess progress towards, or achievement of completion criteria.

Weed monitoring within the Offset Area will include weed cover surveys and photo-monitoring. Incidental observations will also be made during surveys, as well as during general site inspections. The frequency and timing for each monitoring activity is presented in the following Sections.

9.5.4.1 Weed cover surveys

Weed cover surveys involve a visual estimate of the percentage of a monitoring area occupied by each weed species present. Weed cover surveys will be undertaken at fixed monitoring sites including existing

habitat quality transects (established for MHQA) and additional sites, if necessary, required to satisfy minimum replicates (determined using minimum replicate guideline in (Watson et al., 2022)).

At each site the below monitoring will be undertaken. Monitoring site design is consistent with the BioCondition field site layout (Eyre et.al 2015) and includes two quadrat sizes to account for different growth forms (Watson et.al 2021) including:

- One 50 x 10 m quadrat to assess weed cover for shrubs, climbers and ferns
- Five 1 x 1 m quadrats to assess weed cover for herbs, grasses, sedges and forbs.

The following data recorded for both the 1 x 1 m quadrats and the 50 x 10 m quadrats will be presented for each site:

- Total number of weed species recorded at each site.
- Total number of WONS or restricted invasive species recorded at each site, and
- Total weed cover percent at each site based on the following density classes:
- <5%
- 5-10%
- 11-20%
- 21-30%
- 31-50%
- 51-100%

9.5.4.2 Photo monitoring

Photo monitoring is a simple and effective visual tool to demonstrate the response of vegetation to management actions over time. It is a qualitative analysis technique that provides the opportunity for visual time series analysis of changes in vegetation composition, structure and integrity in offset areas where active management is undertaken.

Photo monitoring within the offset area will be undertaken as follows:

- Photos must be taken at the centre-point of the weed monitoring site.
- Capture the co-ordinate of the photo-monitoring point in the field and record it in the datasheet.
- From this point, take four photos in a north, east, south and west direction.
- Photos must be taken from 1.5 m height above ground level.
- Include a fixed reference object in the frame such as a distinctive tree, tree stump, fence post or water feature. This will help to compare changes over time.
- Where possible, ensure the view is unlikely to be obscured in the future (e.g. don't be too close to vegetation as it might obscure the clarity of future photos).
- When taking repeat photos make sure you have copies of the original photos for reference to help match the field of view.
- Ensure that the geo-referencing settings are enabled to record the photo location data.
- For repeat photos, take the photo at the same time each year (where possible) to enable meaningful comparison over time.
- Light cloudy days are ideal when sunlight is weaker and shadows from vegetation are less pronounced; and
- Avoid taking photos during mist or when dark clouds are passing over.

9.5.4.3 Incidental weed observations

Beyond the specified monitoring occasions, incidental observations provide qualitative information on the state of target species to inform management activities and assess responses to weed control. Incidental observations of weed species, particularly WONs and restricted invasive plants, will be recorded during weed cover surveys and general site inspections undertaken throughout the year.

9.5.4.4 Record keeping

The following records must be maintained for all weed control activities undertaken in the Offset Area. Information to be recorded must include at a minimum:

- Date of activities
- Personnel or contractors undertaking control activities; and

Work completed, area covered, weeds controlled, and the methods used to do it.

9.5.4.5 Reporting

Activities undertaken in accordance with this OMP will be included in the OAAR prepared by the Offset Provider. Outcomes of the weed management activities and their performance against performance/completion criteria will be included in the Annual Compliance Report (ARC) prepared by the Proponent.

Milestone monitoring survey results will be reported by the suitably qualified person in the Year 5, 10, 15, and 20 Milestone Report and included in the ACRs. This will provide detail on survey methodologies and detected weed occurrences with reference to the baseline survey data.

9.6. Management Action 4 – Bushfire Management Plan

9.6.1 Justification

Fire management of the Offset Area is critical to achieving the intended outcomes and conservation gains over the management period. Managing the vegetation to promote natural regeneration and reduce the impacts of uncontrolled wildfire within the Offset Area will ensure management objectives are achieved. Uncontrolled wildfire is considered a key threat to Koala populations, with impacts inclusive of mortality, injury, and loss of or altered habitat resulting in a reduction in food source and potentially increased exposure to predators.

The management measures contained in this OMP will be used to assess baseline fuel loads and indicate management techniques and planning, specific to the Offset Area in the context of the surrounding landscape. The overall objective is to prevent fire-induced Koala mortality via targeted fuel hazard reduction and prescribed fire management. Managing the vegetation to promote natural regeneration and reduce the impacts of uncontrolled wildfire within the Offset Area will ensure management objectives are achieved.

Under current Queensland legislation, landowners are required to prepare and plan for bushfire hazards by being aware of fire management issues in the area, trimming trees, mowing grass, removing flammable material around the home, and clearing vegetation, particularly if land boundaries are shared with bushland. It is important to balance undertaking these activities and preventing harm to the natural environment and areas of cultural heritage. This can be achieved through property planning or preparing and implementing a land and water management system. At present, the proposed Offset Area and

broader offset property has internal tracks and access along existing fence lines that may act as fire trails. Specific actions as directed by the local authorities must be implemented which may include prescribed burning or other techniques undertaken as directed by the Bushfire Management Plan as well as the local authority.

9.6.2 Proposed action and management measures

A specific Bushfire Management Plan (BMP) will be developed by qualified bushfire consultants in Year 1 of the offset. The purpose of the BMP will be to guide fire management on the Offset Property to manage the risk of high intensity fire impacting vegetation communities and associated fauna species including koala, greater glider and grey-headed flying fox. The BMP principles will aim to enhance bushfire resilience and vegetation community health through fuel load management, risk-reduction measures and appropriate fire regimes. The BMP will combine information from a variety of sources including land manager discussions, industry best practice, This OMP, as well as the following technical documents:

- Queensland Fire and Emergency Services. (2020). Queensland Bushfire Plan.
- Queensland Parks and Wildlife Services (QPWS) Bioregional Planned Burn Guidelines
- Queensland Parks and Wildlife Service. (2022). Planned Burn Guidelines: Introductory Volume.
- Queensland Parks and Wildlife Service. (2022). Planned Burn Guidelines: Southeast Queensland Bioregion of Queensland.
- Queensland Parks and Wildlife Service. (2012). Planned Burn Guidelines - How to Assess if Your Burn is Ready to Go. www.bom.gov.au
- Queensland Parks and Wildlife Service. (2012). QPWS Planned Burn Fire Behaviour Tables.
- Queensland Fire and Emergency Services. (2019). Bushfire Resilient Communities (BRC) Technical Reference Guide for the State Planning Policy State Interest “Natural Hazards, Risk and Resilience Bushfire.
- Australasian Fire Authorities Council (AFAC) National Burning Project.
- Queensland Fire and Biodiversity Consortium (2022). Burnett Mary Fire Management Guidelines

The BMP will include the following components, with further initial detail on some of these components in the below sections:

- Fire management for MNES: Description of fire management considerations for koala, grey-headed flying fox and greater glider, including threats from inappropriate fire regimes.
- Bushfire hazards: A comprehensive landscape-scale assessment and historical review of the key factors characterising the area’s bushfire risk, including fire weather, topography and fire history. Site fuel load assessment. A brief description of hazards on the Offset Property is provided in **Section 9.6.2.1** below.
- Operation fire management units (FMUs): outlining site fire management activities including but not limited to weed management, stock grazing and planned burning for fuel reduction and ecological management, access and fire break maintenance and habitat protection measures (further detailed in **Section 9.6.2.2** below).
- Fire management plan: Provides a land management plan which outlines Fuel Management Units, including land management zones (including operational and site information).
- Monitoring and maintenance schedule: Describing an approach for adaptive management and monitoring to evaluate the effectiveness of fire management regimes and land management activities (monitoring methods outlined in **Section 9.6.2.3** below).

9.6.2.1 Bushfire risk areas and potential ignition sources

External

The Offset Property is bordered by rural pastoral land to the north-west and south-west, and by extensive areas of native vegetation to the north-east and south-east associated with remnant rangelands. These surrounding land uses present potential pathways for bushfire to originate outside the Offset Property and enter the site, particularly under elevated fire weather conditions.

Higher external bushfire risk is associated with:

- Northern most portion of the property where remnant vegetation connects the Offset Property to continuous native remnant vegetation outside of the property, increasing the potential for large landscape scale fires to enter the site.
- Eastern, southern, western and northern boundaries, where fire may originate from neighbouring rural properties due to pasture management activities, machinery use or escaped planned burns; and
- Roadside corridors and access tracks adjoining or entering the Offset Property, which may act as ignition sources during periods of high fire danger

Internal

Potential sources of bushfire ignition within the Offset Property include:

- Escaped planned fire management activities, including ecological or hazard reduction burning.
- Operational activities, such as use of farm machinery and vehicle movements along internal tracks.
- Natural ignition sources, including lightning strikes, particularly along ridgelines and elevated areas; and
- Accumulated fine fuels, including grasslands, regrowth areas and edge interfaces between cleared land and remnant vegetation.

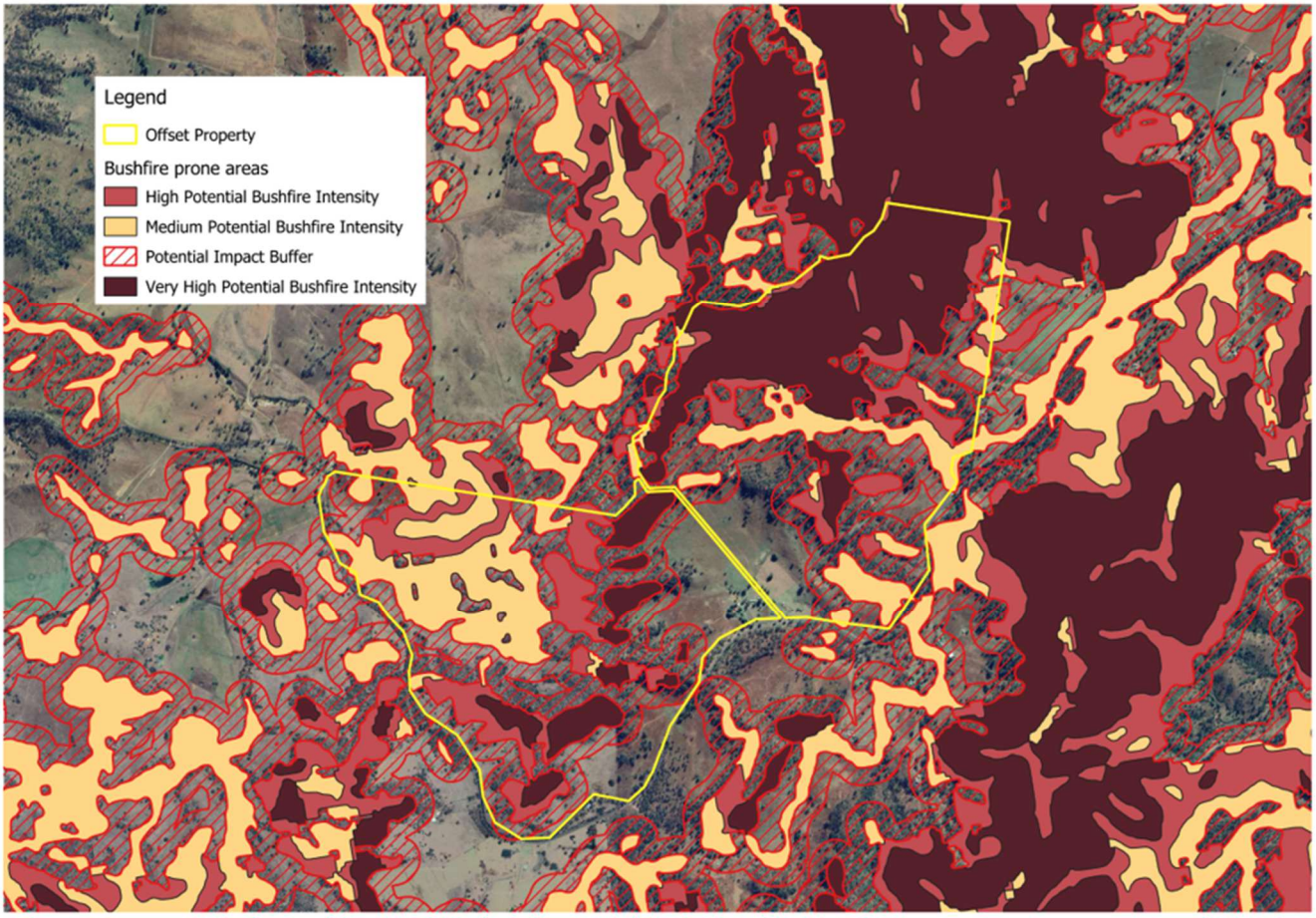
Bushfire hazard characteristics

Bushfire behaviour across the Offset Property is influenced by fuel, weather and topography. Fuel loads vary spatially and include heavily grazed areas, ungrazed grasslands, regenerating vegetation and remnant woodland. Areas of steeper terrain and woody vegetation, particularly along western ridgelines and vegetated creek lines, present a higher potential bushfire intensity.

Much of the Offset Property is mapped as a Bushfire Prone Area under the State Planning Policy. Mapping indicates areas of Very High and High Potential Bushfire Intensity associated with woody vegetation on rugged terrain, with Medium Potential Bushfire Intensity generally occurring along vegetated drainage lines. Cleared areas with scattered regrowth are mapped as Potential Impact Buffers (Extract below).

Existing access tracks and cleared areas provide opportunities for fire containment and suppression, subject to prevailing fire weather conditions and fire behaviour.

Fire management across the Offset Property will prioritise asset protection and prevention, with the offset values and restoration areas treated as critical assets requiring protection from high-intensity or unplanned fire.



Extract: State Fire Hazard Risk Mapping

9.6.2.2 Fire access, breaks and water resources

Site access and fire management lines

The Offset Property contains an established network of internal access tracks and entry points that provide access for land managers and emergency services (**Plan 19**). These tracks also function as fire management lines, enabling fire suppression access and assisting in fire containment during bushfire events.

Boundary fire breaks

Fire breaks are located along portions of the property boundaries and internal interfaces and will be maintained to reduce the risk of fire entering or exiting the Offset Property. Boundary fire breaks may comprise cleared lines, managed grazing areas or existing tracks and will be managed in a manner that balances bushfire risk reduction with protection of environmental values.

Water resources and fire management infrastructure

Several farm dams, water bores and water storage tanks are located across the Offset Property. These water sources may provide suitable access points for fire management vehicles and emergency services during bushfire suppression activities.

The approximate locations of existing water resources are identified to support fire response planning. Locations for temporary or permanent fire management infrastructure, including additional water tanks or equipment storage areas, will be further assessed and refined through the development of the BMP.

Protection of revegetation and rehabilitation areas

Fire management will specifically address the heightened vulnerability of developing revegetation and rehabilitation areas, which are at increased risk of damage from unplanned or high intensity fire, particularly during early establishment phases. Fire regimes will be designed to minimise the likelihood of fire impacting these areas until vegetation communities have sufficiently matured.

Protection of restoration areas is critical to achieving offset objectives and will be a key consideration in fire management planning, prioritisation of suppression response and selection of fuel management techniques.

9.6.2.3 Fuel management

Various techniques are used to reduce and manage the fuel load within the landscape or modify the connectivity between fuel layers (Queensland Fire and Emergency Services, 2020). Fuel management techniques include the following (to be further detailed in the BMP):

- Stock grazing to manage near surface fuel loads (only to be undertaken under an approved Livestock Management Plan).
- Appropriate planned burn regimes to reduce fuel loads, control fire susceptible weeds and/or maintain ecological processes (to be detailed in BMP), and
- Targeted chemical or mechanical weed management and removal.

It is acknowledged that the primary aim of the Offset Property is to manage habitat and food resources for MNES, therefore fuel management will be implemented as part of an integrated land management approach that aims to appropriately manage the offset site values and risk profile.

Appropriate planned burn regimes as outlined within the BMP will factor in State recommendations for the management of specific Regional Ecosystems, as follows:

Regional Ecosystem	State Recommended Fire Management Guidelines
RE12.3.3	SEASON: Summer to spring. After rain. INTENSITY: Low. INTERVAL: 3-6 years. INTERVAL_MIN: 3. INTERVAL_MAX: 6. STRATEGY: Aim to burn 40-60% of any given area. Spot ignition in cooler or moister periods encourages mosaics. ISSUES: Maintain ground litter and fallen timber habitats by burning only with sufficient soil moisture. Burning should aim to produce fine scale mosaics of unburnt areas.
RE12.3.7	INTERVAL: Fire return interval not relevant. INTERVAL_MIN: 100. INTERVAL_MAX: 100. STRATEGY: Avoid intentionally burning this fringe vegetation. Burn surrounding ecosystems in conditions that would minimise fire incursion. ISSUES: Protection relies on broad-scale management of surrounding country. However, fire exclusion is not necessary. Casuarina cunninghamiana is sensitive to fire and germination after fire is typically low. Triggers unrelated to fire appear to maintain a healthy ecosystem. Issues with lantana and other weeds may result from fire and other disturbance. These communities respond to flood damage which enhances germination.
RE12.11.6	SEASON: Summer to winter. INTENSITY: Low to moderate. INTERVAL: 4-25 years. INTERVAL_MIN: 4. INTERVAL_MAX: 25. STRATEGY: Aim for 40-60% mosaic burn. Burn with soil moisture and with a spot ignition strategy so that a patchwork of burnt/unburnt country is achieved. Variability in season and fire intensity is important. ISSUES: The fire regime should maintain a mosaic of grassy and shrubby understoreys.
RE12.12.5	SEASON: Summer to late-autumn. INTENSITY: Low. INTERVAL: 3-6 years. INTERVAL_MIN: 3. INTERVAL_MAX: 6. STRATEGY: Aim to burn 40-60% of any given area. Spot ignition in cooler or moister periods encourages mosaics. Burn to produce fine scale mosaics of unburnt areas. ISSUES: Control of weeds (e.g., Lantana camara) with fire might be required.

In addition to a BMP, a Livestock Management Plan (LMP) will be developed by the Offset Provider to guide livestock management across the Offset Property. The plan supports the integration of low intensity, rotational grazing as a bushfire fuel load management tool while ensuring that grazing activities do not compromise ecological values or biodiversity outcomes identified in approved OMPs.

The LMP will be action based and will align with SMART principles as well as sustainable grazing principles and recent ecological research that supports the compatibility of strategic grazing with biodiversity conservation. Strategic, rotational grazing is used to manage groundcover, reduce fuel loads, and support regeneration of eucalypt woodlands.

Key features of the LMP will include:

- Defined objectives that support ecological regeneration through planned grazing.
- A rotational grazing regime based on measurable triggers (i.e. tree height, fuel load levels).
- Fencing strategies to control livestock access.
- A comprehensive monitoring framework covering tree recruitment, fuel loads, habitat quality, and pasture health.
- Corrective actions and adaptive management protocols in response to trigger events.

As well as this, the LMP will provide detailed information on how grazing will occur across the site including but not limited to:

- Demonstrate why grazing is the most effective and most appropriate strategy for reaching the proposed conservation gains.
- The number and species of livestock to be used for grazing.
- Triggers to introduce grazing, and triggers to remove grazing once an acceptable fuel load has been reached (either to/from management zones or the site entirely).
- If seasonal changes to grazing thresholds are required based on fuel load variation.
- How grazing has been considered in conjunction with other fire management strategies and management zones.
- How livestock movement will be monitored and controlled and at what frequency.
- Where livestock will be kept when grazing is not required by the offset.
- Where grazing is a listed threat in the recovery plan of an MNES, provide a discussion on how the grazing will be implemented such that MNES will not be threatened by its ongoing presence.
- Given the risk of trampling new growth, demonstrate how grazing will be excluded from any areas within which revegetation is occurring until it is of a size that grazing no longer poses a risk.

The plan will also ensure full alignment with Commonwealth approvals for each offset located on the Offset Property, detailing specific commitments, monitoring protocols, and reporting obligations. All activities under the LMP will be documented in annual Offset Area Assessment Reports, ensuring transparency and accountability.

Grazing in the Offset Area as per the above will only occur upon approval of the LMP by the Department.

9.6.3 Monitoring and reporting

Monitoring and adaptive site management will be incorporated into the management of bushfire risk within the Offset Property to assess the effectiveness of management activities. Specifically, monitoring will occur prior to and after implementing planned burns, as well as ongoing monitoring of vegetation and fuel condition during rotational grazing (monitored under LMP). The adaptive management program may pose simple questions such as those provided below, or more complexed assessment. For example:

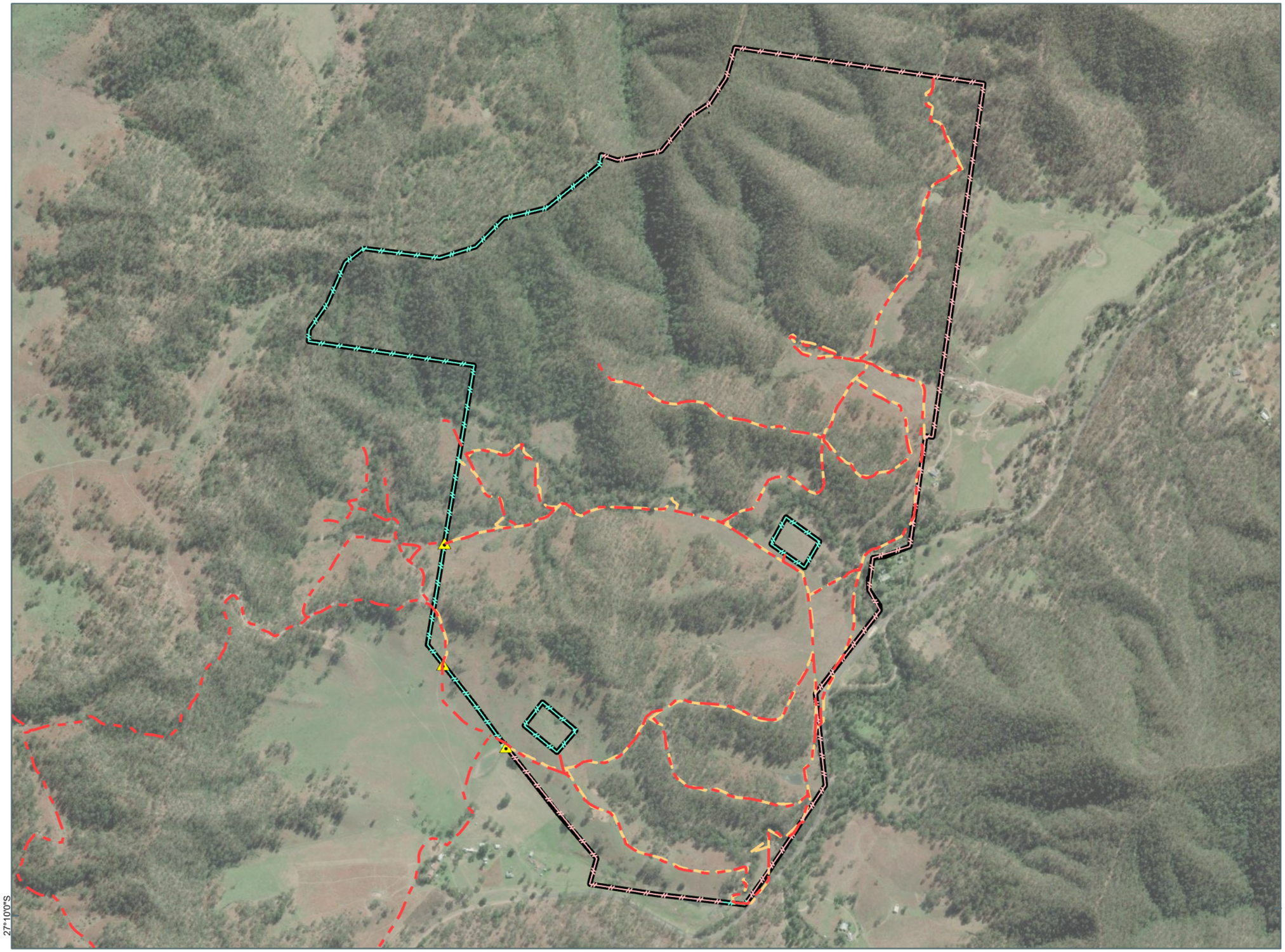
- Was the fuel hazard reduced to the targeted level for the FMU?
- Did the management activity contribute to a fire regime that is maintaining offset targets and environmental values?
- Did target regrowth or planted canopy species of a specific size survive the management activity?

If the answer to these questions is no, then adjustments to the land management actions or schedule will need to be made. The fuel hazard, vegetation condition and fire management tracks will be comprehensively assessed annually, as well as periodically as part of regular property activity, and especially before the start of the bushfire season (August – November).

9.6.3.1 Fuel hazard monitoring

Fuel hazard monitoring within each FMU (to be determined in the BMP) can be used to identify triggers for implementing proposed fuel reduction measures to evaluate the effectiveness of these measures. The Overall Fuel Hazard Assessment Guide (OFHAG) (Hines et al., 2010) provides a quick and representative estimate of fuel hazard on site that can be used for ongoing fuel hazard monitoring to inform management intervention. The OFHAG methodology is based on the structure and availability of fuels within various strata categories (bark, elevated, near surface and surface) and is widely used by land managers across southeast Queensland. The BMP will detail the proposed fuel management prescriptions and monitoring triggers for each FMU. Fuel hazard monitoring will be done annually for the life of the offset.

19. PROPOSED FENCING / SIGNAGE / FIRE TRAILS



Notes:
The information on this plan is not suitable for any purpose other than the expressed use of the Client. Property dimensions, areas, numbers of lots and contours and other physical features may need verification if the development application is approved and development proceeds, and may change when a full survey is undertaken or in order to comply with development approval conditions. No reliance should be placed on the information on this plan for detailed design or for any financial dealings involving the land. Saunders Havill therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying a development application and which may be subject to alteration beyond the control of Saunders Havill.Unless a development approval states otherwise, this is not an approved plan.
Layer Sources
World Imagery: Vantor
World Imagery: Earthstar Geographics
© State of Queensland (Department of Resources) 2026.
Updated data available at
http://qldspatial.information.qld.gov.au/catalogue/
* Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid and not suitable for use.

LEGEND

- Offset Area
- Fire trails
- Access Tracklog
- Offset Area Signage
- Existing fencing to be retrofitted to fauna friendly design and adjusted to Offset area boundaries
- New fencing to be fauna friendly design

Saunders Havill
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PEET

WILLOW VALE OFFSET

0 100 200 300 m
N
Transverse Mercator 1:11,000
GDA 2020 | Zone 56 @ A3

Address / RPD: Biarra, QLD

8/04/2026

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9.7. Management Action 5 – Habitat creation and regeneration

9.7.1 Justification

Habitat creation and regeneration is a key management action that will improve existing habitat values within the proposed Offset Area and expand habitat values in areas that have been subject to weed infestation. In addition, regeneration is a Priority Management Action listed under "Habitat Loss, Disturbance and Modification" of the Conservation Advice for the Koala. Rehabilitation aims to enhance degraded areas through assisted natural regeneration and Management Action 3 which will continue to manage weeds. Assisted natural regeneration applies to areas where the native plant community is largely healthy and functioning or where native plant seed is still stored in the soil, can easily disperse from nearby natural areas, or be readily dispersed by animals. It is applied when limited human intervention, such as weed control, minor soil amelioration, fencing works or cessation of slashing etc., is enough to trigger the recovery process and natural regeneration. Planting occurs where necessary and does not interfere with natural process.

Management Actions 3 to 5 will work together to improve habitat quality through weed removal/control, bushfire management and native species establishment.

9.7.2 Management actions

Operational Management Units listed in **Section 9.2** will be established across the Offset Area and range from higher quality remnant vegetation to non-remnant vegetation. As such, the key management actions across the OMUs will differ (refer **Table 87** and **Table 79** for summary). Key management actions will include assisted natural regeneration practises to expand patches of regrowth throughout areas where high levels of weed management is required. Reconstruction and infill planting will be applied within the non-remnant and historically cleared or newly disturbed areas to assist in vegetation coverage and composition.

EMZs and rehabilitation areas summarising treatments are shown on **Plan 18.**

Table 87: Operational management unit rehabilitation method summary

EMZ	Description	Rehabilitation Method
Paddock (EMZ 1)	Paddock and discontinuous canopy vegetation	• Assisted natural regeneration • Weed removal/control • Bushfire management • Restoration Planting
Regrowth/ Vegetated (EMZ 2)	Scattered regrowth native vegetation with significant levels of weed incursion	• Assisted natural regeneration • Weed removal/ control • Bushfire management • Infill planting as required

EMZ	Description	Rehabilitation Method
Vegetated (EMZ 3)	Vegetated with predominantly native vegetation some significant weed incursions	• Assisted natural regeneration • Weed removal/ control • Bushfire management

9.7.3 Rehabilitation methodology

Following the resolution of site analysis and management areas as part of rehabilitation design, prioritising site works will be considered. Prior to site works commencing, the site will be secured from potentially degrading impacts. Some factors that trigger immediate attention include:

- The presence of highly invasive weed species which may disperse further prior to substantial site works commencing.
- The presence of weed species which may have a long-term impact on ecological communities such as exotic and weed varieties of vines.
- Flammable materials (including weed thickets, grasses and vines).
- Damaging and easy access by 4WD, motorbikes, and pedestrians into core retained vegetation and ecological restoration areas. This will require installation of temporary fencing if deemed appropriate.

Site works can be typically broken down into the following categories depending on the condition of the site prior to works commencing:

- Primary Works
- Follow-up Works
- Maintenance Works

Primary works

Primary works, or initial works, within the site or a section of the site will commonly involve a sequence of activities such as the control of groundcover weeds, woody weeds in the understorey and exotic vines prior to the control of weed trees. Primary work has the effect of creating a large degree of disturbance which will stimulate the germination of native and exotic species. Therefore, continuing works will be scheduled shortly after the initial visit to allow for timely control of the newly regenerating weeds. Where present, highly invasive weeds will be treated as a priority during primary work in order to avoid invasion of newly disturbed areas. Some weeds will need to be treated in steps e.g., where weeded areas are being used by nesting birds or where the staged removal of canopy weed trees is required. Techniques used during primary work commonly involve spot spray, cut-scrape paint, cut-paint, scrape-paint, roll-hang and over spraying (source: SEQERF).

Following completion of weed management, rehabilitation such as assisted natural regeneration, construction, and fabrication planting can occur in areas unaffected by weed management activities or areas where primary weed management activities have concluded. Planting can begin in Year 2 with general rehab works (i.e. weed removal, assessment of planting areas, planting prep, tree ordering etc.), beginning in Year 1. At the end of primary work, the zone will have been comprehensively and systematically worked, ready for follow-up works.

Follow-up works

At intervals, which will vary according to the type of weed impacting the site and growing conditions, follow-up work will be necessary. This generally involves the spot-spraying of newly germinating weeds and re-sprouting sections of woody weeds and vines. It is at this stage that observational visits will be made to the site to assess the progress of vegetation regeneration and determine whether follow-up work is necessary. A site that receives poorly-timed, too frequent, or too little follow-up will rapidly experience setbacks, as weed propagules will quickly become established in the newly disturbed areas.

Germinating native seedlings may be outcompeted by weeds or damaged by inexperienced operators thereby exhausting the seed bank. Unless adequate follow-up can be ensured when planning restoration works, there is little point in commencing primary work, as time and resources are consumed with no substantial gain achieved (source: SEQERF).

Maintenance works

By the maintenance stage, the vegetation community supports germination and establishment of native plant species and canopy formation. Weed density decreases as the native plants, which have been supported through restoration works, are able to out-compete the weed species. One of the fundamental principles of ecological restoration involves creating or re-establishing a self-sustaining ecosystem. Therefore, the underlying goal is that maintenance will progressively decrease. While this goal is not always possible due to factors such as the continual reintroduction of weed propagules to the site from adjoining properties, unfavourable seasons or significant weather events, persistent weed species, or global influences such as the enhanced greenhouse effect, it will always be strived for (source: SEQERF).

Maintenance works can include minor, ongoing weed management and infill planting depending on site conditions. All rehabilitation works are to be carried out by a suitably qualified bush regeneration contractor.

Plant identification skills

Both native and weed species will be identified prior to primary weed removal works and ongoing throughout the follow-up and maintenance periods. This will maximise natural regeneration by reducing the likelihood of accidental weed spraying to native vegetation. Regenerating species are to be treated and maintained in a similar manner to planted tube stock. Where a contractor is unsure of species, advice will be sought from a botanist, specialist contractor, or confirmed with Queensland Herbarium. Refer to indicative Weed Treatment schedules derived from the *South East Queensland Ecological Restoration Framework: Manual* (2012) for an indication of weed species and treatments (refer **Table 85**).

Planting notes

Areas subjected to weed removal and control could require infill planting (assisted natural regeneration) where lack of natural regeneration is evident. Prior to installation, the following items will be considered:

- Species selection;
- Sourcing plant material;
- Timing of planting;
- Site preparation;
- Planting density; and
- Planting installation.

Species selection

Species selection is critical to achieving the desired ecological restoration outcomes for rehabilitation sites. Planting will be derived from:

- Local and pre-clear Regional Ecosystem descriptions (species to match Regional Ecosystem technical descriptions);
- Observed site native vegetation;
- Bioretention guideline requirements;
- Climatic and weather conditions observed on-site (frost, salt-spray, etc);
- 'Pioneer' species, which are useful in site stabilisation and encouraging native regeneration;
- The utilisation of flowering and fruiting species to attract wildlife and result in introduction of seeds;
- Diverse vegetation layers (trees, shrubs, groundcovers); and
- Species availability from seed propagation and or local nurseries.

Sourcing plant material

There are several options for sourcing plant material for infill planting purposes. Propagation from site seed is a good outcome but is often limited by the required timing of works. Sourcing plants from local nurseries is the more commonly chosen option and has the following benefits:

- Awareness of genetic considerations when collecting seed;
- Experience with breaking dormancy mechanisms in hard to germinate seeds;
- Highly successful propagation techniques;
- Ability to provide high quality stock to order; and
- Draw on industry resources.

Plant material will be sourced from site or local nurseries with specimens source in the same bioregion.

Timing of planting

The timing of planting will ideally be aligned with the wet season in SEQ (Summer and Autumn). This minimises the need for intensive watering to establishment planting. Planting between February - May is the most beneficial as it generally avoids intense heat periods of summer. However, it is understood planting can occur at various times within rehabilitation areas due to development timing needs. Planting is to commence in Year 2.

Site preparation

Site or planting preparation includes:

- Fencing to exclude grazing animals and people (if required);
- Pre-spraying of exotic grasses and other weeds to planting areas;
- Consideration of source of water for new planting (access tracks, temporary irrigation);
- Arranging delivery of mulch, jute netting and tree guards (if required);
- Treatment of heavily compacted soils by ripping and or application of gypsum; and
- Soil amelioration as required.

Site preparation is to be set out as per the SEQ restoration framework.

Planting density

Plant density is calculated on a zone-by-zone basis to cater for various requirements, including infill-only requirements such as canopy trees at low densities.

Planting density is to be set out as per the SEQ restoration framework.

Planting installation

The following outlines the preferred installation methodology for revegetation works within the rehabilitation areas. It has been designed to maximise plant establishment success rates and minimise plant mortality. Revegetation works shall be either undertaken or directly supervised by an experienced and qualified contractor. All works shall be in accordance with the provisions of this Offset Management Framework, and local government policies and Australian Standards.
Plant installation methods shall include:

- Plants are to be vigorous, well established, hardened off, consistent with species or variety, free from disease and insect pests, with large root systems and no evidence of having been restricted or damaged. The landscape coordinator has the right to inspect and reject stock prior to planting.
- Plants are to be planted immediately after delivery to the planting site.
- Excavate planting medium to a depth suitable for the installation of tube or pot specimens. In areas where planting substrate is deemed to be very poor (compacted, nutrient deficient, hydrophobic etc.) and above areas of potential frequent inundation and waterflow, topsoil can be used.
- Pre-water plant hole if soil is dry to decrease root stress upon planting and assess the infiltration of water through the soil.
- Place plant into hole and backfill ensuring that the plant is upright and the stem is not covered in any less than 10 millimetres (mm) or any more than 20 mm of planting medium.
- Plants are to be watered thoroughly immediately after planting (ensure deep irrigation) and thereafter as required during the construction phase of the development depending on climatic conditions. Creation of a concave hollow around the base of each plant will aid water infiltration to the plant roots.
- A complete, long-term slow-release fertiliser such as Nutricote or similar is recommended, and will be administered appropriately during planting where required. Topdressing with slow-release fertiliser is preferred to avoid toxic levels of fertiliser accumulating in the plant hole around the plant roots.
- To ensure successful establishment, all planting surfaces must be covered in:
    - a 100 mm layer of high-quality weed-free composted chip mulch (site mulch)- Note: to avoid possible stem rot in some 'drier' species ensure mulch is 'dished' and not covering plant stem by more than 20 mm. Where available, mulch material to be sourced from cleared vegetation material if adequately seasoned, or
    - Suitable individual anchored natural fibre weed mat (jute netting).
- A minimum 90% survival rate is the target.

Planting installation is to follow the SEQ restoration framework.

Regeneration monitoring

Once weed removal/control has been completed the engaged suitably qualified environmental consultant will be notified to monitor natural regeneration. Photo point monitoring and GPS locational and extent survey will be utilised. The coordinates of the initial photo monitoring will be recorded using the handheld GPS which will assist in locating the monitoring point during subsequent monitoring periods. Photo point monitoring will be undertaken annually at the same time of the year post rehabilitation works.
The photos will provide the baseline imagery to compare future photo point monitoring and ensure the integrity of natural regeneration. A record of the photos will be maintained which includes:

- GPS coordinates of the photo point.

- Date, time and number of each photo.
- Direction in which the photo was taken (north, south, east and west).
- After each photo monitoring event, a GPS waypoint of the location of the rehabilitation and a GPS polyline of the extent will be recorded.

If natural regeneration fails, infill planting will be implemented. Following infill planting, monitoring will commence.

A rapid transect method to go with the photo monitoring will be instigated to make it more quantitative:

- Photo and rapid tree regeneration monitoring for the first 3 years as this is the most critical time for regeneration
- 100x50m transect
- Record recruitment of potential canopy species (based on canopy species of nearby remnant or HVR REs) (based on method of BioCondition)

If no recruitment is observed (i.e. 0%) in transects by Year 3, then infill planting will occur in areas of EMZ where those transects occur as a corrective action (noting that some transects within an EMZ may observe recruitment therefore you don't want to commit to planting the whole EMZ if one transect fails).

This monitoring will either identify that recruitment is on track for year 5 targets or have been augment by planting. At year 5 if they haven't reached the required targets then this will be addressed with corrective actions to make sure the final Year 20 completion criteria is reached.

The following elements will be noted on a field datasheet:

- The presence of weeds within the extent.
- Natural regeneration of native species.

If required:

- the planted stock (a physical count of alive plants in the ground).
- The average health of the planted stock.
- The average height of the planted stock.

9.7.4 Annual monitoring and reporting

Rehabilitation works progress will be reported on by the suitably qualified regeneration contractor and included in the OAAR.

The suitably qualified regeneration contractor will complete annual monitoring tasks until establishment of plantings is achieved (typically after five years):

Annual photo monitoring and rapid transects method

To monitor management action 5, photo point monitoring and GPS locational and extent survey will be utilised along with rapid transects. The coordinates of the initial photo and transect monitoring site will be recorded using the handheld GPS. Point monitoring is to be undertaken annually at the same location and time of the year, before and after planting has commenced. If natural regeneration fails, infill planting is to be implemented. Following infill planting, monitoring will commence.

The photos and transects provide the baseline imagery and data to compare future photo point monitoring. A record of the photos will be maintained which includes:

- GPS coordinates of the photo point.
- Date, time and number of each photo.
- Direction in which the photo was taken (north, south, east and west).
- After each photo monitoring event, a GPS waypoint of the location of the rehabilitation and a GPS polyline of the extent will be recorded.

Rehabilitation and regeneration survey
The following elements will be noted on a field datasheet:

- The success of the rehabilitation stock (a physical count of alive plants in the ground).
- The average health of the rehabilitation stock.
- The average height of the rehabilitation stock.
- The presence of weeds within the rehabilitation extent.
- Natural regeneration of native species.

Infill planting records (where required)
The following elements will be noted on a field datasheet:

- The success of the rehabilitation stock (a physical count of alive plants in the ground).
- The average health of the rehabilitation stock.
- The average height of the rehabilitation stock.
- The presence of weeds within the rehabilitation extent.
- Natural regeneration of native species.

9.7.5 Milestone monitoring

The suitably qualified person as appointed by the Proponent will complete MHQA surveys before the end of Years 5, 10, 15 and 20 of the offset to assess against the interim milestones and environmental.

This will include:

- MHQA transects at baseline sampling locations; and
- direct and indirect surveys to target MNES presence, including Spot Assessment Technique surveys, motion triggered camera trapping and spotlighting.

9.8. Management Action 6 – Fencing and Signage

The Offset Area is to be suitably fenced and marked with signage to discourage trespass and keep out cattle grazing where deemed necessary. Gates leading to the subject Offset Area will have signage installed for added protection.

In addition, cattle will be managed as specified in this OMP via a combination of temporary and existing paddock fencing and, in time, the temporary fencing can be upgraded to permanent or removed when the broader offset property, surrounding the subject Offset Area, is secured as an offset and managed under approval.

Internal fences that are not removed that include barbed wire will also be retrofitted to further reduce threats to the Grey-headed Flying-fox, Greater Glider, Yellow-bellied Glider, Swift Parrot and Regent Honeyeater. Barbed wire can be removed from the top strand, covered with poly pipe (refer Bat

Conservation & Rescue Qld Inc. (2022) or a new strand of smooth wire installed above barbed using a bracket to reduce potential impacts to the threatened species.

Refer to **Plan 19** for proposed Offset Area fencing and signage. The plan shows existing barbed-wire fencing proposed to be retrofitted and existing fauna friendly fencing. Fauna friendly fencing are based on the following specifications:

- Top strand plain wire, and
- Bottom strand either plain wire, or barbed wire set at a minimum 300 mm above ground.

9.9. Management Action 7 – Hollow Monitoring and Management

9.9.1 Justification

Greater Glider / Yellow-bellied Glider rely on specific hollows for denning and breeding as per the conservation advice. Monitoring the development of hollows and creating hollows in suitable trees that will be connected via recreated habitat will ensure denning and breeding resources for the Greater Glider and Yellow-bellied Glider are provided.

9.9.2 Proposed Management Measures

A Hollow Monitoring and Management Plan will be developed to monitor the utility of existing site hollows and creation of new hollows via Arborist / Contractor carving and nest box installation for the Greater Glider over the 20 year management period. The compilation and implementation of the Hollow Monitoring and Management Plan is the responsibility of the Proponent.

Detailed mapping and monitoring of hollow features and the creation of additional features by carving where required will ensure that enough features to acquit the OAG requirements under the features based assessment will be provided across the relevant assessment units, targeting a minimum of 2 hollows per hectare as per the conservation advice and to mitigate the impact.

The following completion criteria under the Hollow Monitoring and Management Plan are proposed:

- Hollow Monitoring and Management Plan developed and implemented in year 1.

9.9.2.1 Artificial hollows

Hollow craving will meet the following guidelines:

- Opening Orientation is east and south preferred but not critical.
- Only one entrance per hollow a minimum of 8 m above the ground
- Hollow opening between 80mm and 350mm
- Minimum wall thickness of 50mm for thermal qualities
- Hollow Chamber Depth between 0.5m and 5m
- Branch ends are preferred hollow locations, but the opportunities will dictate what can be achieved
- Multiple hollows in one tree are acceptable noting diversity of hollow types is desirable
- Avoid situating hollows in positions above one another.

9.9.2.2 Nest boxes

Nest boxes (where required) will meet the following criteria to align with the Greater Glider and Yellow-belied Glider conservation advices that advises live trees are best suited rather than dead trees and to construct artificial hollows in areas of low hollow availability, utilising appropriate nest boxes and/or chainsaw hollows, the latter of which have the potential to restore degraded habitat and may be used more by arboreal marsupials than nest boxes. Greater Glider in particular have a preference for larger hollows (diameter > 10 cm)in large old trees.

Dimensions and materials

Standard construction dimensions for nest boxes are H: 535 mm, W: 360 mm and L: 360mm. An entrance size of 130 mm is recommended to reduce non-target intake (Gracanin et al. 2025). Other design such as the 3 unit nest box from habitat Innovation and Cyplas Greater Glider have seen success with Greater Glider intake.

Non-degradable plastic is recommended for nest box construction. Double-walled plastic boxes with timber inserts have shown to be effective in thermal buffering and will likely last longer than timber ones, allowing more time for additional hollows to form within the offset site during their lifespan (Callan, Jones and Watson 2023).

Insulation and thermoregulation

Insulation such as 20-40 mm foil board wall insulation with air gaps has been shown to support thermoregulation (Howard et al. 2022). Absence of insulation on the wall side of the nest box that is in contact with the tree ma help with heat dissipation (Gracanin et al. 2025). Reflective white, fire-retardant paint can also be effective at reducing radian heat absorption (Larson et al. 2018). Internal surface are not to be painted. Any finishes used to be free of volatile organic compounds.

Installation

Nest boxes are to be installed in healthy trees with a minimum DSH of 300 mm. The height of boxes is best positioned as close as possible to the tree canopy at a minimum of 8 m above ground. Ensure boxes are places in locations that are least vulnerable to branch fall. Boxes must be firmly mounted noting Franks (2006) recommends the habisure system. South to south-east orientation is recommended to reduce solar exposure (Howard et al. 2022).

9.9.2.3 Installation locations

Trees over 500 mm DSH DGPS located throughout the offset site have been identified as suitable for hollow craving and nest box installation if required. A total of 625 trees with a DSH greater than 500 mm have been mapped and utilised in the features-based offset calculations (**Plan 14A**).

9.9.2.4 Responsible party

The Proponent will be responsible for commissioning and implementing the HMMP.

9.9.2.5 Installation timeframes

Artificial hollow carving and nest box installation will be completed as soon as practicable (anticipated within the first year post HMPP compilation) subject to site conditions.

9.9.3 Monitoring and Reporting

A detailed monitoring program as per the Hollow Monitoring and Management Plan will ensure enough hollows (features) are present to acquit the minimum OAG requirements by the end of the management period. Reporting on hollow monitoring and creation will be included in Annual Compliance Reports.

9.9.3.1 Corrective actions

Where monitoring records hollow or nest box failure, corrective actions are to include repair or replacement as necessary. Corrective actions are taken to ensure milestones are rectified, including recovery actions to ensure milestones are implemented prior to the timeline completion as per the HMMP, such as additional specialist resourcing. Repair or replacement of hollows is to occur within 3 months of reporting failure.

9.10. Reporting requirements

Multiple annual reporting mechanisms are proposed to demonstrate compliance with anticipated approval conditions.

An **Offset Area Annual Report (OAAR)** will be prepared by the Offset Provider for each year of the offset detailing management activities undertaken in accordance with the Management Framework and provides clear details on how performance targets are being addressed and any adaptive management measures implemented. It is anticipated that the OAAR will be provided to the Proponent and suitably qualified person preparing the Annual Compliance Report one (1) month after each year of the offset or as specified on approval.

A **Milestone Report** is proposed to be completed by a suitably qualified person before the end of Years 5, 10, 15 and 20 of the offset detailing how the offset is progressing against the interim milestones, key performance indicators and environmental outcomes. This will include an assessment of whether or not each environmental outcome has been or are likely to be achieved and provide advice of any circumstance/s which they consider is/are affecting the achievement of each outcome. The findings of each assessment must be documented and will be published within 3 months of the end of the relevant year of the offset in which the assessment is undertaken.

An **Annual Compliance Report** (ACR) will be required to be prepared under the approval. The OAAR and Milestone Reports will be included as part of the Annual Compliance Reports. The ACR will be prepared by a qualified environmental person as directed by the Proponent and published on the project website each year by the conditioned date. The report will address the compliance with each of the conditions of approval, including any incident reports of undesirable impacts upon MNES (including their habitat) and any monitoring and management milestones achieved during the previous 12 months, including progress on key management measures, attainment of performance targets and completion criteria, and adaptive implementation outcomes. The compliance report will also address the effectiveness of the management measures and how the Offset Area is progressing against performance and completion criteria.

Documentary evidence providing proof of the date of publication of the ACR and non-compliance with any of the conditions of the approval will be provided to DCCEEW at the time of publishing the compliance report if the action is approved.

Section 6 provides a monitoring and reporting schedule for the OMP. This includes the management action, monitoring actions, corrective action trigger, corrective action, reporting action and responsible person/party.

9.11. Data Management

The Proponent, Offset Provider and engaged suitably qualified person appointed by the Proponent and/or Offset Provider will be responsible for the management of data, including interpretation, reporting and presentation. The Proponent will be responsible for the ownership, distribution and availability of data to the DCCEEW.

10. Adaptive Management

An adaptive implementation program will be used to ensure uncertainty is reduced over time, and that completion criteria are attained and maintained for the life of the offset. As more information becomes available following ongoing performance monitoring, the management and monitoring regime will be reviewed and revised to maximise the likelihood of attaining and maintaining the outcomes to be achieved by implementing the OMP. Any updates to the Additional Offset Management Plan which do not result in a material change to the environmental outcomes, performance and completion criteria will be made by the Offset Provider and/or The Proponent without the requirement of informing DCCEEW. If material amendments likely to alter the environmental outcomes, or performance and completion criteria are proposed to the OMP, the amendments and justification for the contingency measures will be provided to DCCEEW in writing.

Adaptive management will be used to incorporate changes in any of the following areas:

1. Assimilation of new data or information - such as, updates to conservation advice or new threat abatement plans relevant to the MNES.
2. Project coordination and scheduling – to manage unforeseen disruptions to schedule such as inclement weather on contractor works for management actions and environmental consultant monitoring events.
3. Annual review of risks – to refresh the mitigation measures should new threats be identified or stochastic events such as unplanned fires or floods occur.
4. Annual review of management measure effectiveness – to increase the frequency or change the method of management actions where monitoring performance criteria are not met.
5. Contingency for unplanned incidents – such as stochastic events including unplanned fires or floods.

An audit of OMP completed every five (5) years with consideration to the areas identified above and is to be directed by the Offset Provider and an appointed suitably qualified person.

10.1. Uncertainty

The plan identifies and manages uncertainty. To this end the plan specifies:

a) key data/information used to formulate the plan;

b) the limitations and/or uncertainty associated with the use of that data/information;

c) the risks that limitation and/or uncertainty represents for plan failure; and

d) how limitations and/or uncertainty, and associated risks, are mitigated during plan implementation. For example, where a margin of safety is applied to management measures until uncertainty is reduced to an acceptable level or performance targets/completion criteria are attained/maintained.

To identify and manage uncertainty, the OMP used regulatory and policy context to formulate the plan, listed below.

10.1.1 Regulatory and policy context

This document has been prepared taking into account the following technical guidelines and legislation:

- Former EPBC Act referral guidelines for the vulnerable Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) (DoEE, 2014)
- National Recovery Plan for the Koala *Phascolarctos cinereus* (combined populations of Queensland, New South Wales and the Australian Capital Territory) (DAWE 2022)
- The National Recovery Plan for the Grey-headed Flying-fox *Pteropus poliocephalus* (DAWE, 2021)
- Conservation Advice for *Petauroides volans* (Greater Glider (southern and central) (DCCEEW 2022)
- National Recovery Plan for the Swift Parrot *Lathamus discolor* (DCCEEW 2024)
- National Recovery Plan for the Regent Honeyeater (*Anthochaera phrygia*)
- *EPBC Act Survey guidelines for Australia's threatened bats* (Department of the Environment, Water, Heritage and the Arts, 2010)
- EPBC Act environmental offsets policy (Department of Sustainability, Environment, Water, Population and Communities, 2012);
- EPBC Act Environmental Management Plan Guidelines (DoEE, 2014)
- Policy Statement: Advanced environmental offsets under the *Environment Protection and Biodiversity Conservation Act 1999*
- *Vegetation Management Act 1999* (legally securing the offset through a Voluntary Declaration under Section 19F)
- Queensland *Environmental Offsets Act 2014*
- Queensland *Environmental Offsets Regulation 2014*.

10.2. Risk of Failure

The plan assesses the risk of failure to achieve the plan's performance targets and/or completion criteria. To this end the plan:

a) states the plan's performance targets and/or completion criteria;

b) identifies events or circumstances that prejudice attainment/maintenance of performance targets and/or completion criteria. The events or circumstances must address scientific/ecological uncertainty, stochastic events and legal/land use planning factors that may represent risks;

c) includes a qualitative assessment of the likelihood and consequence of those events or circumstances, and the residual risk of failure to achieve those criteria due to identified events or circumstances (*assuming management measures will be implemented*);

d) characterises risk as low, medium, high or severe, and derived from likelihood (highly likely, likely, possible, unlikely, rare) and consequence (minor, moderate, high, major and critical); and

e) outlines how consequence, likelihood and risk level for each risk have been determined.

To identify the risk of failure, **Table 88** states the management action, completion criteria, corrective action triggers and corrective actions. In addition, a risk assessment has been completed in **Appendix J.**

Table 88: Risk of failure table and corrective actions

Action	Completion Criteria	Corrective Action Trigger	Corrective Action	Timing
Legally secure the Offset Area	The Offset Area is legally secured for conservation via a suitable method being a VDEC process administered under the Queensland VMA prior to commencement of the action and then a permanent securing method agreed with the Department. The Department is notified of the legal securement within 5 business days of the Offset Area being legally secured. The Offset Area is not used for other purposes – site access is restricted.	NA	NA	Prior to commencement of the action to be defined on approval if agreed.
Non-Native Vertebrate Pest Management	Non-native vertebrate pests and evidence pests are suppressed within the Offset Area.	Monitoring actions and OAARs identify ongoing presence or increase of pest species.	Implement corrective action control measures, as recommended by the suitably qualified pest contractor and the property wide feral animal management program. This will include higher frequency and more targeted control measures.	As per the property wide feral animal management program. If performance criteria are not achieved by the timeframes outlined, the corrective actions will continue until achieved,

Action	Completion Criteria	Corrective Action Trigger	Corrective Action	Timing
			Risk management, corrective actions and adaptive management are to be integrated as required throughout the offset management period in response to changes or natural events.	extending the management period.
Weeds management	The management actions must maintain weed cover at or below 5% by the end of Year 10 and be maintained for the life of the offset (20 years).	Weed cover has increased relative to the previous monitoring event or as specified in **Appendix G**. The extent of weed cover has not been maintained as required to reach the environmental outcome as identified in the OAARs and Milestone Reports.	Weed control program to be expanded/adapted to improve outcomes. This will include the introduction of additional control measures and a higher frequency of control events (refer **Section 9.5.3**). Risk management, corrective actions and adaptive management are to be integrated as required throughout the offset management period in response to changes or natural events.	Within 6 months following a monitoring event where the weed extent has not been maintained. If key milestones and performance criteria are not achieved by the timeframes outlined in **Appendix G**, the corrective actions will continue until achieved, extending the management period.
Bushfire management	Fuel loads have not reached target levels for each FMU as specified in the BMP.	Fuel loads exceed target levels for each FMU as specified in the BMP.	Audit the impacted area.	Undertake an audit to inspect impacts within 2 weeks following an event (if deemed safe).

Action	Completion Criteria	Corrective Action Trigger	Corrective Action	Timing
		Unexpected bushfire event and resurgence of weeds/decreased habitat.	Following annual monitoring of fuel loads, implement actions as directed by the local authority or BMP that includes prescribed burning or other techniques undertaken in consultation with the local authority and in reference to the Bushfire Management Plan to manage fuel loads.	Within 6 months or as soon as appropriate (*i.e.*, consider weather conditions).
			If required, recovery actions including weed control and management and/or infill planting will be undertaken to ensure the habitat quality performance criteria are achieved within the management period (refer Habitat creation and regeneration management).	Within 6 months following an audit if weather conditions are favourable.
			Risk management, corrective actions and adaptive management are to be integrated as required throughout the offset management period in response to changes or natural events.	If performance criteria are not achieved by the timeframes outlined, the corrective actions will continue until achieved, extending the management period

Action	Completion Criteria	Corrective Action Trigger	Corrective Action	Timing
Habitat creation and regeneration management	Rehabilitated areas are established and regenerated as per benchmark milestones set out in this OMP. Site condition metrics for MNES improves in accordance with environmental outcomes (**Appendix G**).	Site condition metrics do not improve according to proposed environmental outcomes as specified in **Appendix G**. OAARs indicate that the rate of plant stock failure is greater than 10%. Habitat does not achieve performance criteria as identified in Milestone Reports within the management period, implement corrective actions.	Initial remedial planting in accordance with schedules as set out in this OMP or determined by the Offset Provider bush regenerator and dependent upon weather. Monitoring will be undertaken regularly by the Offset Provider or appointed suitably qualified person after remedial planting in accordance with schedules as set out in this OMP (**Sections 9.7.3 and 9.7.4**). Further infill planting and supplementary direct seeding, planting, weed control, fertiliser, amelioration or other suitable management actions will be implemented as required to enhance success rate and stimulate tree growth and establishment. Risk management, corrective actions and adaptive management are to be integrated as required throughout the offset management period in	Within 12 months following MHQA survey intervals. Within 12 months following remedial plantings. The management period may be extended to ensure environmental outcomes are able to be achieved.

Action	Completion Criteria	Corrective Action Trigger	Corrective Action	Timing
			response to changes or natural events.	
Fencing and Signage	Risk of mortalities or injury to MNES mitigated as a result of barbed-wire fencing. All existing fencing is retrofitted to fauna friendly design and new fauna friendly fencing is installed in line with **Plan 19**. Where stock breaches or unauthorised access is recorded, this is rectified within 2 weeks.	Fencing or signage is damaged or degraded or stock breaches occur.	Fencing is repaired and alternative signage and fencing solutions are considered if needed.	Within 1 month of detection.
Hollow Monitoring and Management	Hollow Monitoring and Management Plan developed and implemented in year 1. Hollows and nest boxes (if required) installed as per the HMMP.	Where monitoring as per the HMMP records hollow or nest box failure.	Corrective actions are to include repair or replacement as necessary (refer **Section 9.9.3.1**). Corrective actions are taken to ensure milestones are rectified, including recovery actions to ensure milestones are implemented prior to the timeline completion, such as additional specialist	Repair or replacement of hollows to occur within 3 months of reporting (refer **Section 9.9.3**). The management period may be extended to ensure environmental outcomes are able to be achieved.

Action	Completion Criteria	Corrective Action Trigger	Corrective Action	Timing
			resourcing where necessary.	

10.3. Limitations

Although an adaptive management plan will be implemented across the Offset Area for life of the offset (20 years), potential limitations to achieving these include:

- Associated risks and uncertainty in predicting the occurrence and extent of natural disasters or extreme weather events, including drought and flooding.
- Uncertainty of the rate at which vegetation will re-establish.
- The ability of native fauna (*i.e.,* MNES) to recognise and utilise the site for habitat requirements.
- Uncertainty of future predator occurrence and the effectiveness of the pest management measures.
- Coordinated approaches between local governments and the Offset Area holder to ensure effective implementation of management plans.

The implementation of adaptive management measures will ensure that identified limitations are avoided and/or the subsequent impacts are mitigated where possible. The promotion of suitable habitat on-site through implementing the various management actions, along with the continuous monitoring of abundance, will assist in species utilisation of the site.

Further, the regular review of this Offset Management Plan, inclusive of the management actions and monitoring methodologies detailed within it, will assist in identifying areas requiring improvement, and conversely, will identify methodology that has been successful. The success or required amendments to the management plans or works on-site will be assessed during the completion of the ACR as required under the anticipated EPBC Approval.

To ensure progress towards environmental outcomes and completion criteria is assessed correctly the baseline surveys have been developed to be repeatable and gather the data required for comparison against the completion criteria. Surveys are to be repeated in the same manner and location throughout the management period to ensure a consistent approach and accurate representation of the conservation values within the Offset Area.

11. References

Australian Weed Management (2003) 'Weed Management Guide, Lantana – Lantana camara', Commonwealth Department of the Environment and Heritage.

Beyer, H. L., de Villiers, D., Loader, J., Robbins, A., Stigner, M., Forbes, N., & Hanger, J. (2018). Management of multiple threats achieves meaningful Koala conservation outcomes. *Journal of Applied Ecology*, 55(4), 1966– 1975.

Biodiversity Integration and Offsets, Ecosystem Outcomes, Department of Environment and Heritage Protection (2014) 'Guide to determining terrestrial habitat quality - A toolkit for assessing land based offsets under the Queensland Environmental Offsets Policy Version 1.2 April 2017.

Department of Agriculture, Water and the Environment (2022) 'Conservation Advice for Petaurus australis australis (yellow-bellied glider (south-eastern))', Department of Agriculture, Water and the Environment.

Department of Agriculture, Water and the Environment (DAWE) (2022) 'Conservation Advice for Phascolarctos cinereus (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory'

Department of Agriculture, Water and the Environment (DAWE) (2022b) 'National Recovery Plan for the Koala Phascolarctos cinereus'

Department of Climate Change, Energy, the Environment and Water (2022) 'Approved Conservation Advice for the Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions', Department of Climate Change, Energy, the Environment and Water.

Department of Climate Change, Energy, the Environment and Water (2022) 'Conservation Advice for Petauroides volans (greater glider (southern and central))', Department of Climate Change, Energy, the Environment and Water.

Department of the Environment (2015) 'Conservation Advice Anthochaera phrygia Regent Honeyeater.', Department of the Environment.

Department of Environment and Energy (DoEE) (2017) 'Policy Statement: Advanced environmental offsets under the *Environment Protection and Biodiversity Conservation Act 1999*', Commonwealth of Australia.

Department of Environment and Energy (DoEE) (2014) 'EPBC Act referral guidelines for the vulnerable Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory'.

Department of Sustainability, Environment, Water, Population and Communities (2012) 'EPBC Act environmental offsets policy'.

Department of Environment and Energy (DoEE) (2014) 'EPBC Act Environmental Management Plan Guidelines'.

Department of Environment and Science (2020) 'South East Queensland Koala Conservation Strategy 2020–2025'

Eyre, T.J., Kelly, A.L, Neldner, V.J., Wilson, B.A., Ferguson, D.J., Laidlaw, M.J. and Franks, A.J. (2015) 'BioCondition: A Condition Assessment Framework for Terrestrial Biodiversity in Queensland. Assessment Manual. Version 2.2'. Queensland Herbarium, Department of Science, Information Technology, Innovation and Arts, Brisbane.

Phillips, S and Callaghan, J (2011) 'The Spot Assessment Technique: A tool for determining localised levels of habitat use by Koalas Phascolarctos cinereus'.

Rhodes, J. R., Beyer, H. L., Preece, H.J. and McAlpine, C.A. (2015) South East Queensland Koala Population Modelling Study. UniQuest, Brisbane, Australia.
Threatened Species Scientific Committee, (2010) 'Approved Conservation Advice for *Phascolarctos cinereus* (combined populations of Queensland, New South Wales and the Australian Capital Territory) (Koala Northern Designatable Unit) (Conservation Advice)'.

Threatened Species Scientific Committee (2016) 'Conservation Advice Lathamus discolor Swift Parrot.', Department of the Environment.

WoolProducers Association (2014) 'National Wild Dog Action Plan: Promoting and supporting community-driven action for landscape scale wild dog management'.

12. Appendices

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TEC MHQA Tables

Assessment Unit - Regional Ecosystem - TEC	AU 3 - Cat B RE 12.3.7						
Greater Glider	RE12.3.7 Benchmark	Transect 19	Transect 21	Average of Transect(s)	% Benchmark	Score	
SITE CONDITION							
Recruitment of woody perennial species in EDL	100	100	50	75.00	75.00	3	3
Native plant species richness - trees	6	7	8	7.50	125.00	5	5
Native plant species richness - shrubs	8	10	7	8.50	106.25	5	5
Native plant species richness - grasses	6	5	2	3.50	58.33	2.5	2.5
Native plant species richness - forbs	17	13	7	10.00	58.82	2.5	2.5
Tree canopy height (Canopy)*	22	19	23	21.00	95.45	5	
Tree canopy height (Sub-canopy)*	12	6.25	12	9.13	76.04	5	
					*Average tree canopy height	5	5
Tree canopy cover (Canopy)**	31	66.3	26.6	46.45	149.84	5	
Tree canopy cover (Sub-canopy)**	23	63.7	68	65.85	286.30	3	
					**Average tree canopy cover	4	4
Shrub canopy cover	22	13.3	11.7	12.50	56.82	5	5
Native grass cover*	8	5	16	10.50	131.25	5	5
Organic litter*	27	15	39	27.00	100.00	5	5
Large trees (euc plus non-euc) (per ha)	60	8	2	5.00	8.33	5	5
Coarse woody debris (per ha)	667	490	193	341.50	51.20	5	5
Non-native plant cover	0	80	85	82.50	82.50	0	0
					Site Condition Score (/80)	52	
					Overall Site Condition Score - out of 7	4.55	
SITE CONTEXT							
Size of patch	10	10	10	10		10	
Connectedness	5	0	0	0		0	
Context	5	0	0	0		0	
Ecological Corridors	6	6	6	6		6	
Role of site location to species overall population in the state	5	5	5	5		5	
Threats to the species	15	7	7	7		7	
					Site Context Score (/46)	28	
					Overall Site Context Score - out of 3	1.83	
Overall Assessment Unit Score						6.38	

Assessment Unit - Regional Ecosystem - TEC	AU 6 - Cat X vegetated RE12.3.7							
Greater Glider	RE12.3.7 Benchmark	Transect 2	Transect 22	Transect 23	Average of Transect(s)	% Benchmark	Score	
SITE CONDITION								
Recruitment of woody perennial species in EDL	100	50	0	66	38.67	38.67	3	3
Native plant species richness - trees	6	8	8	7	7.67	127.78	5	5
Native plant species richness - shrubs	8	8	3	5	5.33	66.67	2.5	2.5
Native plant species richness - grasses	6	4	3	5	4.00	66.67	2.5	2.5
Native plant species richness - forbs	17	13	7	8	9.33	54.90	2.5	2.5
Tree canopy height (Canopy)*	22	22	23	26	23.67	107.58	5	
Tree canopy height (Sub-canopy)*	12	10	10	14	11.33	94.44	5	
					*Average tree canopy height		5	5
Tree canopy cover (Canopy)**	31	48.6	32.2	14.8	31.87	102.80	5	
Tree canopy cover (Sub-canopy)**	23	37	10.2	24.5	23.90	103.91	5	
					**Average tree canopy cover		5	5
Shrub canopy cover	22	7.7	9.08	4.5	7.09	32.24	3	3
Native grass cover*	8	13	33	70	38.67	483.33	5	5
Organic litter*	27	41	3	0	14.67	54.32	5	5
Large trees (euc plus non-euc) (per ha)	60	14	0	16	10.00	16.67	5	5
Coarse woody debris (per ha)	667	247	0	59	102.00	15.29	2	2
Non-native plant cover	0	80	90	50	73.33	73.33	0	0
						Site Condition Score (/80)	45.5	
						Overall Site Condition Score - out of 7	3.98	
SITE CONTEXT								
Size of patch	10	10	10	10	10		10	
Connectedness	5	0	0	0	0		0	
Context	5	0	0	0	0		0	
Ecological Corridors	6	6	6	6	6		6	
Role of site location to species overall population in the state	5	5	5	5	5		5	
Threats to the species	15	7	7	7	7		7	
						Site Context Score (/46)	28	
						Overall Site Context Score - out of 3	1.83	
Overall Assessment Unit Score							5.81	

Assessment Unit - Regional Ecosystem - TEC	AU 9 - Cat X paddock RE12.3.7						
	RE12.3.7 Benchmark	Transect 16	Transect 24	Average of Transect(s)	% Benchmark	Score	
SITE CONDITION							
Recruitment of woody perennial species in EDL	100	100	0	50.00	50.00	3	3
Native plant species richness - trees	6	2	0	1.00	16.67	0	0
Native plant species richness - shrubs	8	1	0	0.50	6.25	0	0
Native plant species richness - grasses	6	3	6	4.50	75.00	2.5	2.5
Native plant species richness - forbs	17	0	3	1.50	8.82	0	0
Tree canopy height (Canopy)*	22	24	0	12.00	54.55	3	
Tree canopy height (Sub-canopy)*	12	8	0	4.00	33.33	3	
					*Average tree canopy height	3	3
Tree canopy cover (Canopy)**	31	11.7	0	5.85	18.87	2	
Tree canopy cover (Sub-canopy)**	23	12.4	0	6.20	26.96	2	
					**Average tree canopy cover	2	2
Shrub canopy cover	22	2.2	0	1.10	5.00	0	0
Native grass cover*	8	25	34	29.50	368.75	5	5
Organic litter*	27	1	2	1.50	5.56	0	0
Large trees (euc plus non-euc) (per ha)	60	2	0	1.00	1.67	5	5
Coarse woody debris (per ha)	667	0	107	53.50	8.02	0	0
Non-native plant cover	0	95	90	92.50	92.50	0	0
					Site Condition Score (/80)	20.5	
					Overall Site Condition Score - out of 7	1.79	
SITE CONTEXT							
Size of patch	10	10	10	10		10	
Connectedness	5	0	0	0		0	
Context	5	0	0	0		0	
Ecological Corridors	6	6	6	6		6	
Role of site location to species overall population in the state	5	5	5	5		5	
Threats to the species	15	7	7	7		7	
					Site Context Score (/46)	28	
					Overall Site Context Score - out of 3	1.83	
Overall Assessment Unit Score						3.62	

Assessment Unit - Regional Ecosystem - TEC	AU 10 - Cat X paddock RE12.3.3						
	RE12.3.3 Benchmark	Transect 4	Transect 6	Average of Transect(s)	% Benchmark	Score	
SITE CONDITION							
Recruitment of woody perennial species in EDL	100	0	66	33.00	33.00	3	3
Native plant species richness - trees	5	2	5	3.50	70.00	2.5	2.5
Native plant species richness - shrubs	5	1	3	2.00	40.00	2.5	2.5
Native plant species richness - grasses	9	1	5	3.00	33.33	2.5	2.5
Native plant species richness - forbs	25	6	8	7.00	28.00	2.5	2.5
Tree canopy height (Canopy)*	25	32	19.5	25.75	103.00	5	
Tree canopy height (Sub-canopy)*	9	0	12	6.00	66.67	3	
					*Average tree canopy height	4	4
Tree canopy cover (Canopy)**	40	0	36.8	18.40	46.00	2	
Tree canopy cover (Sub-canopy)**	8	0	15.7	7.85	98.13	5	
					**Average tree canopy cover	3.5	3.5
Shrub canopy cover	4	40.1	8.2	24.15	603.75	3	3
Native grass cover*	52	3	65	34.00	65.38	3	3
Organic litter*	20	1	6	3.50	17.50	3	3
Large trees (euc plus non-euc) (per ha)	14	2	8	5.00	35.71	5	5
Coarse woody debris (per ha)	588	0	162	81.00	13.78	2	2
Non-native plant cover	0	65	70	67.50	67.50	0	0
					Site Condition Score (/80)	36.5	
					Overall Site Condition Score - out of 7	3.19	
SITE CONTEXT							
Size of patch	10	10	10	10		10	
Connectedness	5	0	0	0		0	
Context	5	0	0	0		0	
Ecological Corridors	6	6	6	6		6	
Role of site location to species overall population in the state	5	5	5	5		5	
Threats to the species	15	7	7	7		7	
					Site Context Score (/46)	28	
					Overall Site Context Score - out of 3	1.83	
Overall Assessment Unit Score						5.02	

Appendix B

Koala MHQA Tables

Assessment Unit - Regional Ecosystem	AU 1 - Cat B RE12.11.6							
Koala	RE12.11.6 Benchmark	Transect 3	Transect 14	Transect 17	Average of Transect(s)	% Benchmark	Score	
SITE CONDITION								
Recruitment of woody perennial species in EDL	100	66	100	100	88.67	88.67	5	5
Native plant species richness - trees	4	5	3	4	4.00	100.00	5	5
Native plant species richness - shrubs	6	8	4	5	5.67	94.44	5	5
Native plant species richness - grasses	11	3	3	4	3.33	30.30	2.5	2.5
Native plant species richness - forbs	29	15	9	13	12.33	42.53	2.5	2.5
Tree canopy height (Canopy)*	21	21	22	21	21.33	101.59	5	
Tree canopy height (Sub-canopy)*	11	8.25	12	10	10.08	91.67	5	
						*Average tree canopy height	5	5
Tree canopy cover (Canopy)**	32	53.6	48.3	24.9	42.27	132.08	5	
Tree canopy cover (Sub-canopy)**	10	16.48	34	57	35.83	358.27	3	
						**Average tree canopy cover	4	4
Shrub canopy cover	12	14.48	7.5	5.2	9.06	75.50	5	5
Native grass cover*	25	42	5	34	27.00	108.00	5	5
Organic litter*	45	36	17	14	22.33	49.63	3	3
Large trees (euc plus non-euc) (per ha)	12	2	0	0	0.67	5.56	5	5
Coarse woody debris (per ha)	320	0	80	287	122.33	38.23	2	2 Proportion
Non-native plant cover	0	45	5	15	21.67	21.67	5	5 0.675
Quality and availability of food and foraging habitat	NA	10	10	10	10	-	10	10
Quality and availability of shelter	NA	10	10	10	10	-	10	10
								74
						Site Condition Score (/100)	74	
						Overall Site Condition Score - out of 3	2.22	
SITE CONTEXT								
Size of patch	10	10	10	10	10		10	
Connectedness	5	4	4	4	4		4	
Context	5	5	5	5	5		5	
Ecological Corridors	6	6	6	6	6		6	
Role of site location to species overall population in the state	5	5	5	5	5		5	
Threats to the species	15	7	7	7	7		7	
Species mobility capacity	10	10	10	10	10		10	
						Site Context Score (/56)	47	
						Overall Site Context Score - out of 3	2.52	
SPECIES STOCKING RATE								
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	40	40	40	40		40	
						Species Stocking Rate Score (/70)	0.57	
						Overall Species Stocking Rate Score - out of 4	2.29	
Overall Assessment Unit Score							7.02	

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	10 SAT surveys detected koala use on site
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	15 Foraging / Breeding
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	10 SAT surveys showed low presence using the east coast (med-high) category
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below)*	0	5	10	15	5 See below
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		40				
SRR Score (out of 4)	**2.285714286**					

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of koalas range
		No	Yes		

Assessment Unit - Regional Ecosystem	AU 2 - Cat B RE12.12.5					
Koala	RE12.12.5 Benchmark	Transect 18	Transect 20	Average of Transect(s)	% Benchmark	Score
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	100	83	91.50	91.50	5
Native plant species richness - trees	5	4	9	6.50	130.00	5
Native plant species richness - shrubs	9	7	5	6.00	66.67	2.5
Native plant species richness - grasses	11	6	6	6.00	54.55	2.5
Native plant species richness - forbs	17	14	16	15.00	88.24	2.5
Tree canopy height (Canopy)*	22	22	21	21.50	97.73	5
Tree canopy height (Sub-canopy)*	9	9	12	10.50	116.67	5
					*Average tree canopy height	5
Tree canopy cover (Canopy)**	41	54.7	53.8	54.25	132.32	5
Tree canopy cover (Sub-canopy)**	10	17.5	27.5	22.50	225.00	3
					**Average tree canopy cover	4
Shrub canopy cover	3	5.4	11.8	8.60	286.67	3
Native grass cover*	35	7	31	19.00	54.29	3
Organic litter*	35	14	15	14.50	41.43	3
Large trees (euc plus non-euc) (per ha)	29	8	2	5.00	17.24	5
Coarse woody debris (per ha)	578	178	214	196.00	33.91	2
Non-native plant cover	0	20	75	47.50	47.50	3
Quality and availability of food and foraging habitat	NA	5	5	5	-	5
Quality and availability of shelter	NA	5	5	5	-	5
					Site Condition Score (/100)	55.5
					Overall Site Condition Score - out of 3	1.67
SITE CONTEXT						
Size of patch	10	10	10	10		10
Connectedness	5	4	4	4		4
Context	5	5	5	5		5
Ecological Corridors	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5		5
Threats to the species	15	7	7	7		7
Species mobility capacity	10	10	10	10		10
					Site Context Score (/56)	47
					Overall Site Context Score - out of 3	2.52
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	40	40	40		40
					Species Stocking Rate Score (/70)	0.57
					Overall Species Stocking Rate Score - out of 4	2.29
Overall Assessment Unit Score						6.47

5					
5					
2.5					
2.5					
2.5					
5					
4					
3					
3					
3					
5					
2	Proportion				
3	0.56875				
5					
5					
55.5					

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		40				
SRR Score (out of 4)	**2.285714286**					

10	SAT surveys detected koala use on site	
15	Foraging / Breeding	
10	SAT surveys showed low presence using the east coast (med-high) category	
5	See below	

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity give
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of koalas range
		No	Yes		

Assessment Unit - Regional Ecosystem	AU 3 - Cat B RE 12.3.7					
Koala	**RE12.3.7 Benchmark**	**Transect 19**	**Transect 21**	**Average of Transect(s)**	**% Benchmark**	**Score**
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	100	50	75.00	75.00	3
Native plant species richness - trees	6	7	8	7.50	125.00	5
Native plant species richness - shrubs	8	10	7	8.50	106.25	5
Native plant species richness - grasses	6	5	2	3.50	58.33	2.5
Native plant species richness - forbs	17	13	7	10.00	58.82	2.5
Tree canopy height (Canopy)*	22	19	23	21.00	95.45	5
Tree canopy height (Sub-canopy)*	12	6.25	12	9.13	76.04	5
					*Average tree canopy height	5
Tree canopy cover (Canopy)**	31	66.3	26.6	46.45	149.84	5
Tree canopy cover (Sub-canopy)**	23	63.7	68	65.85	286.30	3
					**Average tree canopy cover	4
Shrub canopy cover	22	13.3	11.7	12.50	56.82	5
Native grass cover*	8	5	16	10.50	131.25	5
Organic litter*	27	15	39	27.00	100.00	5
Large trees (euc plus non-euc) (per ha)	60	8	2	5.00	8.33	5
Coarse woody debris (per ha)	667	490	193	341.50	51.20	5
Non-native plant cover	0	80	85	82.50	82.50	0
Quality and availability of food and foraging habitat	NA	5	5	5	-	5
Quality and availability of shelter	NA	5	5	5	-	5
					Site Condition Score (/100)	62
					Overall Site Condition Score - out of 3	1.86
SITE CONTEXT						
Size of patch	10	10	10	10		10
Connectedness	5	4	4	4		4
Context	5	5	5	5		5
Ecological Corridors	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5		5
Threats to the species	15	7	7	7		7
Species mobility capacity	10	10	10	10		10
					Site Context Score (/56)	47
					Overall Site Context Score - out of 3	2.52
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	40	40	40		40
					Species Stocking Rate Score (/70)	0.57
					Overall Species Stocking Rate Score - out of 4	2.29
Overall Assessment Unit Score						6.66

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	10 SAT surveys detected koala use on site
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	15 Foraging / Breeding
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	10 SAT surveys showed low presence using the east coast (med-high) category
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below)*	0	5	10	15	5 See below
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		40				
SRR Score (out of 4)	**2.285714286**					

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low de
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of koalas range
		No	Yes		

Assessment Unit - Regional Ecosystem	AU 4 - Cat X- vegetated RE12.11.6						
Koala	**RE12.11.6 Benchmark**	**Transect 1**	**Transect 7**	**Transect 13**	**Average of Transect(s)**	**% Benchmark**	**Score**
SITE CONDITION							
Recruitment of woody perennial species in EDL	**100**	100	50	50	**66.67**	66.67	**3**
Native plant species richness - trees	**4**	3	3	4	**3.33**	83.33	**2.5**
Native plant species richness - shrubs	**6**	5	4	2	**3.67**	61.11	**2.5**
Native plant species richness - grasses	**11**	4	1	4	**3.00**	27.27	**2.5**
Native plant species richness - forbs	**29**	10	14	12	**12.00**	41.38	**2.5**
Tree canopy height (Canopy)*	**21**	19	19	22	**20.00**	95.24	5
Tree canopy height (Sub-canopy)*	**11**	6.25	9	13	**9.42**	85.61	5
						***Average tree canopy height**	**5**
Tree canopy cover (Canopy)**	**32**	48.9	45.5	56.8	**50.40**	157.50	5
Tree canopy cover (Sub-canopy)**	**10**	14.6	10.8	13.7	**13.03**	130.33	5
						****Average tree canopy cover**	**5**
Shrub canopy cover	**12**	12.8	9	1.1	**7.63**	63.61	**5**
Native grass cover*	**25**	51	5	21	**25.67**	102.67	**5**
Organic litter*	**45**	33	10	14	**19.00**	42.22	**3**
Large trees (euc plus non-euc) (per ha)	**12**	0	0	2	**0.67**	5.56	**5**
Coarse woody debris (per ha)	**320**	120	160	320	**200.00**	62.50	**5**
Non-native plant cover	**0**	70	55	65	**63.33**	63.33	**0**
Quality and availability of food and foraging habitat	**NA**	5	5	5	**5**	-	**5**
Quality and availability of shelter	**NA**	5	5	5	**5**	-	**5**
						Site Condition Score (/100)	**56**
						Overall Site Condition Score - out of 3	**1.68**
SITE CONTEXT							
Size of patch	**10**	10	10	10	10		**10**
Connectedness	**5**	4	4	4	4		**4**
Context	**5**	5	5	5	5		**5**
Ecological Corridors	**6**	6	6	6	6		**6**
Role of site location to species overall population in the state	**5**	5	5	5	5		**5**
Threats to the species	**15**	7	7	7	7		**7**
Species mobility capacity	**10**	10	10	10	10		**10**
						Site Context Score (/56)	**47**
						Overall Site Context Score - out of 3	**2.52**
SPECIES STOCKING RATE							
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	**70**	20	20	20	20		**20**
						Species Stocking Rate Score (/70)	**0.29**
						Overall Species Stocking Rate Score - out of 4	**1.14**
Overall Assessment Unit Score							**5.34**

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	10	SAT surveys detected koala use on site
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	5	Dispersal
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	0	SAT surveys showed no presence using the east coast (med-high) category
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		20					
SRR Score (out of 4)	**1.142857143**						

***SSR Supplementary Table**					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of koalas range
		No	Yes		

Assessment Unit - Regional Ecosystem	AU 5 - Cat X - vegetated RE12.12.5						
Koala	**RE12.12.5 Benchmark**	**Transect 11**	**Transect 15**	**Average of Transect(s)**	**% Benchmark**	**Score**	
SITE CONDITION							
Recruitment of woody perennial species in EDL	100	100	100	100.00	100.00	5	5
Native plant species richness - trees	5	5	5	5.00	100.00	5	5
Native plant species richness - shrubs	9	4	6	5.00	55.56	2.5	2.5
Native plant species richness - grasses	11	5	5	5.00	45.45	2.5	2.5
Native plant species richness - forbs	17	5	10	7.50	44.12	2.5	2.5
Tree canopy height (Canopy)*	22	20	18	19.00	86.36	5	
Tree canopy height (Sub-canopy)*	9	10	9	9.50	105.56	5	
					*Average tree canopy height	5	5
Tree canopy cover (Canopy)**	41	20	24.5	22.25	54.27	5	
Tree canopy cover (Sub-canopy)**	10	10	46.5	28.25	282.50	3	
					**Average tree canopy cover	4	4
Shrub canopy cover	3	8.9	3.1	6.00	200.00	5	5
Native grass cover*	35	10	9	9.50	27.14	1	1
Organic litter*	35	20	21	20.50	58.57	5	5
Large trees (euc plus non-euc) (per ha)	29	2	2	2.00	6.90	5	5
Coarse woody debris (per ha)	578	395.5	504	449.75	77.81	5	5 Proportion
Non-native plant cover	0	60	75	67.50	67.50	0	0 0.59375
Quality and availability of food and foraging habitat	NA	5	5	5	-	5	5
Quality and availability of shelter	NA	5	5	5	-	5	5
							57.5
					Site Condition Score (/100)	57.5	
					Overall Site Condition Score - out of 3	1.73	
SITE CONTEXT							
Size of patch	10	10	10	10		10	
Connectedness	5	4	4	4		4	
Context	5	5	5	5		5	
Ecological Corridors	6	6	6	6		6	
Role of site location to species overall population in the state	5	5	5	5		5	
Threats to the species	15	7	7	7		7	
Species mobility capacity	10	10	10	10		10	
					Site Context Score (/56)	47	
					Overall Site Context Score - out of 3	2.52	
SPECIES STOCKING RATE							
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	40	40	40		40	
					Species Stocking Rate Score (/70)	0.57	
					Overall Species Stocking Rate Score - out of 4	2.29	
Overall Assessment Unit Score						6.53	

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	10	SAT surveys detected koala use on site
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	15	Foraging / Breeding
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	10	SAT surveys showed low presence using the east coast (med-high) category
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below)*	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		40					
SRR Score (out of 4)	**2.285714286**						

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low de
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of koalas range
		No	Yes		

Assessment Unit - Regional Ecosystem	AU 6 - Cat X vegetated RE12.3.7						
Koala	RE12.3.7 Benchmark	Transect 2	Transect 22	Transect 23	Average of Transect(s)	% Benchmark	Score
SITE CONDITION							
Recruitment of woody perennial species in EDL	100	50	0	66	**38.67**	38.67	**3**
Native plant species richness - trees	6	8	8	7	**7.67**	127.78	**5**
Native plant species richness - shrubs	8	8	3	5	**5.33**	66.67	**2.5**
Native plant species richness - grasses	6	4	3	5	**4.00**	66.67	**2.5**
Native plant species richness - forbs	17	13	7	8	**9.33**	54.90	**2.5**
Tree canopy height (Canopy)*	22	22	23	26	**23.67**	107.58	5
Tree canopy height (Sub-canopy)*	12	10	10	14	**11.33**	94.44	5
					***Average tree canopy height**		**5**
Tree canopy cover (Canopy)**	31	48.6	32.2	14.8	**31.87**	102.80	5
Tree canopy cover (Sub-canopy)**	23	37	10.2	24.5	**23.90**	103.91	5
					****Average tree canopy cover**		**5**
Shrub canopy cover	22	7.7	9.08	4.5	**7.09**	32.24	**3**
Native grass cover*	8	13	33	70	**38.67**	483.33	**5**
Organic litter*	27	41	3	0	**14.67**	54.32	**5**
Large trees (euc plus non-euc) (per ha)	60	14	0	16	**10.00**	16.67	**5**
Coarse woody debris (per ha)	667	247	0	59	**102.00**	15.29	**2**
Non-native plant cover	0	80	90	50	**73.33**	73.33	**0**
Quality and availability of food and foraging habitat	NA	5	5	5	**5**	-	**5**
Quality and availability of shelter	NA	5	5	5	**5**	-	**5**
						Site Condition Score (/100)	**55.5**
						Overall Site Condition Score - out of 3	**1.67**
SITE CONTEXT							
Size of patch	10	10	10	10	10		**10**
Connectedness	5	4	4	4	4		**4**
Context	5	5	5	5	5		**5**
Ecological Corridors	6	6	6	6	6		**6**
Role of site location to species overall population in the state	5	5	5	5	5		**5**
Threats to the species	15	7	7	7	7		**7**
Species mobility capacity	10	10	10	10	10		**10**
						Site Context Score (/56)	**47**
						Overall Site Context Score - out of 3	**2.52**
SPECIES STOCKING RATE							
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	40	40	40	40		**40**
						Species Stocking Rate Score (/70)	**0.57**
						Overall Species Stocking Rate Score - out of 4	**2.29**
Overall Assessment Unit Score							**6.47**

3							
5							
2.5							
2.5							
2.5							
5							
5							
3							
5							
5							
5							
2	Proportion						
0	0.56875						
5							
5							
55.5							

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	10	SAT surveys detected koala use on site
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	15	Foraging / Breeding
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	10	SAT surveys showed low presence using the east coast (med-high) category
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		40					
SRR Score (out of 4)	**2.285714286**						

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of koalas range
		No	Yes		

Assessment Unit - Regional Ecosystem	AU 7 - Cat X paddock RE12.11.6					
Koala	**RE12.11.6 Benchmark**	**Transect 5**	**Transect 8**	**Average of Transect(s)**	**% Benchmark**	**Score**
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	0	0	0.00	0.00	0
Native plant species richness - trees	4	2	0	1.00	25.00	2.5
Native plant species richness - shrubs	6	2	2	2.00	33.33	2.5
Native plant species richness - grasses	11	1	1	1.00	9.09	0
Native plant species richness - forbs	29	8	2	5.00	17.24	0
Tree canopy height (Canopy)*	21	0	0	0.00	0.00	0
Tree canopy height (Sub-canopy)*	11	0	0	0.00	0.00	0
					*Average tree canopy height	0
Tree canopy cover (Canopy)**	32	0	0	0.00	0.00	0
Tree canopy cover (Sub-canopy)**	10	0	0	0.00	0.00	0
					**Average tree canopy cover	0
Shrub canopy cover	12	2.4	0	1.20	10.00	3
Native grass cover*	25	18	17	17.50	70.00	3
Organic litter*	45	6	19	12.50	27.78	3
Large trees (euc plus non-euc) (per ha)	12	0	0	0.00	0.00	0
Coarse woody debris (per ha)	320	62	6	34.00	10.63	2
Non-native plant cover	0	55	85	70.00	70.00	0
Quality and availability of food and foraging habitat	N/A	1	1	1	-	1
Quality and availability of shelter	N/A	1	1	1	-	1
					Site Condition Score (/100)	18
					Overall Site Condition Score - out of 3	0.54
SITE CONTEXT						
Size of patch	10	10	10	10		10
Connectedness	5	4	4	4		4
Context	5	5	5	5		5
Ecological Corridors	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5		5
Threats to the species	15	7	7	7		7
Species mobility capacity	10	10	10	10		10
					Site Context Score (/56)	47
					Overall Site Context Score - out of 3	2.52
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	20	20	20		20
					Species Stocking Rate Score (/70)	0.29
					Overall Species Stocking Rate Score - out of 4	1.14
Overall Assessment Unit Score						4.20

0						
2.5						
2.5						
0						
0						
0						
0						
0						
0						
3						
3						
3						
0						
2	Proportion					
0	0.2					
1						
1						
18						

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		20				
SRR Score (out of 4)	**1.142857143**					

10	SAT surveys detected koala use on site
5	Dispersal
0	SAT surveys showed **no** presence using the east coast (med-high) category
5	See below

***SSR Supplementary Table**					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low dens
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of koalas range
		No	Yes		

Assessment Unit - Regional Ecosystem	AU 8 - Cat X paddock RE12.12.5						
Koala	**RE12.12.5 Benchmark**	**Transect 9**	**Transect 10**	**Transect 12**	**Average of Transect(s)**	**% Benchmark**	**Score**
SITE CONDITION							
Recruitment of woody perennial species in EDL	100	0	0	100	33.33	33.33	3
Native plant species richness - trees	5	1	3	2	2.00	40.00	2.5
Native plant species richness - shrubs	9	1	0	2	1.00	11.11	0
Native plant species richness - grasses	11	4	2	4	3.33	30.30	2.5
Native plant species richness - forbs	17	6	2	5	4.33	25.49	2.5
Tree canopy height (Canopy)*	22	0	18	19	12.33	56.06	3
Tree canopy height (Sub-canopy)*	9	6.5	0	7	4.50	50.00	3
						*Average tree canopy height	3
Tree canopy cover (Canopy)**	41	0	12.3	11	7.77	18.94	2
Tree canopy cover (Sub-canopy)**	10	11.3	0	0	3.77	37.67	2
						**Average tree canopy cover	2
Shrub canopy cover	3	1.6	0	6.7	2.77	92.22	5
Native grass cover*	35	58	17	31	35.33	100.95	5
Organic litter*	35	9	7	4	6.67	19.05	3
Large trees (euc plus non-euc) (per ha)	29	0	0	2	0.67	2.30	5
Coarse woody debris (per ha)	578	0	16	0	5.33	0.92	0
Non-native plant cover	0	65	70	80	71.67	71.67	0
Quality and availability of food and foraging habitat	NA	5	5	5	5	-	5
Quality and availability of shelter	NA	5	5	5	5	-	5
						Site Condition Score (/100)	43.5
						Overall Site Condition Score - out of 3	1.31
SITE CONTEXT							
Size of patch	10	10	10	10	10		10
Connectedness	5	4	4	4	4		4
Context	5	5	5	5	5		5
Ecological Corridors	6	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5	5		5
Threats to the species	15	7	7	7	7		7
Species mobility capacity	10	10	10	10	10		10
						Site Context Score (/56)	47
						Overall Site Context Score - out of 3	2.52
SPECIES STOCKING RATE							
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	15	15	15	15		20
						Species Stocking Rate Score (/70)	0.29
						Overall Species Stocking Rate Score - out of 4	1.14
Overall Assessment Unit Score							4.97

3							
2.5							
0							
2.5							
2.5							
3							
2							
2							
5							
5							
3							
5							
0	Proportion						
0	0.41875						
5							
5							
43.5							

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	10 SAT surveys detected koala use on site
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	5 Dispersal
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	0 SAT surveys showed **no** presence using the east coast (medium-high) category
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below)*	0	5	10	15	5 See below
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		20				
SRR Score (out of 4)	**1.142857143**					

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of koalas range
		No	Yes		

Assessment Unit - Regional Ecosystem	AU 9 - Cat X paddock RE12.3.7					
Koala	**RE12.3.7 Benchmark**	**Transect 16**	**Transect 24**	**Average of Transect(s)**	**% Benchmark**	**Score**
SITE CONDITION						
Recruitment of woody perennial species in EDL	**100**	100	0	**50.00**	50.00	**3**
Native plant species richness - trees	**6**	2	0	**1.00**	16.67	**0**
Native plant species richness - shrubs	**8**	1	0	**0.50**	6.25	**0**
Native plant species richness - grasses	**6**	3	6	**4.50**	75.00	**2.5**
Native plant species richness - forbs	**17**	0	3	**1.50**	8.82	**0**
Tree canopy height (Canopy)*	**22**	24	0	**12.00**	54.55	3
Tree canopy height (Sub-canopy)*	**12**	8	0	**4.00**	33.33	3
					***Average tree canopy height**	**3**
Tree canopy cover (Canopy)**	**31**	11.7	0	**5.85**	18.87	2
Tree canopy cover (Sub-canopy)**	**23**	12.4	0	**6.20**	26.96	2
					****Average tree canopy cover**	**2**
Shrub canopy cover	**22**	2.2	0	**1.10**	5.00	**0**
Native grass cover*	**8**	25	34	**29.50**	368.75	**5**
Organic litter*	**27**	1	2	**1.50**	5.56	**0**
Large trees (euc plus non-euc) (per ha)	**60**	2	0	**1.00**	1.67	**5**
Coarse woody debris (per ha)	**667**	0	107	**53.50**	8.02	**0**
Non-native plant cover	**0**	95	90	**92.50**	92.50	**0**
Quality and availability of food and foraging habitat	**NA**	1	1	**1**	-	**1**
Quality and availability of shelter	**NA**	1	1	**1**	-	**1**
					Site Condition Score (/100)	**22.5**
					Overall Site Condition Score - out of 3	**0.68**
SITE CONTEXT						
Size of patch	**10**	10	10	10		**10**
Connectedness	**5**	4	4	4		**4**
Context	**5**	5	5	5		**5**
Ecological Corridors	**6**	6	6	6		**6**
Role of site location to species overall population in the state	**5**	5	5	5		**5**
Threats to the species	**15**	7	7	7		**7**
Species mobility capacity	**10**	10	10	10		**10**
					Site Context Score (/56)	**47**
					Overall Site Context Score - out of 3	**2.52**
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	**70**	20	20	20		**20**
					Species Stocking Rate Score (/70)	**0.29**
					Overall Species Stocking Rate Score - out of 4	**1.14**
Overall Assessment Unit Score						**4.34**

3								
0								
0								
2.5								
0								
3								
2								
0								
5								
0								
5								
0	Proportion							
0	0.25625							
1								
1								
22.5								

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	10	SAT surveys detected koala use on site
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	5	Dispersal
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	0	SAT surveys showed **no** presence using the east coast (med-high) category
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below)*	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		20					
SRR Score (out of 4)	**1.142857143**						

***SSR Supplementary Table**					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low de
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of koalas range
		No	Yes		

Assessment Unit - Regional Ecosystem	AU 10 - Cat X paddock RE12.3.3					
Koala	**RE12.3.3 Benchmark**	**Transect 4**	**Transect 6**	**Average of Transect(s)**	**% Benchmark**	**Score**
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	0	66	**33.00**	33.00	**3**
Native plant species richness - trees	5	2	5	**3.50**	70.00	**2.5**
Native plant species richness - shrubs	5	1	3	**2.00**	40.00	**2.5**
Native plant species richness - grasses	9	1	5	**3.00**	33.33	**2.5**
Native plant species richness - forbs	25	6	8	**7.00**	28.00	**2.5**
Tree canopy height (Canopy)*	25	32	19.5	**25.75**	103.00	5
Tree canopy height (Sub-canopy)*	9	0	12	**6.00**	66.67	3
					***Average tree canopy height**	**4**
Tree canopy cover (Canopy)**	40	0	36.8	**18.40**	46.00	2
Tree canopy cover (Sub-canopy)**	8	0	15.7	**7.85**	98.13	5
					****Average tree canopy cover**	**3.5**
Shrub canopy cover	4	40.1	8.2	**24.15**	603.75	**3**
Native grass cover*	52	3	65	**34.00**	65.38	**3**
Organic litter*	20	1	6	**3.50**	17.50	**3**
Large trees (euc plus non-euc) (per ha)	14	2	8	**5.00**	35.71	**5**
Coarse woody debris (per ha)	588	0	162	**81.00**	13.78	**2**
Non-native plant cover	0	65	70	**67.50**	67.50	**0**
Quality and availability of food and foraging habitat	N/A	5	5	**5**	-	**5**
Quality and availability of shelter	N/A	5	5	**5**	-	**5**
					Site Condition Score (/100)	**46.5**
					Overall Site Condition Score - out of 3	**1.40**
SITE CONTEXT						
Size of patch	10	10	10	10		**10**
Connectedness	5	4	4	4		**4**
Context	5	5	5	5		**5**
Ecological Corridors	6	6	6	6		**6**
Role of site location to species overall population in the state	5	5	5	5		**5**
Threats to the species	15	7	7	7		**7**
Species mobility capacity	10	10	10	10		**10**
					Site Context Score (/56)	**47**
					Overall Site Context Score - out of 3	**2.52**
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	20	20	20		**20**
					Species Stocking Rate Score (/70)	**0.29**
					Overall Species Stocking Rate Score - out of 4	**1.14**
Overall Assessment Unit Score						**5.06**

3						
2.5						
2.5						
2.5						
2.5						
4						
3.5						
3						
3						
3						
5						
2	Proportion					
0	0.45625					
5						
5						
46.5						

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		20				
SRR Score (out of 4)	**1.142857143**					

10	SAT surveys detected koala use on site		
5	Dispersal		
0	SAT surveys showed **no** presence using the east coast (med-high) category		
5	See below		

***SSR Supplementary Table**					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low dens
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of koalas range
		No	Yes		

Koala Threats Uplift

Metric	Low	Moderate	High
Clearing and Degradation of Habitat	Apply one of the following options in order of priority: 1.Apply a current legal protective mechanism. 2.The site is zoned for conservation purposes or clearing is not permitted. 3.If ≤30% of the area within a 5 km buffer of the site is cleared or disturbed land.	In the absence of justification for scoring as high or low and if: >30% and <70% of the area within a 5km buffer of the site is cleared or disturbed land.	Apply one of the following options in order of priority: 1.The site is zoned for development 2.If ≥ 70% of the area within a 5 km buffer of the site is cleared or disturbed land.
Score Weighting	6	2.8	0.4
Inappropriate Fire Regimes - Very High Risk	Current Government endorsed Bushfire Management Plan (BMP) to protect the Koala is in effect.	Non-Koala specific BMP in effect. or; Low fuel load and low fire risk.	Site has a high fuel load and/or high fire risk.
Score Weighting	6	2.8	0.4
Vehicle Strike - Moderate Risk	Low volume of cars, unsealed, no Koala accessibility, fencing, and mitigation measures in place, negligible Koala mortality.	Site-specific and evidence-based qualitative assessment of these considerations	High volume of cars, sealed, accessibility for Koala, no fencing, and no mitigation measures in place, high Koala mortality
Score Weighting	1.5	0.7	0.1
Dog Attack - Moderate Risk	No dogs recorded on site.	Dogs recorded on site and adequate refuge for Koalas (>70% canopy cover).	Dogs recorded on site and limited refuge for Koalas (<70% canopy cover)
Score Weighting	1.5	0.7	0.1
Threats to Species			
Threshold Analysis	≥10	>4 and <10	≤4
Score	15	7	1
Description	Low threat level (i.e. likely to survive)	Moderate threat level	High threat level (i.e. likely to result in death, irreversible damage)
Final Score	13.4		
Final Treat Level Score	15		

Appendix C

GHFF FHA Tables

GHFF FHA

Assessment Unit - Regional Ecosystem	AU 1 Remnant (Cat B) RE12.11.6												
Site Reference	**Transect 3**	**Transect 14**	**Transect 17**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**	
Vegetation Condition	20	20	20	**20**	**20**	**20**	**20**	**20**	**20**	Remnant status will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be maintained. Remedial actions not required.	20
Species Richness	5	5	5	**5**	**5**	**5**	**5**	**5**	**5**	Species richness will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that species richness will be maintained. Remedial actions not required.	5
Flower Score	0.4250	0.6630	0.4030	**0.50**	**5**	**5**	**5**	**5**	**5**	Flower Score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.	5
Timing of Biological Shortages	7	8.5	8.5	**8**	**8**	**8**	**8**	**8**	**8**	Timing of biological shortages will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that timing of biological shortages will be maintained. Remedial actions not required.	8
Quality of Foraging Habitat	2	2	2	**2.00**	**5**	**5**	**5**	**5**	**5**	Quality of foraging habitat will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.	5
Non-native Plant Cover	45.00	5.00	15.00	**18.00**	**10**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 18% of the benchmark. If improvement toward below 5% non-native plant cover has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.	10
Site Condition Score					**53.00**	**53.00**	**63.00**	**63.00**	**63.00**				53
MAX Site Condition Score					***100***	***100***	***100***	***100***	***100***				
Site Condition Score - out of 4					**2.12**	**2.12**	**2.52**	**2.52**	**2.52**				
Size of patch	>200ha	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA	
Connectedness	1 active camps within 20km	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA	
Context	33.8%	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA	
Ecological Corridors	Within	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA	
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA	
Threats to the species	5	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 60**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.	
Site Context Score					**35**	**40**	**40**	**40**	**40**				
MAX Site Context Score					***60***	***60***	***60***	***60***	***60***				
Site Context Score - out of 3					**1.75**	**2.00**	**2.00**	**2.00**	**2.00**				
GHFF Foraging Tree Density - Recorded	96	86	85										
GHFF Foraging Tree Density - per hectare	480	430	425	**445.00**	**6**	**6**	**6**	**6**	**6**	Foraging tree density will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraginf tree density will be maintained. Remedial actions not required.	
Species Stocking Rate Score					***6***	***6***	***6***	***6***	***6***				
MAX Species Stocking Rate Score					***10***	***10***	***10***	***10***	***10***				
Species Stocking Rate Score - out of 3					**1.80**	**1.80**	**1.80**	**1.80**	**1.80**				
Total					**5.67**	**5.92**	**6.32**	**6.32**	**6.32**				

Site Condition

Vegetation Description	Score
Cat X	5
Cat C	10
Cat B	20

Canopy Species Richness	Score
0 GHFF Foraging Species	0
1 - 3 GHFF Foraging Species	5
4 - 6 GHFF Foraging Species	10
> 6 GHFF Foraging Species	20

Quality of Foraging Species	Score
0 Significant Foraging Species	0
.	5
4 - 6 Significant Foraging Species	10
> 6 Significant Foraging Species	20

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		7
T3									
Corymbia citriodora	0.65	x	x					1	
Lophostemon suaveolens	0.4				x		x		
Alhitonia excelsa	0								
Eucalyptus crebra	0.65	x	x					1	
Average	0.4250	Yes	Yes	No	Yes	No	Yes	2	
Total Species:	4								
GHFF Species:	3								
Important Species:	2								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		8.5
T14									
Corymbia citriodora	0.65	x	x					1	
Eucalyptus siderophloia	0.81	x	x			x	x	1	
Eucalyptus carnea	0.53		x	x		x	x		
Average	0.663	Yes	Yes	Yes	No	Yes	Yes	2	
Total Species:	3								
GHFF Species:	3								
Important Species:	2								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		8.5
T17									
Corymbia citriodora	0.65	x	x					1	
Alphitonia excelsa	0								
Eucalyptus siderophloia	0.81	x	x			x	x	1	
Brachychiton populneus	0								
Lophostemon suaveolens	0.4				x		x		
Average	0.403	Yes	Yes	No	Yes	Yes	Yes	2	
Total Species:	5								
GHFF Species:	3								
Important Species:	2								

Site Context

Size of Patch	
< 5 hectares	0
5-25 hectares	2
26 -100 hectares	5
101-200 hectares	7
> 200 hectares	10

Connectedness	
Active GHFF camps within 20 km	
<1 camps	0
1 - 3 camps	3
4 - 6 camps	6
> 6 camps	10

Context	
% GHFF Foraging habitat within 20km	
<10%	0
10 - 30%	3
31 - 75%	6
> 75%	10

Ecological Corridors	
Not within ecological corridor	0
Sharing a common boundary	6
Within an ecological corridor	10

Threats to species	
High level threat	1
Moderate Level Threat	5
Low Level Threat	10

Role of site location to overall population	
Active Lvl 3 GHFF Camp within 20km	
1 - 2 camps	1
3 - 4 camps	6
> 5 camps	10

Species Stocking Rate

Stem Density Scoring

RE: 12.11.6 (Stem density for 12.11.5e used	Density:	733
Score	Lower	Upper
2	0	92
4	93	397
6	398	672
8	673	718
10	719	748
8	749	794
6	795	1069
4	1070	1374
2	> 1375	

GHFF FHA

Assessment Unit - Regional Ecosystem	AU 2 Remnant (Cat B) RE12.12.5											
Site Reference	**Transect 18**	**Transect 20**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**	
Vegetation Condition	20	20	**20**	**20**	**20**	**20**	**20**	**20**	Remnant status will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be maintained. Remedial actions not required.	20
Species Richness	3	6	**4.5**	**10**	**10**	**10**	**10**	**10**	Tree species richness will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that tree species richness will be maintained. Remedial actions not required.	10
Flower Score	0.7733	0.5190	**0.6462**	**8**	**8**	**8**	**8**	**8**	Flower score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.	8
Timing of Biological Shortages	10	10	**10**	**10**	**10**	**10**	**10**	**10**	Timing of biological shortages will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.	10
Quality of Foraging Habitat	3	4	**3.5**	**5**	**5**	**5**	**5**	**5**	Quality of foraging habitat will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.	5
Non-native Plant Cover	20.00	75.00	**47.50**	**5**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 47.5% of the benchmark. If improvement toward below 5% has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.	5
Site Condition Score				**58.00**	**63.00**	**73.00**	**73.00**	**73.00**				58
MAX Site Condition Score				***100***	***100***	***100***	***100***	***100***				
Site Condition Score - out of 4				**2.32**	**2.52**	**2.92**	**2.92**	**2.92**				
Size of patch	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA	
Connectedness	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA	
Context	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA	
Ecological Corridors	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA	
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA	
Threats to the species	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 60**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.	
Site Context Score				**35**	**40**	**40**	**40**	**40**				
MAX Site Context Score				***60***	***60***	***60***	***60***	***60***				
Site Context Score - out of 3				**1.75**	**2.00**	**2.00**	**2.00**	**2.00**				
GHFF Foraging Tree Density - Recorded	52	83										
GHFF Foraging Tree Density - per hectare	260	415	**337.5**	**4**	**4**	**4**	**4**	**4**	Foraging tree density will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.	
Species Stocking Rate Score				***4***	***4***	***4***	***4***	***4***				
MAX Species Stocking Rate Score				***10***	***10***	***10***	***10***	***10***				
Species Stocking Rate Score - out of 3				**1.20**	**1.20**	**1.20**	**1.20**	**1.20**				
Total				**5.27**	**5.72**	**6.12**	**6.12**	**6.12**				

Site Condition

Vegetation Description	Score
Cat X	5
Cat C	10
Cat B	20

Canopy Species Richness	Score
0 GHFF Foraging Species	0
1 - 3 GHFF Foraging Species	5
4 - 6 GHFF Foraging Species	10
> 6 GHFF Foraging Species	20

Quality of Foraging Species	Score
0 Significant Foraging Species	0
1 - 3 Significant Foraging Species	5
4 - 6 Significant Foraging Species	10
> 6 Significant Foraging Species	20

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		10
T18									
Eucalyptus siderophloia	0.81	x	x			x	x	1	
Corymbia citriodora	0.65	x	x					1	
Corymbia intermedia	0.86			x	x		x	1	
Average	0.7733	Yes	Yes	Yes	Yes	Yes	Yes	3	
Total Species:	3								
GHFF Species:	3								
Important Species:	3								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		10
T20									
Eucalyptus tereticornis	0.63	x	x	x		x	x		
Eucalyptus crebra	0.65	x	x					1	
Eucalyptus melanophloia	0.49	x	x	x	x	x	x		
Angophora subvelutina	0.35			x			x		
Corymbia intermedia	0.86			x	x		x	1	
Allocasuarina torulosa	0								
Eucalyptus acmenoides	0.65			x			x	1	
Average	0.519	Yes	Yes	Yes	Yes	Yes	Yes	3	
Total Species:	7								
GHFF Species:	6								
Important Species:	4								

Site Context

Size of Patch	
< 5 hectares	0
5-25 hectares	2
26 -100 hectares	5
101-200 hectares	7
> 200 hectares	10

Connectedness	
Active GHFF camps within 20 km	
<1 camps	0
1 - 3 camps	3
4 - 6 camps	6
> 6 camps	10

Context	
% GHFF Foraging habitat within 20km	
<10%	0
10 - 30%	3
31 - 75%	6
> 75%	10

Ecological Corridors	
Not within ecological corridor	0
Sharing a common boundary	6
Within an ecological corridor	10

Threats to species	
High level threat	1
Moderate Level Threat	5
Low Level Threat	10

Role of site location to overall population	
Active Lvl 3 GHFF Camp within 20km	
1 - 2 camps	1
3 - 4 camps	6
> 5 camps	10

Species Stocking Rate

Stem Density Scoring

RE: 12.12.5	Density:	680
Score	Lower	Upper
2	0	85
4	86	368
6	369	623
8	624	666
10	667	694
8	695	737
6	738	992
4	993	1275
2	1276	

0

GHFF FHA

Assessment Unit - Regional Ecosystem	AU 3 Remnant (Cat B) RE12.3.7											
Site Reference	**Transect 19**	**Transect 21**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**	
Vegetation Condition	20	20	**20**	**20**	**20**	**20**	**20**	**20**	Remnant status will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be maintained. Remedial actions not required.	20
Species Richness	6	5	**5.5**	**10**	**10**	**10**	**10**	**10**	Species richness will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that species richness will be maintained. Remedial actions not required.	10
Flower Score	0.2100	0.7133	**0.4617**	**5**	**5**	**5**	**5**	**5**	Flower score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.	5
Timing of Biological Shortages	10	10	**10**	**10**	**10**	**10**	**10**	**10**	Timing of biological shortages will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that timing of biological shortages will be maintained. Remedial actions not required.	10
Quality of Foraging Habitat	4	4	**4**	**10**	**10**	**10**	**10**	**10**	Qaulity of foragin habitat will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.	10
Non-native Plant Cover	80.00	85.00	**82.50**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 82.5% of the benchmark. If improvement toward below 5% has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.	1
Site Condition Score				**56.00**	**65.00**	**75.00**	**75.00**	**75.00**				56
MAX Site Condition Score				***100***	***100***	***100***	***100***	***100***				
Site Condition Score - out of 4				**2.24**	**2.60**	**3.00**	**3.00**	**3.00**				
Size of patch	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA	
Connectedness	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA	
Context	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA	
Ecological Corridors	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA	
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA	
Threats to the species	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 60**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.	
Site Context Score				**35**	**40**	**40**	**40**	**40**				
MAX Site Context Score				***60***	***60***	***60***	***60***	***60***				
Site Context Score - out of 3				**1.75**	**2.00**	**2.00**	**2.00**	**2.00**				
GHFF Foraging Tree Density - Recorded	50	80										
GHFF Foraging Tree Density - per hectare	250	400	**325**	**6**	**6**	**6**	**6**	**6**	Foraging tree density will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree density will be maintained. Remedial actions not required.	
Species Stocking Rate Score				***6***	***6***	***6***	***6***	***6***				
MAX Species Stocking Rate Score				***10***	***10***	***10***	***10***	***10***				
Species Stocking Rate Score - out of 3				**1.80**	**1.80**	**1.80**	**1.80**	**1.80**				
Total				**5.79**	**6.40**	**6.80**	**6.80**	**6.80**				

Site Condition

Vegetation Description	Score
Cat X	5
Cat C	10
Cat B	20

Canopy Species Richness	Score
0 GHFF Foraging Species	0
1 - 3 GHFF Foraging Species	5
4 - 6 GHFF Foraging Species	10
> 6 GHFF Foraging Species	20

Quality of Foraging Species	Score
0 Significant Foraging Species	0
1 - 3 Significant Foraging Species	5
4 - 6 Significant Foraging Species	10
> 6 Significant Foraging Species	20

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		10
T19									
Angophora subvelutina	0.35			x			x	0	
Corymbia citriodora	0.65	x	x					1	
Corymbia intermedia	0.86			x	x		x	1	
Corymbia tessellaris	0.4			x	x		x	0	
Eucalyptus acmenoides	0.65			x			x	1	
Eucalyptus tereticornis	0.63	x	x	x		x	x	0	
Melaleuca bracteata	0							0	
Mallotus philippensis	0							0	
Average	0.2100	YES	YES	YES	YES	YES	YES	3	
Total Species:	8								
GHFF Species:	6								
Important Species:	4								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		10
T21									
Mallotus philippensis	0							0	
Eucalyptus crebra	0.65	x	x					1	
Corymbia tessellaris	0.4			x	x		x	0	
Eucalyptus tereticornis	0.63	x	x	x		x	x	0	
Corymbia intermedia	0.86			x	x		x	1	
Corymbia citriodora	0.65	x	x					1	
Average	0.7133	YES	YES	YES	YES	YES	YES	3	
Total Species:	6								
GHFF Species:	5								
Important Species:	4								

Site Context

Size of Patch	
< 5 hectares	0
5-25 hectares	2
26 -100 hectares	5
101-200 hectares	7
> 200 hectares	10

Connectedness	
Active GHFF camps within 20 km	
<1 camps	0
1 - 3 camps	3
4 - 6 camps	6
> 6 camps	10

Context	
% GHFF Foraging habitat within 20km	
<10%	0
10 - 30%	3
31 - 75%	6
> 75%	10

Ecological Corridors	
Not within ecological corridor	0
Sharing a common boundary	6
Within an ecological corridor	10

Threats to species	
High level threat	1
Moderate Level Threat	5
Low Level Threat	10

Role of site location to overall population	
Active Lvl 3 GHFF Camp within 20km	
1 - 2 camps	1
3 - 4 camps	6
> 5 camps	10

Species Stocking Rate

Stem Density Scoring

RE: 12.3.7	Density:	406
Score	Lower	Upper
2	0	51
4	52	220
6	221	372
8	373	398
10	399	414
8	415	440
6	441	592
4	593	761
2	762	

GHFF FHA

Assessment Unit - Regional Ecosystem	AU 4 Non-Remnant (Cat X) Vegetated RE12.11.6												
Site Reference	Transect 1	Transect 7	Transect 13	Average Score	AU Score	5 years	10 years	15 years	20 years	Justification / management Actions / Timing	Monitoring	KPIs and Adaptive Management	
Vegetation Condition	5	5	5	5	5	5	10	20	20	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 15 years. If remnant status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.	5
Species Richness	1	2	3	2	5	5	5	10	10	Tree species richness will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that tree species richness score will improve to 10 species by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	5
Flower Score	0.2167	0.7300	0.7133	0.5533	8	8	8	8	8	Flower score will be maintained as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.	8
Timing of Biological Shortages	4	7	10	7	7	7	7	9	9	Timing of biological shortages will improve to 10 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should timing of biological shortages not improve to 9 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.	7
Quality of Foraging Habitat	1	2	3	2	5	5	5	10	10	Quality of foraging habitat will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree species richness will improve to a score of 10 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	5
Non-native Plant Cover	70.00	55.00	65.00	63.33	1	10	20	20	20	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently63.33% of the benchmark. If improvement toward below 5% non-native plant cover has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.	1
Site Condition Score					31.00	40.00	55.00	77.00	77.00				31
MAX Site Condition Score					*100*	*100*	*100*	*100*	*100*				
Site Condition Score - out of 4					1.24	1.60	2.20	3.08	3.08				
Size of patch	>200ha	>200ha	>200ha	10	10	10	10	10	10	NA	NA	NA	
Connectedness	1 active camps within 20km	1 active camps within 20km	1 active camps within 20km	3	3	3	3	3	3	NA	NA	NA	
Context	33.8%	33.8%	33.8%	6	6	6	6	6	6	NA	NA	NA	
Ecological Corridors	Within	Within	Within	10	10	10	10	10	10	NA	NA	NA	
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1 active level 3 camp	1	1	1	1	1	1	NA	NA	NA	
Threats to the species	5	5	5	5	5	10	10	10	10	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in Table 60.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.	
Site Context Score					35	40	40	40	40				
MAX Site Context Score					*60*	*60*	*60*	*60*	*60*				
Site Context Score - out of 3					1.75	2.00	2.00	2.00	2.00				
GHFF Foraging Tree Density - Recorded	77	76	35										
GHFF Foraging Tree Density - per hectare	385	380	175	313.333	4	4	4	6	6	Foraging tree density will improve to score 6 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 6 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.	
Species Stocking Rate Score					*4*	*4*	*4*	*6*	*6*				
MAX Species Stocking Rate Score					*10*	*10*	*10*	*10*	*10*				
Species Stocking Rate Score - out of 3					1.20	1.20	1.20	1.80	1.80				
Total					4.19	4.80	5.40	6.88	6.88				

Site Condition

Vegetation Description	Score
Cat X	5
Cat C	10
Cat B	20

Canopy Species Richness	Score
0 GHFF Foraging Species	0
1 - 3 GHFF Foraging Species	5
4 - 6 GHFF Foraging Species	10
> 6 GHFF Foraging Species	20

Quality of Foraging Species	Score
0 Significant Foraging Species	0
1 - 3 Significant Foraging Species	5
4 - 6 Significant Foraging Species	10
> 6 Significant Foraging Species	20

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		4
T1									
Corymbia citriodora	0.65	x	x					1	
Brachychiton australis	0							0	
Alphitonia excelsa	0							0	
Average	0.2167	YES	YES	NO	NO	NO	NO	1	
Total Species:	3								
GHFF Species:	1								
Important Species:	1								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		7
T7									
Corymbia citriodora	0.65	x	x					1	
Eucalyptus siderophloia	0.81	x	x			x	x	1	
Average	0.7300	YES	YES	NO	NO	YES	YES	2	
Total Species:	2								
GHFF Species:	2								
Important Species:	2								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		10
T13									
Corymbia citriodora	0.65	x	x					1	
Eucalyptus tereticornis	0.63	x	x	x		x	x	0	
Corymbia intermedia	0.86			x	x		x	1	
Average	0.7133	YES	YES	YES	YES	YES	YES	2	
Total Species:	3								
GHFF Species:	3								
Important Species:	3								

Site Context

Size of Patch	
< 5 hectares	0
5-25 hectares	2
26 -100 hectares	5
101-200 hectares	7
> 200 hectares	10

Connectedness	
Active GHFF camps within 20 km	
<1 camps	0
1 - 3 camps	3
4 - 6 camps	6
> 6 camps	10

Context	
% GHFF Foraging habitat within 20km	
<10%	0
10 - 30%	3
31 - 75%	6
> 75%	10

Ecological Corridors	
Not within ecological corridor	0
Sharing a common boundary	6
Within an ecological corridor	10

Threats to species	
High level threat	1
Moderate Level Threat	5
Low Level Threat	10

Role of site location to overall population	
Active Lvl 3 GHFF Camp within 20km	
1 - 2 camps	1
3 - 4 camps	6
> 5 camps	10

Species Stocking Rate

Stem Density Scoring

RE: 12.11.6 (Stem density for 12.11.5e used	Density:	733
Score	Lower	Upper
2	0	92
4	93	397
6	398	672
8	673	718
10	719	748
8	749	794
6	795	1069
4	1070	1374
2	> 1375	

GHFF FHA

Assessment Unit - Regional Ecosystem	AU 5 Non-Remnant (Cat X) Vegetated RE12.12.5											
Site Reference	**Transect 11**	**Transect 15**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**	
Vegetation Condition	5	5	**5**	**5**	**5**	**10**	**20**	**20**	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 15 years. If remnant status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension if the offset period of required.	5
Species Richness	3	4	**3.5**	**5**	**5**	**5**	**10**	**10**	Tree species richness will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that tree species richness will improve to a score of 10 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	5
Flower Score	0.4775	0.5440	**0.5108**	**8**	**8**	**8**	**8**	**8**	Flower score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.	8
Timing of Biological Shortages	8.5	10	**9.25**	**9.25**	**9.25**	**9.25**	**9.25**	**9.25**	Timing of biological shortages will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.	9.25
Quality of Foraging Habitat	2	3	**2.5**	**5**	**5**	**5**	**5**	**5**	Quality of foraging habitat will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.	5
Non-native Plant Cover	60.00	75.00	**67.50**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 67.5% of the benchmark. If improvement toward below 5% has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.	1
Site Condition Score				**33.25**	**42.25**	**57.25**	**72.25**	**72.25**				33.25
MAX Site Condition Score				***100***	***100***	***100***	***100***	***100***				
Site Condition Score - out of 4				**1.33**	**1.69**	**2.29**	**2.89**	**2.89**				
Size of patch	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA	
Connectedness	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA	
Context	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA	
Ecological Corridors	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA	
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA	
Threats to the species	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 60**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.	
Site Context Score				**35**	**40**	**40**	**40**	**40**				
MAX Site Context Score				***60***	***60***	***60***	***60***	***60***				
Site Context Score - out of 3				**1.75**	**2.00**	**2.00**	**2.00**	**2.00**				
GHFF Foraging Tree Density - Recorded	89	66										
GHFF Foraging Tree Density - per hectare	445	330	**387.5**	**6**	**6**	**6**	**6**	**6**	Foraging tree density will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.	
Species Stocking Rate Score				***6***	***6***	***6***	***6***	***6***				
MAX Species Stocking Rate Score				***10***	***10***	***10***	***10***	***10***				
Species Stocking Rate Score - out of 3				**1.80**	**1.80**	**1.80**	**1.80**	**1.80**				
Total				**4.88**	**5.49**	**6.09**	**6.69**	**6.69**				

Site Condition

Vegetation Description	Score
Cat X	5
Cat C	10
Cat B	20

Canopy Species Richness	Score
0 GHFF Foraging Species	0
1 - 3 GHFF Foraging Species	5
4 - 6 GHFF Foraging Species	10
> 6 GHFF Foraging Species	20

Quality of Foraging Species	Score
0 Significant Foraging Species	0
1 - 3 Significant Foraging Species	5
4 - 6 Significant Foraging Species	10
> 6 Significant Foraging Species	20

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		8.5
T11									
Eucalyptus crebra	0.65	x	x					1	
Corymbia intermedia	0.86			x	x		x	1	
Corymbia tessellaris	0.4			x	x		x	0	
Brachychiton populneus	0							0	
Average	0.4775	YES	YES	YES	YES	NO	YES	2	
Total Species:	4								
GHFF Species:	3								
Important Species:	2								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		10
T15									
Eucalyptus siderophloia	0.81	x	x			x	x	1	
Alphitonia excelsa	0							0	
Corymbia citriodora	0.65	x	x					1	
Corymbia intermedia	0.86			x	x		x	1	
Corymbia tessellaris	0.4			x	x		x	0	
Average	0.5440	YES	YES	YES	YES	YES	YES	3	
Total Species:	5								
GHFF Species:	4								
Important Species:	3								

Site Context

Size of Patch	
< 5 hectares	0
5-25 hectares	2
26 -100 hectares	5
101-200 hectares	7
> 200 hectares	10

Connectedness	
Active GHFF camps within 20 km	
<1 camps	0
1 - 3 camps	3
4 - 6 camps	6
> 6 camps	10

Context	
% GHFF Foraging habitat within 20km	
<10%	0
10 - 30%	3
31 - 75%	6
> 75%	10

Ecological Corridors	
Not within ecological corridor	0
Sharing a common boundary	6
Within an ecological corridor	10

Threats to species	
High level threat	1
Moderate Level Threat	5
Low Level Threat	10

Role of site location to overall population	
Active Lvl 3 GHFF Camp within 20km	
1 - 2 camps	1
3 - 4 camps	6
> 5 camps	10

Species Stocking Rate

Stem Density Scoring

RE: 12.12.5	Density:	680
Score	Lower	Upper
2	0	85
4	86	368
6	369	623
8	624	666
10	667	694
8	695	737
6	738	992
4	993	1275
2	>1276	

GHFF FHA

Assessment Unit - Regional Ecosystem	AU 6 Non-Remnant (Cat X) Vegetated RE12.3.7												
Site Reference	**Transect 2**	**Transect 22**	**Transect 23**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**	
Vegetation Condition	5	5	5	**5**	**5**	**5**	**10**	**20**	**20**	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 15 years. If remnant status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.	5
Species Richness	5	6	5	**5.33333**	**10**	**10**	**10**	**10**	**10**	Species richness will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that species richness will be maintained. Remedial actions not required.	5
Flower Score	0.458	0.4700	0.3471	**0.4250**	**5**	**5**	**5**	**5**	**5**	Flower score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.	5
Timing of Biological Shortages	10	10	10	**10**	**10**	**10**	**10**	**10**	**10**	Timing of biological shortages will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that timing of biological shortages will be maintained. Remedial actions not required.	10
Quality of Foraging Habitat	2	3	2	**2.33333**	**5**	**5**	**5**	**5**	**5**	Quality of foraging habitat will be maintained as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated thatquality of foraging habitat will be maintained. Remedial actions not required.	5
Non-native Plant Cover	80.00	90.00	50.00	**73.33**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 73.33% of the benchmark. If improvement toward below 5% has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.	1
Site Condition Score					**31.00**	**45.00**	**60.00**	**70.00**	**70.00**				31
MAX Site Condition Score					***100***	***100***	***100***	***100***	***100***				
Site Condition Score - out of 4					**1.24**	**1.80**	**2.40**	**2.80**	**2.80**				
Size of patch	>200ha	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA	
Connectedness	1 active camps within 20km	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA	
Context	33.8%	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA	
Ecological Corridors	Within	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA	
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA	
Threats to the species	5	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 60**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.	
Site Context Score					**35**	**40**	**40**	**40**	**40**				
MAX Site Context Score					***60***	***60***	***60***	***60***	***60***				
Site Context Score - out of 3					**1.75**	**2.00**	**2.00**	**2.00**	**2.00**				
GHFF Foraging Tree Density - Recorded	45	23	25										
GHFF Foraging Tree Density - per hectare	225	115	125	**155**	**4**	**4**	**4**	**6**	**6**	Foraging tree density will improve to score 6 as a result of specific management actions 1 to 6 outlined in **Table 60**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 6 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.	
Species Stocking Rate Score					***4***	***4***	***4***	***6***	***6***				
MAX Species Stocking Rate Score					***10***	***10***	***10***	***10***	***10***				
Species Stocking Rate Score - out of 3					**1.20**	**1.20**	**1.20**	**1.80**	**1.80**				
Total					**4.19**	**5.00**	**5.60**	**6.60**	**6.60**				

Site Condition

Vegetation Description	Score
Cat X	5
Cat C	10
Cat B	20

Canopy Species Richness	Score
0 GHFF Foraging Species	0
1 - 3 GHFF Foraging Species	5
4 - 6 GHFF Foraging Species	10
> 6 GHFF Foraging Species	20

Quality of Foraging Species	Score
0 Significant Foraging Species	0
1 - 3 Significant Foraging Species	5
4 - 6 Significant Foraging Species	10
> 6 Significant Foraging Species	20

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		10
T2									
Lophostemon suaveolens	0.4				x		x	0	
Corymbia citriodora	0.65	x	x					1	
Corymbia tessellaris	0.4			x	x		x	0	
Angophora subvelutina	0.35			x			x	0	
Eucalyptus melanophloia	0.49	x	x	x	x	x	x	0	
Average	0.4580	YES	YES	YES	YES	YES	YES	1	
Total Species:	5								
GHFF Species:	5								
Important Species:	1								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		10
T22									
Corymbia citriodora	0.65	x	x					1	
Corymbia intermedia	0.86			x	x		x	1	
Corymbia tessellaris	0.4			x	x		x	0	
Eucalyptus tereticornis	0.63	x	x	x		x	x	0	
Angophora subvelutina	0.35			x			x	0	
Jagera pseudorhus	0							0	
Lophostemon suaveolens	0.4				x		x	0	
Average	0.4700	YES	YES	YES	YES	YES	YES	2	
Total Species:	7								
GHFF Species:	6								
Important Species:	3								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		10
T23									
Corymbia tessellaris	0.4			x	x		x	0	
Lophostemon suaveolens	0.4				x		x	0	
Angophora subvelutina	0.35			x			x	0	
Casuarina cunninghamii	0							0	
Corymbia citriodora	0.65	x	x					1	
Melaleuca bracteata	0							0	
Eucalyptus tereticornis	0.63	x	x	x		x	x	0	
Average	0.3471	YES	YES	YES	YES	YES	YES	1	
Total Species:	7								
GHFF Species:	5								
Important Species:	2								

Site Context

Size of Patch	
< 5 hectares	0
5-25 hectares	2
26 -100 hectares	5
101-200 hectares	7
> 200 hectares	10

Connectedness	
Active GHFF camps within 20 km	
<1 camps	0
1 - 3 camps	3
4 - 6 camps	6
> 6 camps	10

Context	
% GHFF Foraging habitat within 20km	
<10%	0
10 - 30%	3
31 - 75%	6
> 75%	10

Ecological Corridors	
Not within ecological corridor	0
Sharing a common boundary	6
Within an ecological corridor	10

Threats to species	
High level threat	1
Moderate Level Threat	5
Low Level Threat	10

Role of site location to overall population	
Active Lvl 3 GHFF Camp within 20km	
1 - 2 camps	1
3 - 4 camps	6
> 5 camps	10

Species Stocking Rate

Stem Density Scoring

RE: 12.3.7	Density:	406
Score	Lower	Upper
2	0	51
4	52	220
6	221	372
8	373	398
10	399	414
8	415	440
6	441	592
4	593	761
2	>762.25	

GHFF FHA

Assessment Unit - Regional Ecosystem	AU 7 Non-remnant (Cat X) Paddock RE12.11.6											
Site Reference	Transect 5	Transect 8	Average Score	AU Score	5 years	10 years	15 years	20 years	Justification / management Actions / Timing	Monitoring	KPIs and Adaptive Management	
Vegetation Condition	5	5	5	5	5	5	10	20	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 20 years. If regrowth status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.	5
Species Richness	1	0	0.5	0	0	0	10	10	Flower score will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that fspecies richness will improve to average 10 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	0
Flower Score	0.5000	0.0000	0.2500	2	2	2	8	8	Flower score will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will improve to a scre of 10 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	2
Timing of Biological Shortages	3	0	1.5	1.5	1.5	1.5	8.5	8.5	Flower score will improve to a score of 8.5 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will improve to average 8.5 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	1.5
Quality of Foraging Habitat	1	0	0.5	0	0	0	10	10	Quality of foraging habitat will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree species richness will improve to 4 species by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	0
Non-native Plant Cover	55.00	85.00	70.00	1	10	20	20	20	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 70% of the benchmark. If improvement toward below 5% weed cover has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.	1
Site Condition Score				9.50	18.50	28.50	66.50	76.50				9.5
MAX Site Condition Score				*100*	*100*	*100*	*100*	*100*				
Site Condition Score - out of 4				0.38	0.74	1.14	2.66	3.06				
Size of patch	>200ha	>200ha	10	10	10	10	10	10	NA	NA	NA	
Connectedness	1 active camps within 20km	1 active camps within 20km	3	3	3	3	3	3	NA	NA	NA	
Context	33.8%	33.8%	6	6	6	6	6	6	NA	NA	NA	
Ecological Corridors	Within	Within	10	10	10	10	10	10	NA	NA	NA	
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1	1	1	1	1	1	NA	NA	NA	
Threats to the species	5	5	5	5	10	10	10	10	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in Table 60.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.	
Site Context Score				35	40	40	40	40				
MAX Site Context Score				*60*	*60*	*60*	*60*	*60*				
Site Context Score - out of 3				1.75	2.00	2.00	2.00	2.00				
GHFF Foraging Tree Density - Recorded	1	0										
GHFF Foraging Tree Density - per hectare	5	0	2.5	2	2	4	6	6	Foraging tree density will improve to score 6 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 6 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.	
Species Stocking Rate Score				*2*	*2*	*4*	*6*	*6*				
MAX Species Stocking Rate Score				*10*	*10*	*10*	*10*	*10*				
Species Stocking Rate Score - out of 3				0.60	0.60	1.20	1.80	1.80				
Total				2.73	3.34	4.34	6.46	6.86				

Site Condition

Vegetation Description	Score
Cat X	5
Cat C	10
Cat B	20

Canopy Species Richness	Score
0 GHFF Foraging Species	0
1 - 3 GHFF Foraging Species	5
4 - 6 GHFF Foraging Species	10
> 6 GHFF Foraging Species	20

Quality of Foraging Species	Score
0 Significant Foraging Species	0
1 - 3 Significant Foraging Species	5
4 - 6 Significant Foraging Species	10
> 6 Significant Foraging Species	20

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		3
T5									
Eucalyptus moluccana	0.5			x		x		0	
Average	0.5			YES		YES		0	
Total Species:	1								
GHFF Species:	1								
Important Species:	1								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		0
T8									
No Trees	0							0	
Average	0							0	
Total Species:	0								
GHFF Species:	0								
Important Species:	0								

Site Context

Size of Patch	
< 5 hectares	0
5-25 hectares	2
26 -100 hectares	5
101-200 hectares	7
> 200 hectares	10

Connectedness	
Active GHFF camps within 20 km	
<1 camps	0
1 - 3 camps	3
4 - 6 camps	6
> 6 camps	10

Context	
% GHFF Foraging habitat within 20km	
<10%	0
10 - 30%	3
31 - 75%	6
> 75%	10

Ecological Corridors	
Not within ecological corridor	0
Sharing a common boundary	6
Within an ecological corridor	10

Threats to species	
High level threat	1
Moderate Level Threat	5
Low Level Threat	10

Role of site location to overall population	
Active Lvl 3 GHFF Camp within 20km	
1 - 2 camps	1
3 - 4 camps	6
> 5 camps	10

Species Stocking Rate

Stem Density Scoring

RE: 12.11.6 (Stem density for 12.11.5e used	Density:	733
Score	Lower	Upper
2	0	92
4	93	397
6	398	672
8	673	718
10	719	748
8	749	794
6	795	1069
4	1070	1374
2	> 1375	

GHFF FHA

Assessment Unit - Regional Ecosystem	AU 8 Non-remnant (Cat X) Paddock RE12.12.5												
Site Reference	Transect 9	Transect 10	Transect 12	Average Score	AU Score	5 years	10 years	15 years	20 years	Justification / management Actions / Timing	Monitoring	KPIs and Adaptive Management	
Vegetation Condition	5	5	5	5	5	5	5	10	20	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 20 years. If regrowth status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.	5
Species Richness	0	1	2	1	1	1	1	10	10	Tree species richness will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that tree species richness will improve to a score of 10 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	1
Flower Score	0.0000	0.6500	0.6050	0.4183	5	5	5	8	8	Flower score will improve to a score of 8 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will improve to a score of 8 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	5
Timing of Biological Shortages	0	4	4.5	2.83333	2.83333	2.8333	2.8333	7.6667	7.6667	Timing of biological shortages will improve to 7.6667 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should timing of biological shortages not improve to 7.6667 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.	2.8333
Quality of Foraging Habitat	0	1	1	0.66667	0	0	0	5	5	Quality of foraging habitat will improve to a score of 5 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree species richness will improve to a score of 5 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	0
Non-native Plant Cover	65.00	70.00	80.00	71.67	1	10	20	20	20	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 71.67% of the benchmark. If improvement toward below 5% non-native plant cover has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.	1
Site Condition Score					14.83	23.83	33.83	60.67	70.67				14.8333
MAX Site Condition Score					*100*	*100*	*100*	*100*	*100*				
Site Condition Score - out of 4					0.59	0.95	1.35	2.43	2.83				
Size of patch	>200ha	>200ha	>200ha	10	10	10	10	10	10	NA	NA	NA	
Connectedness	1 active camps within 20km	1 active camps within 20km	1 active camps within 20km	3	3	3	3	3	3	NA	NA	NA	
Context	33.8%	33.8%	33.8%	6	6	6	6	6	6	NA	NA	NA	
Ecological Corridors	Within	Within	Within	10	10	10	10	10	10	NA	NA	NA	
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1 active level 3 camp	1	1	1	1	1	1	NA	NA	NA	
Threats to the species	5	5	5	5	5	10	10	10	10	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in Table 60.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.	
Site Context Score					35	40	40	40	40				
MAX Site Context Score					*60*	*60*	*60*	*60*	*60*				
Site Context Score - out of 3					1.75	2.00	2.00	2.00	2.00				
GHFF Foraging Tree Density - Recorded	17	45	50										
GHFF Foraging Tree Density - per hectare	85	225	250	186.667	4	4	4	6	6	Foraging tree density will improve to score 6 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 6 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.	
Species Stocking Rate Score					*4*	*4*	*4*	*6*	*6*				
MAX Species Stocking Rate Score					*10*	*10*	*10*	*10*	*10*				
Species Stocking Rate Score - out of 3					1.20	1.20	1.20	1.80	1.80				
Total					3.54	4.15	4.55	6.23	6.63				

Site Condition

Vegetation Description	Score
Cat X	5
Cat C	10
Cat B	20

Canopy Species Richness	Score
0 GHFF Foraging Species	0
1 - 3 GHFF Foraging Species	5
4 - 6 GHFF Foraging Species	10
> 6 GHFF Foraging Species	20

Quality of Foraging Species	Score
0 Significant Foraging Species	0
1 - 3 Significant Foraging Species	5
4 - 6 Significant Foraging Species	10
> 6 Significant Foraging Species	20

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		0
T9									
Ficus rubignosa	0							0	
Average	0.0000	NO	NO	NO	NO	NO	NO	0	
Total Species:	1								
GHFF Species:	0								
Important Species:	0								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		4
T10									
Corymbia citriodora	0.65	x	x					1	
Average	0.6500	YES	YES	NO	NO	NO	NO	1	
Total Species:	1								
GHFF Species:	1								
Important Species:	1								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		4.5
T12									
Angophora subvelutina	0.35			x			x	0	
Corymbia intermedia	0.86			x	x		x	1	
Average	0.6050	NO	NO	YES	YES	NO	YES	1	
Total Species:	2								
GHFF Species:	2								
Important Species:	1								

Site Context

Size of Patch	
< 5 hectares	0
5-25 hectares	2
26 -100 hectares	5
101-200 hectares	7
> 200 hectares	10

Connectedness	
Active GHFF camps within 20 km	
<1 camps	0
1 - 3 camps	3
4 - 6 camps	6
> 6 camps	10

Context	
% GHFF Foraging habitat within 20km	
<10%	0
10 - 30%	3
31 - 75%	6
> 75%	10

Ecological Corridors	
Not within ecological corridor	0
Sharing a common boundary	6
Within an ecological corridor	10

Threats to species	
High level threat	1
Moderate Level Threat	5
Low Level Threat	10

Role of site location to overall population	
Active Lvl 3 GHFF Camp within 20km	
1 - 2 camps	1
3 - 4 camps	6
> 5 camps	10

Species Stocking Rate

Stem Density Scoring

RE: 12.12.5	Density:	680
Score	Lower	Upper
2	0	85
4	86	368
6	369	623
8	624	666
10	667	694
8	695	737
6	738	992
4	993	1275
2	>1276	

GHFF FHA

Assessment Unit - Regional Ecosystem	AU 9 Non-remnant (Cat X) Paddock RE12.3.7											
Site Reference	Transect 16	Transect 24	Average Score	AU Score	5 years	10 years	15 years	20 years	Justification / management Actions / Timing	Monitoring	KPIs and Adaptive Management	
Vegetation Condition	5	5	5	5	5	5	10	20	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 20 years. If regrowth status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.	5
Species Richness	1	0	0.5	0	0	0	5	5	Tree species richness will improve to a score of 5 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that tree species richness will improve toa score of 5 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	0
Flower Score	0.4000	0.0000	0.2000	2	2	2	8	8	Flower score will improve to a score of 8 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will improve to average 0.525 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	2
Timing of Biological Shortages	4.5	0	2.25	2.25	2.25	2.25	10	10	Timing of biological shortages will improve to 10 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should timing of biological shortages not improve to 10 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.	2.25
Quality of Foraging Habitat	1	0	0.5	0	0	0	5	5	Quality of foraging habitat will improve to a score of 5 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree species richness will improve to a score of 5 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	0
Non-native Plant Cover	95.00	90.00	92.50	1	10	20	20	20	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 92.5% of the benchmark. If improvement toward below 5% non-native plant cover has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.	1
Site Condition Score				10.25	19.25	29.25	58.00	68.00				10.25
MAX Site Condition Score				*100*	*100*	*100*	*100*	*100*				
Site Condition Score - out of 4				0.41	0.77	1.17	2.32	2.72				
Size of patch	>200ha	>200ha	10	10	10	10	10	10	NA	NA	NA	
Connectedness	1 active camps within 20km	1 active camps within 20km	3	3	3	3	3	3	NA	NA	NA	
Context	33.8%	33.8%	6	6	6	6	6	6	NA	NA	NA	
Ecological Corridors	Within	Within	10	10	10	10	10	10	NA	NA	NA	
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1	1	1	1	1	1	NA	NA	NA	
Threats to the species	5	5	5	5	10	10	10	10	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in Table 60.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.	
Site Context Score				35	40	40	40	40				
MAX Site Context Score				*60*	*60*	*60*	*60*	*60*				
Site Context Score - out of 3				1.75	2.00	2.00	2.00	2.00				
GHFF Foraging Tree Density - Recorded	3	0										
GHFF Foraging Tree Density - per hectare	15	0	7.5	2	2	2	4	4	Foraging tree density will improve to score 4 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 4 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.	
Species Stocking Rate Score				*2*	*2*	*2*	*4*	*4*				
MAX Species Stocking Rate Score				*10*	*10*	*10*	*10*	*10*				
Species Stocking Rate Score - out of 3				0.60	0.60	0.60	1.20	1.20				
Total				2.76	3.37	3.77	5.52	5.92				

Site Condition

Vegetation Description	Score
Cat X	5
Cat C	10
Cat B	20

Canopy Species Richness	Score
0 GHFF Foraging Species	0
1 - 3 GHFF Foraging Species	5
4 - 6 GHFF Foraging Species	10
> 6 GHFF Foraging Species	20

Quality of Foraging Species	Score
0 Significant Foraging Species	0
1 - 3 Significant Foraging Species	5
4 - 6 Significant Foraging Species	10
> 6 Significant Foraging Species	20

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		4.5
T16									
Corymbia tessellaris	0.4			x	x		x		0
Average	0.4000	NO	NO	YES	YES	NO	YES	0	
Total Species:	1								
GHFF Species:	1								
Important Species:	1								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		0
T24									
No Trees	0								0
Average	0.0000							0	
Total Species:	0								
GHFF Species:	0								
Important Species:	0								

Site Context

Size of Patch	
< 5 hectares	0
5-25 hectares	2
26 -100 hectares	5
101-200 hectares	7
> 200 hectares	10

Connectedness	
Active GHFF camps within 20 km	
<1 camps	0
1 - 3 camps	3
4 - 6 camps	6
> 6 camps	10

Context	
% GHFF Foraging habitat within 20km	
<10%	0
10 - 30%	3
31 - 75%	6
> 75%	10

Ecological Corridors	
Not within ecological corridor	0
Sharing a common boundary	6
Within an ecological corridor	10

Threats to species	
High level threat	1
Moderate Level Threat	5
Low Level Threat	10

Role of site location to overall population	
Active Lvl 3 GHFF Camp within 20km	
1 - 2 camps	1
3 - 4 camps	6
> 5 camps	10

Species Stocking Rate

Stem Density Scoring

RE: 12.3.7	Density:	406
Score	Lower	Upper
2	0	51
4	52	220
6	221	372
8	373	398
10	399	414
8	415	440
6	441	592
4	593	761
2	>762.25	

GHFF FHA

Assessment Unit - Regional Ecosystem	AU 10 Non-Remnant (Cat X) Paddock RE12.3.3											
Site Reference	Transect 4	Transect 6	Average Score	AU Score	5 years	10 years	15 years	20 years	Justification / management Actions / Timing	Monitoring	KPIs and Adaptive Management	
Vegetation Condition	5	5	5	5	5	5	10	20	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 20 years. If regrowth status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.	5
Species Richness	0	0	0	0	0	0	5	5	Species richness will improve to a score of 5 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that species richness will improve to a score of 5 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	0
Flower Score	0.0000	0.4450	0.2225	2	2	2	8	8	Flower score will improve to a score of 8 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will improve to a score of 8 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	2
Timing of Biological Shortages	0	10	5	5	5	5	9.25	9.25	Timing of biological shortages will improve to 9.25 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should timing of biological shortages not improve to 9.25 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.	5
Quality of Foraging Habitat	0	0	0	0	0	0	5	10	Quality of foraging habitat will improve to a score of 5 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated thatquality of foraging habitat score will improve to 5 species by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.	0
Non-native Plant Cover	65.00	70.00	67.50	1	10	20	20	20	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 67.5% of the benchmark. If improvement toward below 5% non-native plant cover has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.	1
Site Condition Score				13.00	22.00	32.00	57.25	72.25				13
MAX Site Condition Score				*100*	*100*	*100*	*100*	*100*				
Site Condition Score - out of 4				0.52	0.88	1.28	2.29	2.89				
Size of patch	>200ha	>200ha	10	10	10	10	10	10	NA	NA	NA	
Connectedness	1 active camps within 20km	1 active camps within 20km	3	3	3	3	3	3	NA	NA	NA	
Context	33.8%	33.8%	6	6	6	6	6	6	NA	NA	NA	
Ecological Corridors	Within	Within	10	10	10	10	10	10	NA	NA	NA	
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1	1	1	1	1	1	NA	NA	NA	
Threats to the species	5	5	5	5	10	10	10	10	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in Table 60.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.	
Site Context Score				35	40	40	40	40				
MAX Site Context Score				*60*	*60*	*60*	*60*	*60*				
Site Context Score - out of 3				1.75	2.00	2.00	2.00	2.00				
GHFF Foraging Tree Density - Recorded	0	29										
GHFF Foraging Tree Density - per hectare	0	145	72.5	4	4	4	6	6	Foraging tree density will improve to score 6 as a result of specific management actions 1 to 6 outlined in Table 60.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 6 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.	
Species Stocking Rate Score				*4*	*4*	*4*	*6*	*6*				
MAX Species Stocking Rate Score				*10*	*10*	*10*	*10*	*10*				
Species Stocking Rate Score - out of 3				1.20	1.20	1.20	1.80	1.80				
Total				3.47	4.08	4.48	6.09	6.69				

Site Condition

Vegetation Description	Score
Cat X	5
Cat C	10
Cat B	20

Canopy Species Richness	Score
0 GHFF Foraging Species	0
1 - 3 GHFF Foraging Species	5
4 - 6 GHFF Foraging Species	10
> 6 GHFF Foraging Species	20

Quality of Foraging Species	Score
0 Significant Foraging Species	0
1 - 3 Significant Foraging Species	5
4 - 6 Significant Foraging Species	10
> 6 Significant Foraging Species	20

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		0
T4									
No Trees	0							0	
Average	0	NO	NO	NO	NO	NO	NO	0	
Total Species:	0								
GHFF Species:	0								
Important Species:	0								

Flower Scores	Wt p*r	Food shortages Jul-Sep	Pregnancy Jul-Nov	Lactation Oct-Mar	Mating & conception Dec-May	Migration paths All year	Fruit industries Aug-Mar	Quality of foraging habitat (1 = Wt p*r ≥0.65)	
		2.5	1.5	1.5	1.5	1.5	1.5		10
T6									
Corymbia tessellaris	0.4			x	x		x	0	
Eucalyptus melanophloia	0.49	x	x	x	x	x	x	0	
Melia azedarach	0							0	
Average	0.445	YES	YES	YES	YES	YES	YES	0	
Total Species:	3								
GHFF Species:	2								
Important Species:	0								

Site Context

Size of Patch	
< 5 hectares	0
5-25 hectares	2
26 -100 hectares	5
101-200 hectares	7
> 200 hectares	10

Connectedness	
Active GHFF camps within 20 km	
<1 camps	0
1 - 3 camps	3
4 - 6 camps	6
> 6 camps	10

Context	
% GHFF Foraging habitat within 20km	
<10%	0
10 - 30%	3
31 - 75%	6
> 75%	10

Ecological Corridors	
Not within ecological corridor	0
Sharing a common boundary	6
Within an ecological corridor	10

Threats to species	
High level threat	1
Moderate Level Threat	5
Low Level Threat	10

Role of site location to overall population	
Active Lvl 3 GHFF Camp within 20km	
1 - 2 camps	1
3 - 4 camps	6
> 5 camps	10

Species Stocking Rate

Stem Density Scoring

RE: 12.3.3	Density:	275
Score	Lower	Upper
2	0	34
4	35	149
6	150	252
8	253	269
10	270	281
8	282	298
6	299	401
4	402	516
2	517	

Appendix D

Greater Glider MHQA Tables

Assessment Unit - Regional Ecosystem - Greater Glider	AU 1 - Cat B RE12.11.6									
Greater Glider	RE12.11.6 Benchmark	Transect 3	Transect 14	Transect 17	Average of Transect(s)	% Benchmark	Score			
SITE CONDITION										
Recruitment of woody perennial species in EDL	100	66	100	100	88.67	88.67	5	5		
Native plant species richness - trees	4	5	3	4	4.00	100.00	5	5		
Native plant species richness - shrubs	6	8	4	5	5.67	94.44	5	5		
Native plant species richness - grasses	11	3	3	4	3.33	30.30	2.5	2.5		
Native plant species richness - forbs	29	15	9	13	12.33	42.53	2.5	2.5		
Tree canopy height (Canopy)*	21	21	22	21	21.33	101.59	5	5		
Tree canopy height (Sub-canopy)*	11	8.25	12	10	10.08	91.67	5	5		
						*Average tree canopy height	5	5		
Tree canopy cover (Canopy)**	32	53.6	48.3	24.9	42.27	132.08	5	5		
Tree canopy cover (Sub-canopy)**	10	16.48	34	57	35.83	358.27	3	3		
						**Average tree canopy cover	4	4		
Shrub canopy cover	12	14.48	7.5	5.2	9.06	75.50	5	5		
Native grass cover*	25	42	5	34	27.00	108.00	5	5		
Organic litter*	45	36	17	14	22.33	49.63	3	3		
Large trees (euc plus non-euc) (per ha)	12	2	0	0	0.67	5.56	5	5		
Coarse woody debris (per ha)	320	0	80	287	122.33	38.23	2	2		
Non-native plant cover	0	45	5	15	21.67	21.67	5	5		27
Quality and availability of food and foraging habitat	NA	10	10	10	10	-	10	10		20
Quality and availability of shelter	NA	1	1	1	1	-	1	1	Estimate 0.44/ha	4
										51
							Site Condition Score (/100)	51		
							Overall Site Condition Score - out of 3	1.53		
SITE CONTEXT										
Size of patch	10	10	10	10	10		10			
Connectedness	5	2	2	2	2		2			
Context	5	4	4	4	4		4			
Ecological Corridors	6	6	6	6	6		6			
Role of site location to species overall population in the state	5	5	5	5	5		5			
Threats to the species	15	7	7	7	7		7			
Species mobility capacity	10	7	7	7	7		7			
							Site Context Score (/56)	41		
							Overall Site Context Score - out of 3	2.20		
SPECIES STOCKING RATE										
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	15	15	15	15		15			
							Species Stocking Rate Score (/70)	0.21		
							Overall Species Stocking Rate Score - out of 4	0.86		
Overall Assessment Unit Score								4.58		

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0	No evidence of species on site or on adjacent sites
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	10	Foraging
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	0	No evidence of species detected on site
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		15					
SRR Score (out of 4)	**0.857142857**						

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for b
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - Greater Glider	AU 2 - Cat B RE12.12.5								
Greater Glider	RE12.12.5 Benchmark	Transect 18	Transect 20	Average of Transect(s)	% Benchmark	Score			
SITE CONDITION									
Recruitment of woody perennial species in EDL	100	100	83	91.50	91.50	5	5		
Native plant species richness - trees	5	4	9	6.50	130.00	5	5		
Native plant species richness - shrubs	9	7	5	6.00	66.67	2.5	2.5		
Native plant species richness - grasses	11	6	6	6.00	54.55	2.5	2.5		
Native plant species richness - forbs	17	14	16	15.00	88.24	2.5	2.5		
Tree canopy height (Canopy)*	22	22	21	21.50	97.73	5			
Tree canopy height (Sub-canopy)*	9	9	12	10.50	116.67	5			
					*Average tree canopy height	5	5		
Tree canopy cover (Canopy)**	41	54.7	53.8	54.25	132.32	5			
Tree canopy cover (Sub-canopy)**	10	17.5	27.5	22.50	225.00	3			
					**Average tree canopy cover	4	4		
Shrub canopy cover	3	5.4	11.8	8.60	286.67	3	3		
Native grass cover*	35	7	31	19.00	54.29	3	3		
Organic litter*	35	14	15	14.50	41.43	3	3		
Large trees (euc plus non-euc) (per ha)	29	8	2	5.00	17.24	5	5		
Coarse woody debris (per ha)	578	178	214	196.00	33.91	2	2		
Non-native plant cover	0	20	75	47.50	47.50	3	3		22.75
Quality and availability of food and foraging habitat	NA	10	10	10	-	10	10		20
Quality and availability of shelter	NA	1	1	1	-	1	1	Estimate 0.5/ha	4
									46.75
					Site Condition Score (/100)	46.75			
					Overall Site Condition Score - out of 3	1.40			
SITE CONTEXT									
Size of patch	10	10	10	10		10			
Connectedness	5	2	2	2		2			
Context	5	4	4	4		4			
Ecological Corridors	6	6	6	6		6			
Role of site location to species overall population in the state	5	5	5	5		5			
Threats to the species	15	7	7	7		7			
Species mobility capacity	10	7	7	7		7			
					Site Context Score (/56)	41			
					Overall Site Context Score - out of 3	2.20			
SPECIES STOCKING RATE									
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	15	15	15		15			
					Species Stocking Rate Score (/70)	0.21			
					Overall Species Stocking Rate Score - out of 4	0.86			
Overall Assessment Unit Score						4.46			

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0 No evidence of species on site or on adjacent sites
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	10 Foraging
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	0 No evidence of species detected on site
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5 See below
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		15				
SRR Score (out of 4)		**0.857142857**				

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - Greater Glider	AU 3 - Cat B RE 12.3.7					
Greater Glider	**RE12.3.7 Benchmark**	**Transect 19**	**Transect 21**	**Average of Transect(s)**	**% Benchmark**	**Score**
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	100	50	75.00	75.00	3
Native plant species richness - trees	6	7	8	7.50	125.00	5
Native plant species richness - shrubs	8	10	7	8.50	106.25	5
Native plant species richness - grasses	6	5	2	3.50	58.33	2.5
Native plant species richness - forbs	17	13	7	10.00	58.82	2.5
Tree canopy height (Canopy)*	22	19	23	21.00	95.45	5
Tree canopy height (Sub-canopy)*	12	6.25	12	9.13	76.04	5
					*Average tree canopy height	5
Tree canopy cover (Canopy)**	31	66.3	26.6	46.45	149.84	5
Tree canopy cover (Sub-canopy)**	23	63.7	68	65.85	286.30	3
					**Average tree canopy cover	4
Shrub canopy cover	22	13.3	11.7	12.50	56.82	5
Native grass cover*	8	5	16	10.50	131.25	5
Organic litter*	27	15	39	27.00	100.00	5
Large trees (euc plus non-euc) (per ha)	60	8	2	5.00	8.33	5
Coarse woody debris (per ha)	667	490	193	341.50	51.20	5
Non-native plant cover	0	80	85	82.50	82.50	0
Quality and availability of food and foraging habitat	NA	10	10	10	-	10
Quality and availability of shelter	NA	10	10	10	-	10
					Site Condition Score (/100)	86
					Overall Site Condition Score - out of 3	2.58
SITE CONTEXT						
Size of patch	10	10	10	10		10
Connectedness	5	2	2	2		2
Context	5	4	4	4		4
Ecological Corridors	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5		5
Threats to the species	15	7	7	7		7
Species mobility capacity	10	7	7	7		7
					Site Context Score (/56)	41
					Overall Site Context Score - out of 3	2.20
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	20	20	20		20
					Species Stocking Rate Score (/70)	0.29
					Overall Species Stocking Rate Score - out of 4	1.14
Overall Assessment Unit Score						5.92

3							
5							
5							
2.5							
2.5							
5							
4							
5							
5							
5							
5							
5							
0							26
10							20
10	Estimate 3.11/ha						40
							86

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		20				
SRR Score (out of 4)	**1.142857143**					

0	No evidence of species on site or on adjacent sites
15	Foraging / Breeding
0	No evidence of species detected on site
5	See below

***SSR Supplementary Table**					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - Greater Glider	AU 4 - Cat X- vegetated RE12.11.6						
Greater Glider	RE12.11.6 Benchmark	Transect 1	Transect 7	Transect 13	Average of Transect(s)	% Benchmark	Score
SITE CONDITION							
Recruitment of woody perennial species in EDL	100	100	50	50	66.67	66.67	3
Native plant species richness - trees	4	3	3	4	3.33	83.33	2.5
Native plant species richness - shrubs	6	5	4	2	3.67	61.11	2.5
Native plant species richness - grasses	11	4	1	4	3.00	27.27	2.5
Native plant species richness - forbs	29	10	14	12	12.00	41.38	2.5
Tree canopy height (Canopy)*	21	19	19	22	20.00	95.24	5
Tree canopy height (Sub-canopy)*	11	6.25	9	13	9.42	85.61	5
						*Average tree canopy height	5
Tree canopy cover (Canopy)**	32	48.9	45.5	56.8	50.40	157.50	5
Tree canopy cover (Sub-canopy)**	10	14.6	10.8	13.7	13.03	130.33	5
						**Average tree canopy cover	5
Shrub canopy cover	12	12.8	9	1.1	7.63	63.61	5
Native grass cover*	25	51	5	21	25.67	102.67	5
Organic litter*	45	33	10	14	19.00	42.22	3
Large trees (euc plus non-euc) (per ha)	12	0	0	2	0.67	5.56	5
Coarse woody debris (per ha)	320	120	160	320	200.00	62.50	5
Non-native plant cover	0	70	55	65	63.33	63.33	0
Quality and availability of food and foraging habitat	NA	10	10	10	10	-	10
Quality and availability of shelter	NA	1	1	1	1	-	1
						Site Condition Score (/100)	47
						Overall Site Condition Score - out of 3	1.41
SITE CONTEXT							
Size of patch	10	10	10	10	10		10
Connectedness	5	2	2	2	2		2
Context	5	4	4	4	4		4
Ecological Corridors	6	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5	5		5
Threats to the species	15	7	7	7	7		7
Species mobility capacity	10	7	7	7	7		7
						Site Context Score (/56)	41
						Overall Site Context Score - out of 3	2.20
SPECIES STOCKING RATE							
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	15	15	15	15		15
						Species Stocking Rate Score (/70)	0.21
						Overall Species Stocking Rate Score - out of 4	0.86
Overall Assessment Unit Score							4.46

3								
2.5								
2.5								
2.5								
2.5								
5								
5								
5								
5								
3								
5								
5								
0								23
10								20
1	Estimate 0.2/ha							4
								47

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below)*	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		15				
SRR Score (out of 4)	**0.857142857**					

0	No evidence of species on site or on adjacent sites	
10	Foraging	
0	No evidence of species detected on site	
5	See below	

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for breeding
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - Greater Glider	AU 5 - Cat X - vegetated RE12.12.5					
Greater Glider	RE12.12.5 Benchmark	Transect 11	Transect 15	Average of Transect(s)	% Benchmark	Score
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	100	100	100.00	100.00	5
Native plant species richness - trees	5	5	5	5.00	100.00	5
Native plant species richness - shrubs	9	4	6	5.00	55.56	2.5
Native plant species richness - grasses	11	5	5	5.00	45.45	2.5
Native plant species richness - forbs	17	5	10	7.50	44.12	2.5
Tree canopy height (Canopy)*	22	20	18	19.00	86.36	5
Tree canopy height (Sub-canopy)*	9	10	9	9.50	105.56	5
					*Average tree canopy height	5
Tree canopy cover (Canopy)**	41	20	24.5	22.25	54.27	5
Tree canopy cover (Sub-canopy)**	10	10	46.5	28.25	282.50	3
					**Average tree canopy cover	4
Shrub canopy cover	3	8.9	3.1	6.00	200.00	5
Native grass cover*	35	10	9	9.50	27.14	1
Organic litter*	35	20	21	20.50	58.57	5
Large trees (euc plus non-euc) (per ha)	29	2	2	2.00	6.90	5
Coarse woody debris (per ha)	578	395.5	504	449.75	77.81	5
Non-native plant cover	0	60	75	67.50	67.50	0
Quality and availability of food and foraging habitat	NA	5	5	5	-	5
Quality and availability of shelter	NA	1	1	1	-	1
					Site Condition Score (/100)	37.75
					Overall Site Condition Score - out of 3	1.13
SITE CONTEXT						
Size of patch	10	10	10	10		10
Connectedness	5	2	2	2		2
Context	5	4	4	4		4
Ecological Corridors	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5		5
Threats to the species	15	7	7	7		7
Species mobility capacity	10	7	7	7		7
					Site Context Score (/56)	41
					Overall Site Context Score - out of 3	2.20
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	10	10	10		10
					Species Stocking Rate Score (/70)	0.14
					Overall Species Stocking Rate Score - out of 4	0.57
Overall Assessment Unit Score						3.90

5						
5						
2.5						
2.5						
2.5						
5						
4						
5						
1						
5						
5						
5						
0						
5						23.75
1						10
	Estimate 0.31/ha					4
						37.75

Species Stocking Rate (SSR)					
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10
		No	Yes - adjacent		Yes - on site
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15
		Not habitat	Dispersal	Foraging	Breeding
Approximate density (per ha)	Score	0	10	20	30
		0%	low	med	high
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15
		0	5 - 15	20 - 35	40 - 45
Total SRR score (out of 70)		10			
SRR Score (out of 4)	**0.571428571**				

0	No evidence of species on site or on adjacent sites
5	Dispersal
0	No evidence of species detected on site
5	See below

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - Greater Glider	AU 6 - Cat X vegetated RE12.3.7						
Greater Glider	RE12.3.7 Benchmark	Transect 2	Transect 22	Transect 23	Average of Transect(s)	% Benchmark	Score
SITE CONDITION							
Recruitment of woody perennial species in EDL	100	50	0	66	**38.67**	38.67	**3**
Native plant species richness - trees	6	8	8	7	**7.67**	127.78	**5**
Native plant species richness - shrubs	8	8	3	5	**5.33**	66.67	**2.5**
Native plant species richness - grasses	6	4	3	5	**4.00**	66.67	**2.5**
Native plant species richness - forbs	17	13	7	8	**9.33**	54.90	**2.5**
Tree canopy height (Canopy)*	22	22	23	26	**23.67**	107.58	5
Tree canopy height (Sub-canopy)*	12	10	10	14	**11.33**	94.44	5
					***Average tree canopy height**		**5**
Tree canopy cover (Canopy)**	31	48.6	32.2	14.8	**31.87**	102.80	5
Tree canopy cover (Sub-canopy)**	23	37	10.2	24.5	**23.90**	103.91	5
					****Average tree canopy cover**		**5**
Shrub canopy cover	22	7.7	9.08	4.5	**7.09**	32.24	**3**
Native grass cover*	8	13	33	70	**38.67**	483.33	**5**
Organic litter*	27	41	3	0	**14.67**	54.32	**5**
Large trees (euc plus non-euc) (per ha)	60	14	0	16	**10.00**	16.67	**5**
Coarse woody debris (per ha)	667	247	0	59	**102.00**	15.29	**2**
Non-native plant cover	0	80	90	50	**73.33**	73.33	**0**
Quality and availability of food and foraging habitat	NA	10	10	10	**10**	-	**10**
Quality and availability of shelter	NA	5	5	5	**5**	-	**5**
						Site Condition Score (/100)	**62.75**
						Overall Site Condition Score - out of 3	**1.88**
SITE CONTEXT							
Size of patch	10	10	10	10	10		**10**
Connectedness	5	2	2	2	2		**2**
Context	5	4	4	4	4		**4**
Ecological Corridors	6	6	6	6	6		**6**
Role of site location to species overall population in the state	5	5	5	5	5		**5**
Threats to the species	15	7	7	7	7		**7**
Species mobility capacity	10	7	7	7	7		**7**
						Site Context Score (/56)	**41**
						Overall Site Context Score - out of 3	**2.20**
SPECIES STOCKING RATE							
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	15	15	15	15		**15**
						Species Stocking Rate Score (/70)	**0.21**
						Overall Species Stocking Rate Score - out of 4	**0.86**
Overall Assessment Unit Score							**4.94**

3						
5						
2.5						
2.5						
2.5						
5						
5						
3						
5						
5						
5						
2						
0						22.75
10						20
5	Estimate 1.27/ha					20
						62.75

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		15				
SRR Score (out of 4)	**0.857142857**					

0	No evidence of species on site or on adjacent sites	
10	Foraging	
0	No evidence of species detected on site	
5	See below	

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for b
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - Greater Glider	AU 7 - Cat X paddock RE12.11.6					
Greater Glider	RE12.11.6 Benchmark	Transect 5	Transect 8	Average of Transect(s)	% Benchmark	Score
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	0	0	0.00	0.00	0
Native plant species richness - trees	4	2	0	1.00	25.00	2.5
Native plant species richness - shrubs	6	2	2	2.00	33.33	2.5
Native plant species richness - grasses	11	1	1	1.00	9.09	0
Native plant species richness - forbs	29	8	2	5.00	17.24	0
Tree canopy height (Canopy)*	21	0	0	0.00	0.00	0
Tree canopy height (Sub-canopy)*	11	0	0	0.00	0.00	0
					*Average tree canopy height	0
Tree canopy cover (Canopy)**	32	0	0	0.00	0.00	0
Tree canopy cover (Sub-canopy)**	10	0	0	0.00	0.00	0
					**Average tree canopy cover	0
Shrub canopy cover	12	2.4	0	1.20	10.00	3
Native grass cover*	25	18	17	17.50	70.00	3
Organic litter*	45	6	19	12.50	27.78	3
Large trees (euc plus non-euc) (per ha)	12	0	0	0.00	0.00	0
Coarse woody debris (per ha)	320	62	6	34.00	10.63	2
Non-native plant cover	0	55	85	70.00	70.00	0
Quality and availability of food and foraging habitat	N/A	1	1	1	-	1
Quality and availability of shelter	N/A	1	1	1	-	1
					Site Condition Score (/100)	14
					Overall Site Condition Score - out of 3	0.42
SITE CONTEXT						
Size of patch	10	10	10	10		10
Connectedness	5	2	2	2		2
Context	5	4	4	4		4
Ecological Corridors	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5		5
Threats to the species	15	7	7	7		7
Species mobility capacity	10	4	4	4		4
					Site Context Score (/56)	38
					Overall Site Context Score - out of 3	2.04
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	5	5	5		5
					Species Stocking Rate Score (/70)	0.07
					Overall Species Stocking Rate Score - out of 4	0.29
Overall Assessment Unit Score						2.74

0						
2.5						
2.5						
0						
0						
0						
0						
0						
0						
3						
3						
3						
0						
2						
0						8
1						2
1	Estimate 0.14/ha					4
						14

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		5				
SRR Score (out of 4)	**0.285714286**					

0	No evidence of species on site or on adjacent sites
0	Not habitat
0	No evidence of species detected on site
5	See below

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - Greater Glider	AU 8 - Cat X paddock RE12.12.5								
Greater Glider	**RE12.12.5 Benchmark**	**Transect 9**	**Transect 10**	**Transect 12**	**Average of Transect(s)**	**% Benchmark**	**Score**		
SITE CONDITION									
Recruitment of woody perennial species in EDL	100	0	0	100	**33.33**	33.33	**3**	3	
Native plant species richness - trees	5	1	3	2	**2.00**	40.00	**2.5**	2.5	
Native plant species richness - shrubs	9	1	0	2	**1.00**	11.11	**0**	0	
Native plant species richness - grasses	11	4	2	4	**3.33**	30.30	**2.5**	2.5	
Native plant species richness - forbs	17	6	2	5	**4.33**	25.49	**2.5**	2.5	
Tree canopy height (Canopy)*	22	0	18	19	**12.33**	56.06	3		
Tree canopy height (Sub-canopy)*	9	6.5	0	7	**4.50**	50.00	3		
						***Average tree canopy height**	**3**	3	
Tree canopy cover (Canopy)**	41	0	12.3	11	**7.77**	18.94	2		
Tree canopy cover (Sub-canopy)**	10	11.3	0	0	**3.77**	37.67	2		
						****Average tree canopy cover**	**2**	2	
Shrub canopy cover	3	1.6	0	6.7	**2.77**	92.22	**5**	5	
Native grass cover*	35	58	17	31	**35.33**	100.95	**5**	5	
Organic litter*	35	9	7	4	**6.67**	19.05	**3**	3	
Large trees (euc plus non-euc) (per ha)	29	0	0	2	**0.67**	2.30	**5**	5	
Coarse woody debris (per ha)	578	0	16	0	**5.33**	0.92	**0**	0	
Non-native plant cover	0	65	70	80	**71.67**	71.67	**0**	0	16.75
Quality and availability of food and foraging habitat	NA	1	1	1	**1**	-	**1**	1	2
Quality and availability of shelter	NA	1	1	1	**1**	-	**1**	1 Estimate 0.46/ha	4
									22.75
							Site Condition Score (/100)		**22.75**
							Overall Site Condition Score - out of 3		**0.68**
SITE CONTEXT									
Size of patch	10	10	10	10	10		**10**		
Connectedness	5	2	2	2	2		**2**		
Context	5	4	4	4	4		**4**		
Ecological Corridors	6	6	6	6	6		**6**		
Role of site location to species overall population in the state	5	5	5	5	5		**5**		
Threats to the species	15	7	7	7	7		**7**		
Species mobility capacity	10	4	4	4	4		**4**		
							Site Context Score (/56)		**38**
							Overall Site Context Score - out of 3		**2.04**
SPECIES STOCKING RATE									
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	5	5	5	5		**5**		
							Species Stocking Rate Score (/70)		**0.07**
							Overall Species Stocking Rate Score - out of 4		**0.29**
Overall Assessment Unit Score							**3.00**		

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0	No evidence of species on site or on adjacent sites
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	0	Not Habitat
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	0	No evidence of species detected on site
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		5					
SRR Score (out of 4)	**0.285714286**						

***SSR Supplementary Table**					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for breeding
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - Greater Glider	AU 9 - Cat X paddock RE12.3.7					
Greater Glider	RE12.3.7 Benchmark	Transect 16	Transect 24	Average of Transect(s)	% Benchmark	Score
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	100	0	50.00	50.00	3
Native plant species richness - trees	6	2	0	1.00	16.67	0
Native plant species richness - shrubs	8	1	0	0.50	6.25	0
Native plant species richness - grasses	6	3	6	4.50	75.00	2.5
Native plant species richness - forbs	17	0	3	1.50	8.82	0
Tree canopy height (Canopy)*	22	24	0	12.00	54.55	3
Tree canopy height (Sub-canopy)*	12	8	0	4.00	33.33	3
					*Average tree canopy height	3
Tree canopy cover (Canopy)**	31	11.7	0	5.85	18.87	2
Tree canopy cover (Sub-canopy)**	23	12.4	0	6.20	26.96	2
					**Average tree canopy cover	2
Shrub canopy cover	22	2.2	0	1.10	5.00	0
Native grass cover*	8	25	34	29.50	368.75	5
Organic litter*	27	1	2	1.50	5.56	0
Large trees (euc plus non-euc) (per ha)	60	2	0	1.00	1.67	5
Coarse woody debris (per ha)	667	0	107	53.50	8.02	0
Non-native plant cover	0	95	90	92.50	92.50	0
Quality and availability of food and foraging habitat	NA	1	1	1	-	1
Quality and availability of shelter	NA	1	1	1	-	1
					Site Condition Score (/100)	16.25
					Overall Site Condition Score - out of 3	0.49
SITE CONTEXT						
Size of patch	10	10	10	10		10
Connectedness	5	2	2	2		2
Context	5	4	4	4		4
Ecological Corridors	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5		5
Threats to the species	15	7	7	7		7
Species mobility capacity	10	4	4	4		4
					Site Context Score (/56)	38
					Overall Site Context Score - out of 3	2.04
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	5	5	5		5
					Species Stocking Rate Score (/70)	0.07
					Overall Species Stocking Rate Score - out of 4	0.29
Overall Assessment Unit Score						2.81

3							
0							
0							
2.5							
0							
3							
2							
0							
5							
0							
5							
0							
0							10.25
1							2
1	Estimate 0.0/ha						4
							16.25

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0 No evidence of species on site or on adjacent sites
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	0 Not Habitat
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	0 No evidence of species detected on site
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5 See below
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		5				
SRR Score (out of 4)	**0.285714286**					

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - Greater Glider	AU 10 - Cat X paddock RE12.3.3								
Greater Glider	RE12.3.3 Benchmark	Transect 4	Transect 6	Average of Transect(s)	% Benchmark	Score			
SITE CONDITION									
Recruitment of woody perennial species in EDL	100	0	66	33.00	33.00	3	3		
Native plant species richness - trees	5	2	5	3.50	70.00	2.5	2.5		
Native plant species richness - shrubs	5	1	3	2.00	40.00	2.5	2.5		
Native plant species richness - grasses	9	1	5	3.00	33.33	2.5	2.5		
Native plant species richness - forbs	25	6	8	7.00	28.00	2.5	2.5		
Tree canopy height (Canopy)*	25	32	19.5	25.75	103.00	5	5		
Tree canopy height (Sub-canopy)*	9	0	12	6.00	66.67	3	3		
					*Average tree canopy height	4	4		
Tree canopy cover (Canopy)**	40	0	36.8	18.40	46.00	2	2		
Tree canopy cover (Sub-canopy)**	8	0	15.7	7.85	98.13	5	5		
					**Average tree canopy cover	3.5	3.5		
Shrub canopy cover	4	40.1	8.2	24.15	603.75	3	3		
Native grass cover*	52	3	65	34.00	65.38	3	3		
Organic litter*	20	1	6	3.50	17.50	3	3		
Large trees (euc plus non-euc) (per ha)	14	2	8	5.00	35.71	5	5		
Coarse woody debris (per ha)	588	0	162	81.00	13.78	2	2		
Non-native plant cover	0	65	70	67.50	67.50	0	0	18.25	
Quality and availability of food and foraging habitat	N/A	5	5	5	-	5	5	10	
Quality and availability of shelter	N/A	1	1	1	-	1	1	4	
								32.25	
					Site Condition Score (/100)		32.25		
					Overall Site Condition Score - out of 3		0.97		
SITE CONTEXT									
Size of patch	10	10	10	10			10		
Connectedness	5	2	2	2			2		
Context	5	4	4	4			4		
Ecological Corridors	6	6	6	6			6		
Role of site location to species overall population in the state	5	5	5	5			5		
Threats to the species	15	7	7	7			7		
Species mobility capacity	10	4	4	4			4		
					Site Context Score (/56)		38		
					Overall Site Context Score - out of 3		2.04		
SPECIES STOCKING RATE									
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	5	5	5			5		
					Species Stocking Rate Score (/70)		0.07		
					Overall Species Stocking Rate Score - out of 4		0.29		
Overall Assessment Unit Score							3.29		

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0	No evidence of species on site or on adjacent sites
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	0	Not habitat
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	0	No evidence of species detected on site
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		5					
SRR Score (out of 4)	**0.285714286**						

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Greater Glider Threats Matrix Uplift

Metric	Low	Moderate	High
Clearing and Degradation of Habitat	Apply one of the following options in order of priority: 1.Apply a current legal protective mechanism. 2.The site is zoned for conservation purposes or clearing is not permitted. 3.If ≤30% of the area within a 5 km buffer of the site is cleared or disturbed land.	In the absence of justification for scoring as high or low and if: >30% and <70% of the area within a 5km buffer of the site is cleared or disturbed land.	Apply one of the following options in order of priority: 1.The site is zoned for development 2.If ≥ 70% of the area within a 5 km buffer of the site is cleared or disturbed land.
Score Weighting	**4**	**1.8**	**0.25**
Inappropriate Fire Regimes - Very High Risk	Current Government endorsed Bushfire Management Plan (BMP) to protect the Koala is in effect.	Non-Koala specific BMP in effect. or; Low fuel load and low fire risk.	Site has a high fuel load and/or high fire risk.
Score Weighting	**4**	**1.8**	**0.25**
Timber Harvesting - Very High Risk	No timber harvesting on site.	Historical timber harvesting having occurred on site	Current timber harvesting occurring on site
Score Weighting	**4**	**1.8**	**0.25**
Feral Cat Attack - Low Risk	No feral cats recorded on site	Feral cats recorded on site and adequate refuge for Greater Glider (>70% canopy cover)	Feral cats recorded on site and limited refuge for Greater Glider (<70% canopy cover)
Score Weighting	**1**	**0.53**	**0.08**
Fox Attack - Low Risk	No foxes recorded on site	Foxes recorded on site and adequate refuge for Greater Glider (>70% canopy cover).	Foxes recorded on site and limited refuge for Greater Glider (<70% canopy cover)
Score Weighting	**1**	**0.53**	**0.08**
Barbed Wire Entanglement - Low Risk	No barbed wire on or adjoining the site	Up to 50% of the site and boundary is traversed by barbed wire	More than 50% of the site and boundary is traversed by barbed wire
Score Weighting	**1**	**0.53**	**0.08**
Threats to Species			
Threshold Analysis	≥10	>4 and <10	≤4
Score	**15**	**7**	**1**
Description	Low threat level (i.e. likely to survive)	Moderate threat level	High threat level (i.e. likely to result in death, irreversible damage)
Final Score	**14.53**		
Final Treat Level Score	**15**		

Appendix E

Yellow-bellied Glider MHQA Tables

Assessment Unit - Regional Ecosystem - YBG	AU 1 - Cat B RE12.11.6									
Greater Glider	RE12.11.6 Benchmark	Transect 3	Transect 14	Transect 17	Average of Transect(s)	% Benchmark	Score			
SITE CONDITION										
Recruitment of woody perennial species in EDL	100	66	100	100	88.67	88.67	5	5		
Native plant species richness - trees	4	5	3	4	4.00	100.00	5	5		
Native plant species richness - shrubs	6	8	4	5	5.67	94.44	5	5		
Native plant species richness - grasses	11	3	3	4	3.33	30.30	2.5	2.5		
Native plant species richness - forbs	29	15	9	13	12.33	42.53	2.5	2.5		
Tree canopy height (Canopy)*	21	21	22	21	21.33	101.59	5	5		
Tree canopy height (Sub-canopy)*	11	8.25	12	10	10.08	91.67	5	5		
						*Average tree canopy height	5	5		
Tree canopy cover (Canopy)**	32	53.6	48.3	24.9	42.27	132.08	5			
Tree canopy cover (Sub-canopy)**	10	16.48	34	57	35.83	358.27	3			
						**Average tree canopy cover	4	4		
Shrub canopy cover	12	14.48	7.5	5.2	9.06	75.50	5	5		
Native grass cover*	25	42	5	34	27.00	108.00	5	5		
Organic litter*	45	36	17	14	22.33	49.63	3	3		
Large trees (euc plus non-euc) (per ha)	12	2	0	0	0.67	5.56	5	5		
Coarse woody debris (per ha)	320	0	80	287	122.33	38.23	2	2		
Non-native plant cover	0	45	5	15	21.67	21.67	5	5		27
Quality and availability of food and foraging habitat	NA	10	10	10	10	-	10	10		20
Quality and availability of shelter	NA	1	1	1	1	-	1	1	Estimate 0.44/ha	4
										51
							Site Condition Score (/100)	51		
							Overall Site Condition Score - out of 3	1.53		
SITE CONTEXT										
Size of patch	10	10	10	10	10		10			
Connectedness	5	2	2	2	2		2			
Context	5	4	4	4	4		4			
Ecological Corridors	6	6	6	6	6		6			
Role of site location to species overall population in the state	5	5	5	5	5		5			
Threats to the species	15	7	7	7	7		7			
Species mobility capacity	10	7	7	7	7		7			
							Site Context Score (/56)	41		
							Overall Site Context Score - out of 3	2.20		
SPECIES STOCKING RATE										
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	15	15	15	15		15			
							Species Stocking Rate Score (/70)	0.21		
							Overall Species Stocking Rate Score - out of 4	0.86		
Overall Assessment Unit Score								4.58		

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0	No evidence of species on site or on adjacent sites
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	10	Foraging
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	0	No evidence of species detected on site
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		15					
SRR Score (out of 4)	**0.857142857**						

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for b
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - YBG	AU 2 - Cat B RE12.12.5								
Greater Glider	RE12.12.5 Benchmark	Transect 18	Transect 20	Average of Transect(s)	% Benchmark	Score			
SITE CONDITION									
Recruitment of woody perennial species in EDL	100	100	83	91.50	91.50	5	5		
Native plant species richness - trees	5	4	9	6.50	130.00	5	5		
Native plant species richness - shrubs	9	7	5	6.00	66.67	2.5	2.5		
Native plant species richness - grasses	11	6	6	6.00	54.55	2.5	2.5		
Native plant species richness - forbs	17	14	16	15.00	88.24	2.5	2.5		
Tree canopy height (Canopy)*	22	22	21	21.50	97.73	5			
Tree canopy height (Sub-canopy)*	9	9	12	10.50	116.67	5			
					*Average tree canopy height	5	5		
Tree canopy cover (Canopy)**	41	54.7	53.8	54.25	132.32	5			
Tree canopy cover (Sub-canopy)**	10	17.5	27.5	22.50	225.00	3			
					**Average tree canopy cover	4	4		
Shrub canopy cover	3	5.4	11.8	8.60	286.67	3	3		
Native grass cover*	35	7	31	19.00	54.29	3	3		
Organic litter*	35	14	15	14.50	41.43	3	3		
Large trees (euc plus non-euc) (per ha)	29	8	2	5.00	17.24	5	5		
Coarse woody debris (per ha)	578	178	214	196.00	33.91	2	2		
Non-native plant cover	0	20	75	47.50	47.50	3	3		22.75
Quality and availability of food and foraging habitat	NA	10	10	10	-	10	10		20
Quality and availability of shelter	NA	1	1	1	-	1	1	Estimate 0.5/ha	4
									46.75
					Site Condition Score (/100)	46.75			
					Overall Site Condition Score - out of 3	1.40			
SITE CONTEXT									
Size of patch	10	10	10	10		10			
Connectedness	5	2	2	2		2			
Context	5	4	4	4		4			
Ecological Corridors	6	6	6	6		6			
Role of site location to species overall population in the state	5	5	5	5		5			
Threats to the species	15	7	7	7		7			
Species mobility capacity	10	7	7	7		7			
					Site Context Score (/56)	41			
					Overall Site Context Score - out of 3	2.20			
SPECIES STOCKING RATE									
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	15	15	15		15			
					Species Stocking Rate Score (/70)	0.21			
					Overall Species Stocking Rate Score - out of 4	0.86			
Overall Assessment Unit Score						4.46			

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0	No evidence of species on site or on adjacent sites
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	10	Foraging
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	0	No evidence of species detected on site
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		15					
SRR Score (out of 4)	**0.857142857**						

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - YBG	AU 3 - Cat B RE 12.3.7					
Greater Glider	**RE12.3.7 Benchmark**	**Transect 19**	**Transect 21**	**Average of Transect(s)**	**% Benchmark**	**Score**
SITE CONDITION						
Recruitment of woody perennial species in EDL	**100**	100	50	**75.00**	75.00	**3**
Native plant species richness - trees	**6**	7	8	**7.50**	125.00	**5**
Native plant species richness - shrubs	**8**	10	7	**8.50**	106.25	**5**
Native plant species richness - grasses	**6**	5	2	**3.50**	58.33	**2.5**
Native plant species richness - forbs	**17**	13	7	**10.00**	58.82	**2.5**
Tree canopy height (Canopy)*	**22**	19	23	**21.00**	95.45	5
Tree canopy height (Sub-canopy)*	**12**	6.25	12	**9.13**	76.04	5
					***Average tree canopy height**	**5**
Tree canopy cover (Canopy)**	**31**	66.3	26.6	**46.45**	149.84	5
Tree canopy cover (Sub-canopy)**	**23**	63.7	68	**65.85**	286.30	3
					****Average tree canopy cover**	**4**
Shrub canopy cover	**22**	13.3	11.7	**12.50**	56.82	**5**
Native grass cover*	**8**	5	16	**10.50**	131.25	**5**
Organic litter*	**27**	15	39	**27.00**	100.00	**5**
Large trees (euc plus non-euc) (per ha)	**60**	8	2	**5.00**	8.33	**5**
Coarse woody debris (per ha)	**667**	490	193	**341.50**	51.20	**5**
Non-native plant cover	**0**	80	85	**82.50**	82.50	**0**
Quality and availability of food and foraging habitat	**NA**	10	10	**10**	-	**10**
Quality and availability of shelter	**NA**	10	10	**10**	-	**10**
					Site Condition Score (/100)	**86**
					Overall Site Condition Score - out of 3	**2.58**
SITE CONTEXT						
Size of patch	**10**	10	10	10		**10**
Connectedness	**5**	2	2	2		**2**
Context	**5**	4	4	4		**4**
Ecological Corridors	**6**	6	6	6		**6**
Role of site location to species overall population in the state	**5**	5	5	5		**5**
Threats to the species	**15**	7	7	7		**7**
Species mobility capacity	**10**	7	7	7		**7**
					Site Context Score (/56)	**41**
					Overall Site Context Score - out of 3	**2.20**
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	**70**	20	20	20		**20**
					Species Stocking Rate Score (/70)	**0.29**
					Overall Species Stocking Rate Score - out of 4	**1.14**
Overall Assessment Unit Score						**5.92**

3							
5							
5							
2.5							
2.5							
5							
4							
5							
5							
5							
5							
5							
0						26	
10						20	
10	Estimate 3.11/ha					40	
						86	

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		20				
SRR Score (out of 4)	**1.142857143**					

0	No evidence of species on site or on adjacent sites	
15	Foraging / Breeding	
0	No evidence of species detected on site	
5	See below	

***SSR Supplementary Table**					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - YBG	AU 4 - Cat X- vegetated RE12.11.6						
Greater Glider	RE12.11.6 Benchmark	Transect 1	Transect 7	Transect 13	Average of Transect(s)	% Benchmark	Score
SITE CONDITION							
Recruitment of woody perennial species in EDL	100	100	50	50	66.67	66.67	3
Native plant species richness - trees	4	3	3	4	3.33	83.33	2.5
Native plant species richness - shrubs	6	5	4	2	3.67	61.11	2.5
Native plant species richness - grasses	11	4	1	4	3.00	27.27	2.5
Native plant species richness - forbs	29	10	14	12	12.00	41.38	2.5
Tree canopy height (Canopy)*	21	19	19	22	20.00	95.24	5
Tree canopy height (Sub-canopy)*	11	6.25	9	13	9.42	85.61	5
						*Average tree canopy height	5
Tree canopy cover (Canopy)**	32	48.9	45.5	56.8	50.40	157.50	5
Tree canopy cover (Sub-canopy)**	10	14.6	10.8	13.7	13.03	130.33	5
						**Average tree canopy cover	5
Shrub canopy cover	12	12.8	9	1.1	7.63	63.61	5
Native grass cover*	25	51	5	21	25.67	102.67	5
Organic litter*	45	33	10	14	19.00	42.22	3
Large trees (euc plus non-euc) (per ha)	12	0	0	2	0.67	5.56	5
Coarse woody debris (per ha)	320	120	160	320	200.00	62.50	5
Non-native plant cover	0	70	55	65	63.33	63.33	0
Quality and availability of food and foraging habitat	NA	10	10	10	10	-	10
Quality and availability of shelter	NA	1	1	1	1	-	1
						Site Condition Score (/100)	47
						Overall Site Condition Score - out of 3	1.41
SITE CONTEXT							
Size of patch	10	10	10	10	10		10
Connectedness	5	2	2	2	2		2
Context	5	4	4	4	4		4
Ecological Corridors	6	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5	5		5
Threats to the species	15	7	7	7	7		7
Species mobility capacity	10	7	7	7	7		7
						Site Context Score (/56)	41
						Overall Site Context Score - out of 3	2.20
SPECIES STOCKING RATE							
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	15	15	15	15		15
						Species Stocking Rate Score (/70)	0.21
						Overall Species Stocking Rate Score - out of 4	0.86
Overall Assessment Unit Score							4.46

3								
2.5								
2.5								
2.5								
2.5								
2.5								
5								
5								
5								
5								
3								
5								
5								
0								23
10								20
1	Estimate 0.2/ha							4
								47

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		15				
SRR Score (out of 4)	**0.857142857**					

0	No evidence of species on site or on adjacent sites	
10	Foraging	
0	No evidence of species detected on site	
5	See below	

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for breeding
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - YBG	AU 5 - Cat X - vegetated RE12.12.5					
Greater Glider	RE12.12.5 Benchmark	Transect 11	Transect 15	Average of Transect(s)	% Benchmark	Score
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	100	100	100.00	100.00	5
Native plant species richness - trees	5	5	5	5.00	100.00	5
Native plant species richness - shrubs	9	4	6	5.00	55.56	2.5
Native plant species richness - grasses	11	5	5	5.00	45.45	2.5
Native plant species richness - forbs	17	5	10	7.50	44.12	2.5
Tree canopy height (Canopy)*	22	20	18	19.00	86.36	5
Tree canopy height (Sub-canopy)*	9	10	9	9.50	105.56	5
					*Average tree canopy height	5
Tree canopy cover (Canopy)**	41	20	24.5	22.25	54.27	5
Tree canopy cover (Sub-canopy)**	10	10	46.5	28.25	282.50	3
					**Average tree canopy cover	4
Shrub canopy cover	3	8.9	3.1	6.00	200.00	5
Native grass cover*	35	10	9	9.50	27.14	1
Organic litter*	35	20	21	20.50	58.57	5
Large trees (euc plus non-euc) (per ha)	29	2	2	2.00	6.90	5
Coarse woody debris (per ha)	578	395.5	504	449.75	77.81	5
Non-native plant cover	0	60	75	67.50	67.50	0
Quality and availability of food and foraging habitat	NA	5	5	5	-	5
Quality and availability of shelter	NA	1	1	1	-	1
					Site Condition Score (/100)	37.75
					Overall Site Condition Score - out of 3	1.13
SITE CONTEXT						
Size of patch	10	10	10	10		10
Connectedness	5	2	2	2		2
Context	5	4	4	4		4
Ecological Corridors	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5		5
Threats to the species	15	7	7	7		7
Species mobility capacity	10	7	7	7		7
					Site Context Score (/56)	41
					Overall Site Context Score - out of 3	2.20
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	10	10	10		10
					Species Stocking Rate Score (/70)	0.14
					Overall Species Stocking Rate Score - out of 4	0.57
Overall Assessment Unit Score						3.90

						5
						5
						2.5
						2.5
						2.5
						5
						4
						5
						1
						5
						5
						5
						0
						5
						1
					Estimate 0.31/ha	4
						37.75

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		10				
SRR Score (out of 4)	**0.571428571**					

0	No evidence of species on site or on adjacent sites
5	Dispersal
0	No evidence of species detected on site
5	See below

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - YBG	AU 6 - Cat X vegetated RE12.3.7						
Greater Glider	RE12.3.7 Benchmark	Transect 2	Transect 22	Transect 23	Average of Transect(s)	% Benchmark	Score
SITE CONDITION							
Recruitment of woody perennial species in EDL	100	50	0	66	**38.67**	38.67	**3**
Native plant species richness - trees	6	8	8	7	**7.67**	127.78	**5**
Native plant species richness - shrubs	8	8	3	5	**5.33**	66.67	**2.5**
Native plant species richness - grasses	6	4	3	5	**4.00**	66.67	**2.5**
Native plant species richness - forbs	17	13	7	8	**9.33**	54.90	**2.5**
Tree canopy height (Canopy)*	22	22	23	26	**23.67**	107.58	5
Tree canopy height (Sub-canopy)*	12	10	10	14	**11.33**	94.44	5
					***Average tree canopy height**		**5**
Tree canopy cover (Canopy)**	31	48.6	32.2	14.8	**31.87**	102.80	5
Tree canopy cover (Sub-canopy)**	23	37	10.2	24.5	**23.90**	103.91	5
					****Average tree canopy cover**		**5**
Shrub canopy cover	22	7.7	9.08	4.5	**7.09**	32.24	**3**
Native grass cover*	8	13	33	70	**38.67**	483.33	**5**
Organic litter*	27	41	3	0	**14.67**	54.32	**5**
Large trees (euc plus non-euc) (per ha)	60	14	0	16	**10.00**	16.67	**5**
Coarse woody debris (per ha)	667	247	0	59	**102.00**	15.29	**2**
Non-native plant cover	0	80	90	50	**73.33**	73.33	**0**
Quality and availability of food and foraging habitat	NA	10	10	10	**10**	-	**10**
Quality and availability of shelter	NA	5	5	5	**5**	-	**5**
						Site Condition Score (/100)	**62.75**
						Overall Site Condition Score - out of 3	**1.88**
SITE CONTEXT							
Size of patch	10	10	10	10	10		**10**
Connectedness	5	2	2	2	2		**2**
Context	5	4	4	4	4		**4**
Ecological Corridors	6	6	6	6	6		**6**
Role of site location to species overall population in the state	5	5	5	5	5		**5**
Threats to the species	15	7	7	7	7		**7**
Species mobility capacity	10	7	7	7	7		**7**
						Site Context Score (/56)	**41**
						Overall Site Context Score - out of 3	**2.20**
SPECIES STOCKING RATE							
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	15	15	15	15		**15**
						Species Stocking Rate Score (/70)	**0.21**
						Overall Species Stocking Rate Score - out of 4	**0.86**
Overall Assessment Unit Score							**4.94**

3						
5						
2.5						
2.5						
2.5						
5						
5						
3						
5						
5						
5						
2						
0						22.75
10						20
5	Estimate 1.27/ha					20
						62.75

Species Stocking Rate (SSR)					
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10
		No	Yes - adjacent		Yes - on site
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15
		Not habitat	Dispersal	Foraging	Breeding
Approximate density (per ha)	Score	0	10	20	30
		0%	low	med	high
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15
		0	5 - 15	20 - 35	40 - 45
Total SRR score (out of 70)		15			
SRR Score (out of 4)	**0.857142857**				

0	No evidence of species on site or on adjacent sites	
10	Foraging	
0	No evidence of species detected on site	
5	See below	

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for b
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - YBG	AU 7 - Cat X paddock RE12.11.6					
Greater Glider	RE12.11.6 Benchmark	Transect 5	Transect 8	Average of Transect(s)	% Benchmark	Score
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	0	0	0.00	0.00	0
Native plant species richness - trees	4	2	0	1.00	25.00	2.5
Native plant species richness - shrubs	6	2	2	2.00	33.33	2.5
Native plant species richness - grasses	11	1	1	1.00	9.09	0
Native plant species richness - forbs	29	8	2	5.00	17.24	0
Tree canopy height (Canopy)*	21	0	0	0.00	0.00	0
Tree canopy height (Sub-canopy)*	11	0	0	0.00	0.00	0
					*Average tree canopy height	0
Tree canopy cover (Canopy)**	32	0	0	0.00	0.00	0
Tree canopy cover (Sub-canopy)**	10	0	0	0.00	0.00	0
					**Average tree canopy cover	0
Shrub canopy cover	12	2.4	0	1.20	10.00	3
Native grass cover*	25	18	17	17.50	70.00	3
Organic litter*	45	6	19	12.50	27.78	3
Large trees (euc plus non-euc) (per ha)	12	0	0	0.00	0.00	0
Coarse woody debris (per ha)	320	62	6	34.00	10.63	2
Non-native plant cover	0	55	85	70.00	70.00	0
Quality and availability of food and foraging habitat	N/A	1	1	1	-	1
Quality and availability of shelter	N/A	1	1	1	-	1
					Site Condition Score (/100)	14
					Overall Site Condition Score - out of 3	0.42
SITE CONTEXT						
Size of patch	10	10	10	10		10
Connectedness	5	2	2	2		2
Context	5	4	4	4		4
Ecological Corridors	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5		5
Threats to the species	15	7	7	7		7
Species mobility capacity	10	4	4	4		4
					Site Context Score (/56)	38
					Overall Site Context Score - out of 3	2.04
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	5	5	5		5
					Species Stocking Rate Score (/70)	0.07
					Overall Species Stocking Rate Score - out of 4	0.29
Overall Assessment Unit Score						2.74

0						
2.5						
2.5						
0						
0						
0						
0						
3						
3						
3						
0						
2						
0						8
1						2
1	Estimate 0.14/ha					4
						14

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		5				
SRR Score (out of 4)	**0.285714286**					

0	No evidence of species on site or on adjacent sites	
0	Not habitat	
0	No evidence of species detected on site	
5	See below	

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - YBG	AU 8 - Cat X paddock RE12.12.5								
Greater Glider	**RE12.12.5 Benchmark**	**Transect 9**	**Transect 10**	**Transect 12**	**Average of Transect(s)**	**% Benchmark**	**Score**		
SITE CONDITION									
Recruitment of woody perennial species in EDL	100	0	0	100	**33.33**	33.33	**3**	3	
Native plant species richness - trees	5	1	3	2	**2.00**	40.00	**2.5**	2.5	
Native plant species richness - shrubs	9	1	0	2	**1.00**	11.11	**0**	0	
Native plant species richness - grasses	11	4	2	4	**3.33**	30.30	**2.5**	2.5	
Native plant species richness - forbs	17	6	2	5	**4.33**	25.49	**2.5**	2.5	
Tree canopy height (Canopy)*	22	0	18	19	**12.33**	56.06	3		
Tree canopy height (Sub-canopy)*	9	6.5	0	7	**4.50**	50.00	3		
						***Average tree canopy height**	**3**	3	
Tree canopy cover (Canopy)**	41	0	12.3	11	**7.77**	18.94	2		
Tree canopy cover (Sub-canopy)**	10	11.3	0	0	**3.77**	37.67	2		
						****Average tree canopy cover**	**2**	2	
Shrub canopy cover	3	1.6	0	6.7	**2.77**	92.22	**5**	5	
Native grass cover*	35	58	17	31	**35.33**	100.95	**5**	5	
Organic litter*	35	9	7	4	**6.67**	19.05	**3**	3	
Large trees (euc plus non-euc) (per ha)	29	0	0	2	**0.67**	2.30	**5**	5	
Coarse woody debris (per ha)	578	0	16	0	**5.33**	0.92	**0**	0	
Non-native plant cover	0	65	70	80	**71.67**	71.67	**0**	0	16.75
Quality and availability of food and foraging habitat	NA	1	1	1	**1**	-	**1**	1	2
Quality and availability of shelter	NA	1	1	1	**1**	-	**1**	1 Estimate 0.46/ha	4
									22.75
							Site Condition Score (/100)		**22.75**
							Overall Site Condition Score - out of 3		**0.68**
SITE CONTEXT									
Size of patch	10	10	10	10	10		**10**		
Connectedness	5	2	2	2	2		**2**		
Context	5	4	4	4	4		**4**		
Ecological Corridors	6	6	6	6	6		**6**		
Role of site location to species overall population in the state	5	5	5	5	5		**5**		
Threats to the species	15	7	7	7	7		**7**		
Species mobility capacity	10	4	4	4	4		**4**		
							Site Context Score (/56)		**38**
							Overall Site Context Score - out of 3		**2.04**
SPECIES STOCKING RATE									
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	5	5	5	5		**5**		
							Species Stocking Rate Score (/70)		**0.07**
							Overall Species Stocking Rate Score - out of 4		**0.29**
Overall Assessment Unit Score							**3.00**		

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0	No evidence of species on site or on adjacent sites
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	0	Not Habitat
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	0	No evidence of species detected on site
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		5					
SRR Score (out of 4)	**0.285714286**						

***SSR Supplementary Table**					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for breeding
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - YBG	AU 9 - Cat X paddock RE12.3.7					
Greater Glider	RE12.3.7 Benchmark	Transect 16	Transect 24	Average of Transect(s)	% Benchmark	Score
SITE CONDITION						
Recruitment of woody perennial species in EDL	100	100	0	50.00	50.00	3
Native plant species richness - trees	6	2	0	1.00	16.67	0
Native plant species richness - shrubs	8	1	0	0.50	6.25	0
Native plant species richness - grasses	6	3	6	4.50	75.00	2.5
Native plant species richness - forbs	17	0	3	1.50	8.82	0
Tree canopy height (Canopy)*	22	24	0	12.00	54.55	3
Tree canopy height (Sub-canopy)*	12	8	0	4.00	33.33	3
					*Average tree canopy height	3
Tree canopy cover (Canopy)**	31	11.7	0	5.85	18.87	2
Tree canopy cover (Sub-canopy)**	23	12.4	0	6.20	26.96	2
					**Average tree canopy cover	2
Shrub canopy cover	22	2.2	0	1.10	5.00	0
Native grass cover*	8	25	34	29.50	368.75	5
Organic litter*	27	1	2	1.50	5.56	0
Large trees (euc plus non-euc) (per ha)	60	2	0	1.00	1.67	5
Coarse woody debris (per ha)	667	0	107	53.50	8.02	0
Non-native plant cover	0	95	90	92.50	92.50	0
Quality and availability of food and foraging habitat	NA	1	1	1	-	1
Quality and availability of shelter	NA	1	1	1	-	1
					Site Condition Score (/100)	16.25
					Overall Site Condition Score - out of 3	0.49
SITE CONTEXT						
Size of patch	10	10	10	10		10
Connectedness	5	2	2	2		2
Context	5	4	4	4		4
Ecological Corridors	6	6	6	6		6
Role of site location to species overall population in the state	5	5	5	5		5
Threats to the species	15	7	7	7		7
Species mobility capacity	10	4	4	4		4
					Site Context Score (/56)	38
					Overall Site Context Score - out of 3	2.04
SPECIES STOCKING RATE						
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	5	5	5		5
					Species Stocking Rate Score (/70)	0.07
					Overall Species Stocking Rate Score - out of 4	0.29
Overall Assessment Unit Score						2.81

3						
0						
0						
2.5						
0						
3						
2						
0						
5						
0						
5						
0						
0						10.25
1						2
1	Estimate 0.0/ha					4
						16.25

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0 No evidence of species on site or on adjacent sites
		No	Yes - adjacent		Yes - on site	
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	0 Not Habitat
		Not habitat	Dispersal	Foraging	Breeding	
Approximate density (per ha)	Score	0	10	20	30	0 No evidence of species detected on site
		0%	low	med	high	
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5 See below
		0	5 - 15	20 - 35	40 - 45	
Total SRR score (out of 70)		5				
SRR Score (out of 4)	**0.285714286**					

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

Assessment Unit - Regional Ecosystem - YBG	AU 10 - Cat X paddock RE12.3.3								
Greater Glider	RE12.3.3 Benchmark	Transect 4	Transect 6	Average of Transect(s)	% Benchmark	Score			
SITE CONDITION									
Recruitment of woody perennial species in EDL	100	0	66	33.00	33.00	3	3		
Native plant species richness - trees	5	2	5	3.50	70.00	2.5	2.5		
Native plant species richness - shrubs	5	1	3	2.00	40.00	2.5	2.5		
Native plant species richness - grasses	9	1	5	3.00	33.33	2.5	2.5		
Native plant species richness - forbs	25	6	8	7.00	28.00	2.5	2.5		
Tree canopy height (Canopy)*	25	32	19.5	25.75	103.00	5	5		
Tree canopy height (Sub-canopy)*	9	0	12	6.00	66.67	3	3		
					*Average tree canopy height	4	4		
Tree canopy cover (Canopy)**	40	0	36.8	18.40	46.00	2	2		
Tree canopy cover (Sub-canopy)**	8	0	15.7	7.85	98.13	5	5		
					**Average tree canopy cover	3.5	3.5		
Shrub canopy cover	4	40.1	8.2	24.15	603.75	3	3		
Native grass cover*	52	3	65	34.00	65.38	3	3		
Organic litter*	20	1	6	3.50	17.50	3	3		
Large trees (euc plus non-euc) (per ha)	14	2	8	5.00	35.71	5	5		
Coarse woody debris (per ha)	588	0	162	81.00	13.78	2	2		
Non-native plant cover	0	65	70	67.50	67.50	0	0	18.25	
Quality and availability of food and foraging habitat	N/A	5	5	5	-	5	5	10	
Quality and availability of shelter	N/A	1	1	1	-	1	1	4	Estimate 1.34/ha
								32.25	
					Site Condition Score (/100)		32.25		
					Overall Site Condition Score - out of 3		0.97		
SITE CONTEXT									
Size of patch	10	10	10	10			10		
Connectedness	5	2	2	2			2		
Context	5	4	4	4			4		
Ecological Corridors	6	6	6	6			6		
Role of site location to species overall population in the state	5	5	5	5			5		
Threats to the species	15	7	7	7			7		
Species mobility capacity	10	4	4	4			4		
					Site Context Score (/56)		38		
					Overall Site Context Score - out of 3		2.04		
SPECIES STOCKING RATE									
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	5	5	5			5		
					Species Stocking Rate Score (/70)		0.07		
					Overall Species Stocking Rate Score - out of 4		0.29		
Overall Assessment Unit Score							3.29		

Species Stocking Rate (SSR)							
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0	No evidence of species on site or on adjacent sites
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	0	Not habitat
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	0	No evidence of species detected on site
		0%	low	med	high		
Role/importance of species population on site*	Score (*Total from supplementary table below*)	0	5	10	15	5	See below
		0	5 - 15	20 - 35	40 - 45		
Total SRR score (out of 70)		5					
SRR Score (out of 4)	**0.285714286**						

*SSR Supplementary Table					
*Key source population for breeding	Score	0	10	0	Given the low usage and lack of evidence of breeding occurring on site it is not considered to be a key populaiton for
		No	Yes/ Possibly		
*Key source population for dispersal	Score	0	5	5	Unknown but using the precautionary principle it is considered possible.
		No	Yes/ Possibly		
*Necessary for maintaining genetic diversity	Score	0	15	0	The site is highly unlikely to be necessary for maintaining genetic diversity given the low density
		No	Yes/ Possibly		
*Near the limit of the species range	Score	0	15	0	The site is not near the limit of yellow bellied gliders range
		No	Yes		

YBG Threats Matrix Uplift

Metric	Low	Moderate	High
Clearing and Degradation of Habitat	Apply one of the following options in order of priority: 1.Apply a current legal protective mechanism. 2.The site is zoned for conservation purposes or clearing is not permitted. 3.If ≤30% of the area within a 5 km buffer of the site is cleared or disturbed land.	In the absence of justification for scoring as high or low and if: >30% and <70% of the area within a 5km buffer of the site is cleared or disturbed land.	Apply one of the following options in order of priority: 1.The site is zoned for development 2.If ≥ 70% of the area within a 5 km buffer of the site is cleared or disturbed land.
Score Weighting	**4**	**1.8**	**0.25**
Inappropriate Fire Regimes - Very High Risk	Current Government endorsed Bushfire Management Plan (BMP) to protect the Koala is in effect.	Non-Koala specific BMP in effect. or; Low fuel load and low fire risk.	Site has a high fuel load and/or high fire risk.
Score Weighting	**4**	**1.8**	**0.25**
Timber Harvesting - Very High Risk	No timber harvesting on site.	Historical timber harvesting having occurred on site	Current timber harvesting occurring on site
Score Weighting	**4**	**1.8**	**0.25**
Feral Cat Attack - Low Risk	No feral cats recorded on site	Feral cats recorded on site and adequate refuge for Greater Glider (>70% canopy cover)	Feral cats recorded on site and limited refuge for Greater Glider (<70% canopy cover)
Score Weighting	**0.75**	**0.4**	**0.06**
Fox Attack - Low Risk	No foxes recorded on site	Foxes recorded on site and adequate refuge for Greater Glider (>70% canopy cover).	Foxes recorded on site and limited refuge for Greater Glider (<70% canopy cover)
Score Weighting	**0.75**	**0.4**	**0.06**
Barbed Wire Entanglement - Low Risk	No barbed wire on or adjoining the site	Up to 50% of the site and boundary is traversed by barbed wire	More than 50% of the site and boundary is traversed by barbed wire
Score Weighting	**0.75**	**0.4**	**0.06**
Deer Degradation - Low Risk	No deer recorded on site	Deer recorded on site and adequate refuge for Yellow-bellied Glider (>70% canopy cover)	Deer recorded on site and limited refuge for Yellow-bellied Glider (<70% canopy cover)
Score Weighting	**0.75**	**0.4**	**0.06**
Threats to Species			
Threshold Analysis	≥10	>4 and <10	≤4
Score	**15**	**7**	**1**
Description	Low threat level (i.e. likely to survive)	Moderate threat level	High threat level (i.e. likely to result in death, irreversible damage)
Final Score	**14.3**		
Final Treat Level Score	**15**		

Appendix F

Field Survey Data

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T1	Job Number / Property	8414 - Offset Site

Part B - Site Data

Recorders	David Havill & Keeley Richardson	Date	10/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
4	58.79 hectares	12.11.6	12

Site description and Location (including details of discrete polygons within the assessment unit)
Polygon is mapped as contining Category X (Non-Remnant) vegetation. This assessment unit contains species reflective of Regional ecosystem 12.11.6 decsribed as Corymbia cirtiodora, Euclayptus crebra woodland on metamorphics +/- interbedded volcanics.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	3			EDL / Dom / R
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL / Dom / R
Scientific Name	*Brachychiton australis*	Common Name	Broad-leaved Bottle Tree	
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	5		
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum
Scientific Name	*Psydrax odrata*	Common Name	Shiny-leaved Canthium
Scientific Name	*Acacia melanoxylon*	Common Name	Australian Blackwood
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name	*Brachychiton populneus*	Common Name	Kurrajong
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	4		
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name	*Eragrostis brownii*	Common Name	Brown's Lovegrass
Scientific Name	*Themeda triandra*	Common Name	Kangaroo Grass
Scientific Name	*Aristida purpurea*	Common Name	Threeawn aristida
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	10		
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Cyperus gracilis*	Common Name	Slender Sedge
Scientific Name	*Dianella caerulea*	Common Name	Blue Flax-lily
Scientific Name	*Wahlenbergia queenslandica*	Common Name	Blue Star
Scientific Name	*Eustrephus latifolius*	Common Name	Wombat Berry
Scientific Name	*Hibbertia stricta*	Common Name	Guinea Flower
Scientific Name	*Glossocardia bidens*	Common Name	Native Cobbler's Pegs
Scientific Name	*Parsonsia straminea*	Common Name	Monkey Rope
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	70.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Melinis repens*	Common Name	Red Natal Grass
Scientific Name	*Opuntia sp*	Common Name	Opuntia Species
Scientific Name	*Gomphocarpus physocarpus*	Common Name	Balloon Cotton Bush
Scientific Name	*Lantana montevidensis*	Common Name	Creeping Lantana
Scientific Name	*Heliotropium amplexicaule*	Common Name	Blue Heliotrope
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	120.00		
1	3.00	26	
2	4.00	27	
3	4.00	28	
4	1.00	29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	53%	15%	55%	76%	55%	51%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	10%	10%	0%	0%	10%	6%
Native shrubs	5%	0%	5%	0%	0%	2%
Non-native grass	2%	0%	0%	5%	0%	1%
Non native forbs and shrubs	5%	0%	10%	4%	15%	7%
Litter	25%	75%	30%	15%	20%	33%
Rock	0%	0%	0%	0%	0%	
Bare Ground	0%	0%	0%	0%	0%	
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	500mm	Number of large eucalypt trees:	0
Non- Eucalypt Large tree DBH benchmark used:	N/A	Number of large non eucalypt trees:	0
Total number of large trees recorded:	0		
Total Number Large Trees per ha:	0		

Median Tree Canopy Height Measurements	Canopy:	19	Sub-canopy:	6.25	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	100%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	48.9%	Sub-canopy:	14.60%	Emergent:	
Shrub canopy cover %	12.80%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	0.0	2.2	2.2	T2	9.1	11.2	2.1
T1	3.0	11.8	8.8	T2	33.8	37.9	4.1
T1	14.3	22.1	7.8	T2	62.7	65.0	2.3
T1	24.6	28.5	3.9	T2	77.0	79.7	2.7
T1	32.0	39.4	7.4	T2	81.0	82.1	1.1
T1	58.0	63.1	5.1	T2	91.0	93.3	2.3
T1	65.4	70.9	5.5	T2			0.0
T1	83.2	91.4	8.2	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	0.5	1.1	0.6	Shrub	77.3	78.1	0.8
Shrub	6.3	7.4	1.1	Shrub	78.9	79.8	0.9
Shrub	15.6	16.4	0.8	Shrub	82.8	83.6	0.8
Shrub	16.8	17.9	1.1	Shrub	87.5	89.5	2.0
Shrub	22.4	23.3	0.9	Shrub	97.2	97.7	0.5
Shrub	25.0	26.4	1.4	Shrub			0.0
Shrub	47.6	48.3	0.7	Shrub			0.0
Shrub	67.8	68.1	0.3	Shrub			0.0
Shrub	73.1	74.0	0.9	Shrub			0.0

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. If trees are in the same layer and continuous along the transect you can group them.

Part I: GHFF Stem Count

Species Name	Stem Count
Corymbia citriodora	74
Brachychiton australis	2

Alphitonia excelsa	1
Total	77
Total per hectare	385

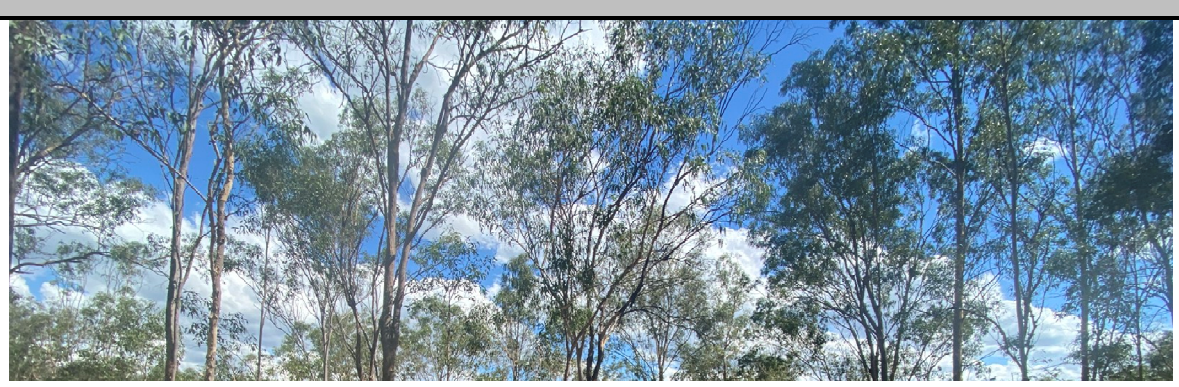
Part J: SAT Survey Results

SAT Survey ID	SAT 1 at Transect 1			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Corymbia citriodora*	Spotted Gum	460	N
2	*Corymbia citriodora*	Spotted Gum	290	N
3	*Corymbia citriodora*	Spotted Gum	210	N
4	*Corymbia citriodora*	Spotted Gum	100	N
5	*Corymbia citriodora*	Spotted Gum	240	N
6	*Corymbia citriodora*	Spotted Gum	220	N
7	*Corymbia citriodora*	Spotted Gum	260	N
8	*Corymbia citriodora*	Spotted Gum	320	N
9	*Corymbia citriodora*	Spotted Gum	410	N
10	*Corymbia citriodora*	Spotted Gum	120	N
11	*Corymbia citriodora*	Spotted Gum	260	N
12	*Corymbia citriodora*	Spotted Gum	410	N
13	*Corymbia citriodora*	Spotted Gum	210	N
14	*Corymbia citriodora*	Spotted Gum	190	N
15	*Corymbia citriodora*	Spotted Gum	300	N
16	*Corymbia citriodora*	Spotted Gum	210	N
17	*Corymbia citriodora*	Spotted Gum	340	N
18	*Corymbia citriodora*	Spotted Gum	270	N
19	*Brachychiton australi*	Broad-leaved Bottle	140	N
20	*Corymbia citriodora*	Spotted Gum	420	N
21	*Corymbia citriodora*	Spotted Gum	100	N
22	*Corymbia citriodora*	Spotted Gum	130	N
23	*Corymbia citriodora*	Spotted Gum	100	N
24	*Corymbia citriodora*	Spotted Gum	120	N
25	*Corymbia citriodora*	Spotted Gum	360	N
26	*Corymbia citriodora*	Spotted Gum	140	N
27	*Corymbia citriodora*	Spotted Gum	320	N
28	*Corymbia citriodora*	Spotted Gum	160	N
29	*Corymbia citriodora*	Spotted Gum	340	N
30	*Corymbia citriodora*	Spotted Gum	160	N
Total				0/30

Attach Landscape Photos Here

North

South



East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T2	Job Number / Property	8418 - Offset Site

Part B - Site Data

Recorders	David Havill & Keeley Richardson	Date	11/10/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
6	10.39 hectares	12.3.7	12

Site description and Location (including details of discrete polygons within the assessment unit)
Polygon is mapped as contining Category X (Non-Remnant) vegetation. Preclear regional ecossytem has the vegetation as containing Of Concern RE12.3.7 described as Eucalyptus tereticornis, Casuarina cunninghamiana +/- Melaleuca spp fringing woodland. Species are consistent with the mapping area.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	8			EDL / Dom / R
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash	EDL/R
Scientific Name	*Angophora subvelutina*	Common Name	Broad-leaved Apple	EDL
Scientific Name	*Lophostemon suaveolens*	Common Name	Swamp Box	
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL/R
Scientific Name	*Acacia melanoxylon*	Common Name	Australian Blackwood	
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala	
Scientific Name	*Melia azedarach*	Common Name	White Cedar	
Scientific Name	*Eucalyptus tereticornis*	Common Name	Forest Red Gum	EDL
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	8		
Scientific Name	*Psydrax odrata*	Common Name	Shiny-leaved Canthium
Scientific Name	*Trema tomentosa*	Common Name	Poison Peach
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala
Scientific Name	*Melia azedarach*	Common Name	White Cedar
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name	*Ficus coronata*	Common Name	Sandpaper Fig
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	4		
Scientific Name	*Aristida purpurea*	Common Name	*Threeawn aristida*
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name	*Cymbopogon refractus*	Common Name	Barbed Wire Grass
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	13		
Scientific Name	*Prunus spinosa*	Common Name	Black Thorn
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name	*Lobelia purpurascens*	Common Name	White Root
Scientific Name	*Lomandra longifolia*	Common Name	Long-leaved Mat Rush
Scientific Name	*Adiantum atroviride*	Common Name	Maidenhair Fern
Scientific Name	*Parsonsia straminea*	Common Name	Monkey Rope
Scientific Name	*Pandorea pandorana*	Common Name	Wonga Wonga Vine
Scientific Name	*Stylidium graminifolium*	Common Name	Grass Triggerplant
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Eustrephus latifolius*	Common Name	Wombat Berry
Scientific Name	*Hibbertia stricta*	Common Name	Guinea Flower
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Cheilanthes distans*	Common Name	Bristle Cloak Fern

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	80.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Solanum seaforthianum*	Common Name	Brazilian Nightshade
Scientific Name	*Conyza sumatrensis*	Common Name	Tall Fleabane
Scientific Name	*Ochna serrata*	Common Name	Ochna
Scientific Name	*Oxalis corniculata*	Common Name	Creeping Oxalis
Scientific Name	*Cirsium vulgare*	Common Name	Spear Thistle
Scientific Name	*Melinis repens*	Common Name	Red Natal Grass
Scientific Name	*Dolichandra unguis-cati*	Common Name	Cat's Claw Creeper
Scientific Name	*Verbena bonariensis*	Common Name	Purple-top Verbena

Scientific Name	*Megathyrsus maximus*	**Common Name**	Guinea Grass
Scientific Name	*Senna pendula*	**Common Name**	Easter Cassia
Scientific Name	*Gomphocarpus physocarpus*	**Common Name**	Balloon Cotton Bush
Scientific Name	*Heliotropium amplexicaule*	**Common Name**	Blue Heliotrope

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	**247.00**		
1	0.80	**26**	
2	5.50	**27**	
3	2.10	**28**	
4	1.70	**29**	
5	0.50	**30**	
6	1.50	**31**	
7	1.00	**32**	
8	2.50	**33**	
9	1.00	**34**	
10	3.00	**35**	
11	1.10	**36**	
12	4.00	**37**	
13		**38**	
14		**39**	
15		**40**	
16		**41**	
17		**42**	
18		**43**	
19		**44**	
20		**45**	
21		**46**	
22		**47**	
23		**48**	
24		**49**	
25		**50**	

6

Ground Cover	**0.5**	**Quadrat 2**	**Quadrat 3**	**Quadrat 4**	**Quadrat 5**	**Average**
Native perennial grass cover	20%	45%	0%	0%	0%	13%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	35%	10%	0%	0%	0%	9%
Native shrubs	0%	0%	2%	0%	5%	1%
Non-native grass	0%	0%	40%	0%	0%	8%
Non native forbs and shrubs	35%	0%	0%	60%	45%	28%
Litter	10%	45%	58%	40%	50%	41%
Rock	0%	0%	0%	0%	0%	
Bare Ground	0%	0%	0%	0%	0%	
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	510mm	**Number of large eucalypt trees:**	Corymbia citriodora = 670mm, 660mm, 520mm, 510mm; Corymbia tessellaris = 510mm; Lophostemon suaveolens = 530mm; Eucalyptus melanophloia = 680mm; (Total = 7)
Non- Eucalypt Large tree DBH benchmark used:	360mm	**Number of large non eucalypt trees:**	0
Total number of large trees recorded:	7		
Total Number Large Trees per ha:	14		

Median Tree Canopy Height Measurements	**Canopy:**	22	**Sub-canopy:**	10	**Emergent:**	NA

Percentage of ecologically dominant layer species regenerating:	**50%**

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	**Canopy:**	48.6%	**Sub-canopy:**	37.00%	**Emergent:**	NA
Shrub canopy cover %	7.70%					

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
T1	0.0	2.8	2.8	**T2**	0.0	2.6	2.6
T1	4.6	6.7	2.1	**T2**	4.9	5.7	0.8
T1	17.6	24.2	6.6	**T2**	14.7	22.7	8.0
T1	31.2	35.4	4.2	**T2**	23.5	24.8	1.3
T1	49.9	54.6	4.7	**T2**	24.8	29.4	4.6
T1	54.6	62.7	8.1	**T2**	35.9	43.7	7.8
T1	63.5	71.0	7.5	**T2**	49.8	51.4	1.6
T1	82.4	90.6	8.2	**T2**	52.4	56.0	3.6
T1	95.6	100.0	4.4	**T2**	57.1	59.1	2.0
T1			0.0	**T2**	91.8	96.5	4.7
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
Shrub	10.3	12.7	2.4	**Shrub**	77.1	77.7	0.6
Shrub	22.0	22.8	0.8	**Shrub**			0.0
Shrub	26.1	26.3	0.2	**Shrub**			0.0
Shrub	37.6	38.9	1.3	**Shrub**			0.0
Shrub	40.9	41.4	0.5	**Shrub**			
Shrub	51.6	52.5	0.9	**Shrub**			
Shrub	53.4	53.7	0.3	**Shrub**			
Shrub	57.2	57.6	0.4	**Shrub**			
Shrub	65.6	66.1	0.3	**Shrub**			

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present *If trees are in the same layer and continuous along the transect you can group them

Part I: GHFF Stem Count

Species Name	Stem Count
Lophostemon suaveolens	4
Corymbia citriodora	21
Corymbia tessellaris	18
Angophora subvelutina	2
Eucalyptus melanophloia	
Total	45
Total per hecatre	225

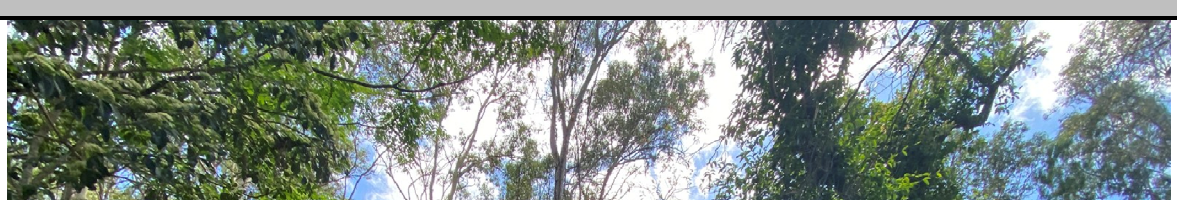
Part J: SAT Survey Results

SAT Survey ID	Sat 2 at Transect 2			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Corymbia citriodora*	Spotted Gum	340	N
2	*Corymbia citriodora*	Spotted Gum	300	N
3	*Corymbia citriodora*	Spotted Gum	180	N
4	*Corymbia citriodora*	Spotted Gum	200	N
5	*Lophostemon suaved*	Swamp Box	330	N
6	*Corymbia citriodora*	Spotted Gum	260	N
7	*Corymbia citriodora*	Spotted Gum	230	N
8	*Lophostemon suaved*	Swamp Box	180	N
9	*Corymbia citriodora*	Spotted Gum	150	N
10	*Corymbia tessellaris*	Moreton Bay Ash	290	N
11	*Corymbia citriodora*	Spotted Gum	300	N
12	*Corymbia tessellaris*	Moreton Bay Ash	240	N
13	*Corymbia citriodora*	Spotted Gum	350	N
14	*Corymbia tessellaris*	Moreton Bay Ash	160	N
15	*Corymbia citriodora*	Spotted Gum	210	N
16	*Corymbia citriodora*	Spotted Gum	460	N
17	*Lophostemon suaved*	Swamp Box	300	N
18	*Corymbia citriodora*	Spotted Gum	460	N
19	*Corymbia tessellaris*	Moreton Bay Ash	250	N
20	*Corymbia citriodora*	Spotted Gum	230	N
21	*Corymbia citriodora*	Spotted Gum	330	N
22	*Corymbia tessellaris*	Moreton Bay Ash	180	N
23	*Corymbia citriodora*	Spotted Gum	470	N
24	*Eucalyptus tereticorn*	Forest Red Gum	350	N
25	*Corymbia tessellaris*	Moreton Bay Ash	250	N
26	*Corymbia tessellaris*	Moreton Bay Ash	150	N
27	*Corymbia tessellaris*	Moreton Bay Ash	180	Y
28	*Corymbia citriodora*	Spotted Gum	120	N
29	*Corymbia tessellaris*	Moreton Bay Ash	180	N
30	*Eucalyptus tereticorn*	Forest Red Gum	360	N
Total				1/30

Attach Landscape Photos Here

North

South



East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T3	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Lisa Fry	Date	11/10/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
1	57.09 hectares	12.11.6	12

Site description and Location (including details of discrete polygons within the assessment unit)
Polygon is mapped as containig a composite regional ecosystem community containing 60% RE12.11.6 and 40% RE12.11.7. Least Concern RE 12.11.6 is decribed as Corymbia citriodora, Eucalyptus crebra woodland on metamorphics +/- interbedded volcanics and Least Concern RE12.11.7 is decribed as Eucalyptus crebra woodland on metamorphics +/- interbedded volcanics. Species within teh polygon are reflective of LEast Concern RE12.11.6.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	5			EDL / Dom / R
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL/Dom/R
Scientific Name	*Lophostemon suaveolens*	Common Name	Swamp Box	EDL /R
Scientific Name	*Psydrax odrata*	Common Name	Shiny-leaved Canthium	
Scientific Name	*Eucalyptus crebra*	Common Name	Narrow-leaved Ironbark	EDL
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	8		
Scientific Name	*Acacia falcata*	Common Name	Sickle Wattle
Scientific Name	*Acacia leiocalyx*	Common Name	Early Flowering Black Wattle
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum
Scientific Name	*Acacia melanoxylon*	Common Name	Australian Blackwood
Scientific Name	*Jacksonia scoparia*	Common Name	Dogwood
Scientific Name	*Lophostemon suaveolens*	Common Name	Swamp Box
Scientific Name	*Psydrax odrata*	Common Name	Shiny-Leaved Canthium
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	3		
Scientific Name	*Aristida purpurea*	Common Name	Threeawn aristida
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name	*Themeda triandra*	Common Name	Kangaroo Grass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	15		
Scientific Name	*Lobelia purpurascens*	Common Name	White Root
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Parsonsia straminea*	Common Name	Monkey Rope
Scientific Name	*Dianella caerulea*	Common Name	Blue Flax-lily
Scientific Name	*Pandorea pandorana*	Common Name	Wonga Wonga Vine
Scientific Name	*Cyperus gracilis*	Common Name	Slender Sedge
Scientific Name	*Eustrephus latifolius*	Common Name	Wombat Berry
Scientific Name	*Cheilanthes distans*	Common Name	Bristle Cloak Fern
Scientific Name	*Stylidium graminifolium*	Common Name	Grass Triggerplant
Scientific Name	*Hybanthus stellarioides*	Common Name	Spade Flower
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Plectranthus sp.*	Common Name	Plectranthus
Scientific Name	*Wahlenbergia queenslandica*	Common Name	Blue Star
Scientific Name	*Glossocardia bidens*	Common Name	Native Cobbler's Pegs
Scientific Name	*Brachyscome microcarpa*	Common Name	Brisbane Daisy

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	45.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Chloris gayana*	Common Name	Rhodes Grass
Scientific Name	*Opuntia stricta*	Common Name	Common Pest Pear
Scientific Name	*Ochna serrulata*	Common Name	Ochna
Scientific Name	*Melinis repens*	Common Name	Red Natal Grass
Scientific Name	*Gomphocarpus physocarpus*	Common Name	Balloon Cotton Bush
Scientific Name	*Bidens pilosa*	Common Name	Cobbler's Pegs

Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)			
1	N/A	**26**	
2		**27**	
3		**28**	
4		**29**	
5		**30**	
6		**31**	
7		**32**	
8		**33**	
9		**34**	
10		**35**	
11		**36**	
12		**37**	
13		**38**	
14		**39**	
15		**40**	
16		**41**	
17		**42**	
18		**43**	
19		**44**	
20		**45**	
21		**46**	
22		**47**	
23		**48**	
24		**49**	
25		**50**	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	**Quadrat 1**	**Quadrat 2**	**Quadrat 3**	**Quadrat 4**	**Quadrat 5**	**Average**
Native perennial grass cover	75%	45%	70%	20%	0%	42%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	10%	10%	5%	25%	0%	10%
Native shrubs	0%	5%	0%	0%	30%	7%
Non-native grass	0%	0%	0%	15%	5%	4%
Non native forbs and shrubs	0%	0%	0%	5%	0%	1%
Litter	15%	40%	25%	35%	65%	36%
Rock	0%	0%	0%	0%	0%	
Bare Ground	0%	0%	0%	0%	0%	
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	500mm	**Number of large eucalypt trees:**	Corymbia citriodora = 560mm (total = 1)
Non- Eucalypt Large tree DBH benchmark used:	N/A	**Number of large non eucalypt trees:**	0
Total number of large trees recorded:	1		
Total Number Large Trees per ha:	2		

Median Tree Canopy Height Measurements	**Canopy:**	21	**Sub-canopy:**	8.25	**Emergent:**	NA

Percentage of ecologically dominant layer species regenerating:	**66%**

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	**Canopy:**	53.6%	**Sub-canopy:**	16.48%	**Emergent:**	
Shrub canopy cover %	14.48%					

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
T1	0.0	6.0	6.0	**T2**	0.0	3.1	3.1
T1	9.5	17.3	7.8	**T2**	55.7	57.9	2.2
T1	25.8	29.6	3.8	**T2**	61.0	63.4	2.4
T1	31.8	36.2	4.4	**T2**	63.4	67.0	3.6
T1	36.2	39.8	3.6	**T2**	87.9	91.0	3.1
T1	42.5	45.0	2.5	**T2**	94.4	96.5	2.1
T1	49.3	55.2	5.9	**T2**			0.0
T1	57.0	61.8	4.8	**T2**			0.0
T1	64.4	69.5	5.1	**T2**			0.0
T1	72.5	75.9	3.4	**T2**			0.0
T1	82.5	87.8	5.3	**T2**			0.0
T1	99.0	100.0	1.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
Shrub	0.0	1.5	1.5	**Shrub**	73.4	74.2	0.8
Shrub	7.0	7.4	0.4	**Shrub**	75.3	76.0	0.8
Shrub	10.6	11.1	0.5	**Shrub**	88.1	88.5	0.7
Shrub	16.8	18.0	1.2	**Shrub**	90.5	91.0	0.4
Shrub	20.6	21.4	0.8	**Shrub**	92.1	92.7	0.5
Shrub	48.4	49.1	0.7	**Shrub**	93.1	94.4	0.6
Shrub	64.7	66.5	1.8	**Shrub**	98.0	98.5	1.3
Shrub	67.8	68.5	1.2	**Shrub**			1.3

Part I: GHFF Stem Count

Species Name	Stem Count
Corymbia citriodora	90
Lophostemon suaveolens	3
Eucalyptus crebra	1
Alphitonia excelsa	2
Total	96
Total per hectare	480

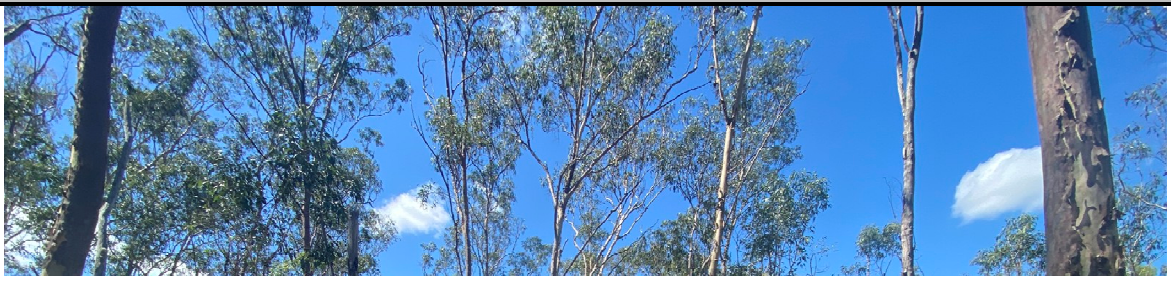
Part J: SAT Survey Results

SAT Survey ID	Sat 3 at Transect 3			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Corymbia tessellaris*	Moreton Bay Ash	240	N
2	*Corymbia tessellaris*	Moreton Bay Ash	320	N
3	*Corymbia tessellaris*	Moreton Bay Ash	250	N
4	*Corymbia tessellaris*	Moreton Bay Ash	200	N
5	*Corymbia tessellaris*	Moreton Bay Ash	320	N
6	*Corymbia tessellaris*	Moreton Bay Ash	350	N
7	*Corymbia tessellaris*	Moreton Bay Ash	200	N
8	*Corymbia tessellaris*	Moreton Bay Ash	300	N
9	*Corymbia tessellaris*	Moreton Bay Ash	200	N
10	*Corymbia tessellaris*	Moreton Bay Ash	310	N
11	*Corymbia tessellaris*	Moreton Bay Ash	270	N
12	*Corymbia tessellaris*	Moreton Bay Ash	180	N
13	*Corymbia tessellaris*	Moreton Bay Ash	320	N
14	*Corymbia tessellaris*	Moreton Bay Ash	220	N
15	*Corymbia tessellaris*	Moreton Bay Ash	300	N
16	*Corymbia tessellaris*	Moreton Bay Ash	300	N
17	*Corymbia tessellaris*	Moreton Bay Ash	290	N
18	*Corymbia tessellaris*	Moreton Bay Ash	200	N
19	*Corymbia tessellaris*	Moreton Bay Ash	370	N
20	*Corymbia tessellaris*	Moreton Bay Ash	220	N
21	*Corymbia tessellaris*	Moreton Bay Ash	250	N
22	*Corymbia tessellaris*	Moreton Bay Ash	220	N
23	*Corymbia tessellaris*	Moreton Bay Ash	240	N
24	*Corymbia tessellaris*	Moreton Bay Ash	500	N
25	*Corymbia tessellaris*	Moreton Bay Ash	380	N
26	*Corymbia tessellaris*	Moreton Bay Ash	200	N
27	*Corymbia tessellaris*	Moreton Bay Ash	250	N
28	*Corymbia tessellaris*	Moreton Bay Ash	270	N
29	*Corymbia tessellaris*	Moreton Bay Ash	160	N
30	*Corymbia tessellaris*	Moreton Bay Ash	190	N
Total				0/30

Attach Landscape Photos Here

North

South



East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T4	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Lisa Fry	Date	11/10/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
10	11.59 hectares	12.3.3	12

Site description and Location (including details of discrete polygons within the assessment unit)
Polygon is mapped as Category X (non-remnant) vegetation. Preclear regional ecosytem ha smapped Endangered RE12.3.3 described as Eucalyptus tereticornis woodland on Quaternary alluvium. Lareg scattered trees within the adjacent road reserve would suggest this regional ecossytem was once presnet in the area however very little vegetation remains.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	2			EDL / Dom / R
Scientific Name	*Angophora subvelutina*	Common Name	Broad-leaved Apple	
Scientific Name	*Eucalyptus tereticornis*	Common Name	Forest Red Gum	EDL
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	1		
Scientific Name	*Acacia melanoxylon*	Common Name	Australian Blackwood
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:				
Total number of species	1			
Scientific Name	*Leersia hexandra*	Common Name	Swamp Rice Grass	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Forbs and others (non grass ground) species richness:			
Total number of species	6		
Scientific Name	*Baumea articulata*	Common Name	Jointed Twigrush
Scientific Name	*Ranunculus lappaceus*	Common Name	Common Buttercup
Scientific Name	*Cyperus polystachyos*	Common Name	Bunchy Sedge
Scientific Name	*Persicaria lapathifolia*	Common Name	Smartweed
Scientific Name	*Stylidium graminifolium*	Common Name	Grass Triggerplant
Scientific Name	*Typha domingensis*	Common Name	Narrow Leaf Cumbungi
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	65.00%		
Scientific Name	*Verbena bonariensis*	Common Name	Purple-top Verbena
Scientific Name	*Crassocephalum crepidioides*	Common Name	Thickhead
Scientific Name	*Conyza sumatrensis*	Common Name	Tall Fleabane
Scientific Name	*Lespedeza thunbergii*	Common Name	Bush Clover
Scientific Name	*Phytolacca octandra*	Common Name	Inkweed
Scientific Name	*Ambrosia artemisiifolia*	Common Name	Annual Ragweed
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)			
1	N/A	26	
2		27	
3		28	
4		29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

6

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	0%	0%	0%	15%	0%	3%
Native other grass	15%	10%	0%	0%	10%	7%
Native forbs and other species	0%	0%	0%	0%	0%	
Native shrubs	0%	0%	0%	0%	0%	
Non-native grass	0%	0%	45%	0%	0%	9%
Non native forbs and shrubs	85%	90%	50%	85%	90%	80%
Litter	0%	0%	5%	0%	0%	1%
Rock	0%	0%	0%	0%	0%	
Bare Ground	0%	0%	0%	0%	0%	
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	540mm	Number of large eucalypt trees:	Eucalyptus tereticornis = 1250; (total = 1)
Non- Eucalypt Large tree DBH benchmark used:	N/A	Number of large non eucalypt trees:	0
Total number of large trees recorded:	1		
Total Number Large Trees per ha:	2		

Median Tree Canopy Height Measurements	Canopy:	32	Sub-canopy:	NA	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	0%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	0.0%	Sub-canopy:	0.00%	Emergent:	NA
Shrub canopy cover %	40.10%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	0.0	37.9	37.9	Shrub			0.0
Shrub	48.0	51.0	3.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			#REF!	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present *If trees are in the same layer and continuous along the transect you can group them

Part I: GHFF Stem Count

Species Name	Stem Count

Part J: SAT Survey Results

SAT Survey ID	NA			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*NA*	*NA*	*NA*	*NA*
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
Total				0/30

Attach Landscape Photos Here

North

South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T5	Job Number / Property	8418 - Offset Site

Part B - Site Data

Recorders	David Havill & Lisa Fry	Date	11/10/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
7	25.16 hectares	12.11.6	12

Site description and Location (including details of discrete polygons within the assessment unit)
Mapped as Category X (Non-remnant) vegetaion . Open paddock area. Preclear regional ecosystem maps Least Concern RE12.11.6 descirbed as Corymbia citriodora, Eucalyptus creba woodland on metamorphics +/- interbedded volcanics. Adjacent vegetation on the slope is consistant with this regional ecosystem community.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	2			EDL / Dom / R
Scientific Name	*Eucalyptus moluccana*	Common Name	Gum-topped Box	
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	2		
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	1		
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	8		
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Fimbristylis ferruginea*	Common Name	Fringed Rush
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name	*Aristida stricta*	Common Name	Threeawn Wire Grass
Scientific Name	*Hybanthus stellarioides*	Common Name	Spade Flower
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Tricoryne elatior*	Common Name	Tricoryne
Scientific Name	*Brunoniella australis*	Common Name	Blue Trumpet
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	55.00%		
Scientific Name	*Heliotropium amplexicaule*	Common Name	Blue Heliotrope
Scientific Name	*Dichondra repens*	Common Name	Kidney Weed
Scientific Name	*Gomphocarpus physocarpus*	Common Name	Balloon Cotton Bush
Scientific Name	*Sida cordifolia*	Common Name	Flannel weed
Scientific Name	*Cirsium vulgare*	Common Name	Spear Thistle
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Calyptocarpus vialis*	Common Name	Creeping Cinderella Weed
Scientific Name	*Hydrocotyle acutiloba*	Common Name	Pennywort
Scientific Name	*Oxalis stricta*	Common Name	Common Wood Sorrel
Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	62.00		
1	0.50	26	
2	0.70	27	
3	3.00	28	
4	0.50	29	
5	1.50	30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

6

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	5%	10%	50%	20%	7%	18%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	0%	15%	5%	5%	5%	6%
Native shrubs	0%	0%	0%	0%	0%	
Non-native grass	0%	0%	0%	0%	0%	
Non native forbs and shrubs	4%	55%	30%	25%	70%	37%
Litter	6%	5%	0%	20%	0%	6%
Rock	0%	0%	0%	0%	0%	
Bare Ground	85%	15%	15%	30%	18%	33%
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	500mm	Number of large eucalypt trees:	0
Non- Eucalypt Large tree DBH benchmark used:	NA	Number of large non eucalypt trees:	0
Total number of large trees recorded:	0		
Total Number Large Trees per ha:	0		

Median Tree Canopy Height Measurements	Canopy:		Sub-canopy:		Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	0

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	0.0%	Sub-canopy:	0.00%	Emergent:	NA
Shrub canopy cover %	2.40%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	17.3	18.0	0.7	Shrub			0.0
Shrub	19.3	21.0	1.7	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			
Shrub			0.0	Shrub			
Shrub			0.0	Shrub			
Shrub			0.0	Shrub			
Shrub			0.0	Shrub			

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present *If trees are in the same layer and continuous along the transect you can group them

Part I: GHFF Stem Count

Species Name	Stem Count
Eucalyptus moluccana	1

Total	1
Total per hectare	5

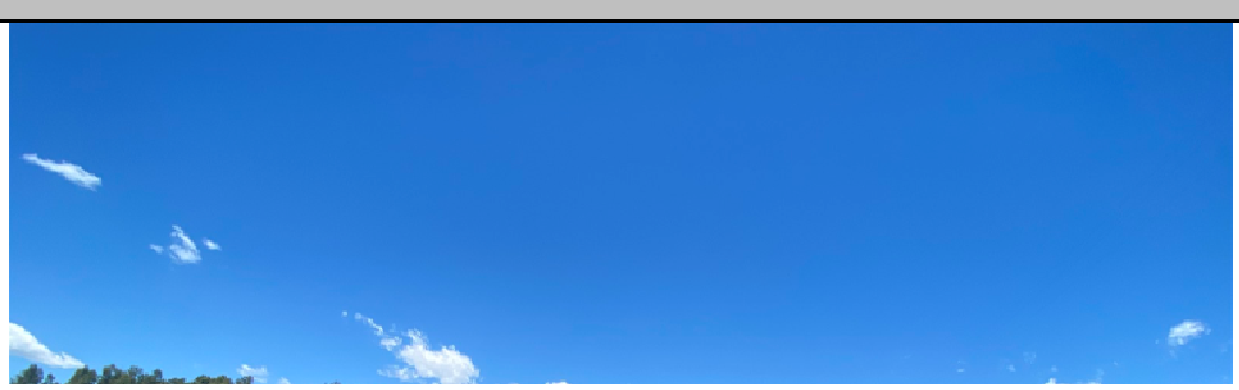
Part J: SAT Survey Results

SAT Survey ID	NA			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*NA*	*NA*	*NA*	*NA*
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
Total (/30)	0			

Attach Landscape Photos Here

North

South



East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T6	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Lisa Fry	Date	11/10/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
10	11.59 hectares	12.3.3	12

Site description and Location (including details of discrete polygons within the assessment unit)
Polygon mapped as Category X (non-remnant) vegetation. Site is open paddock. Preclear Regional Ecosystem maps Endangered RE12.3.3 derscribed as Eucalyptus tereticornis woodland on Quaternary alluvium. Species within the broader context are reflective of this regional ecosystem community.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	5			EDL / Dom / R
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash	EDL / Dom / R
Scientific Name	*Eucalyptus melanophloia*	Common Name	Silver-leaved Ironbark	EDL/R
Scientific Name	*Melia azedarach*	Common Name	White Cedar	R
Scientific Name	*Angophora subvelutina*	Common Name	Broad-leaved Apple	EDL
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala	R
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	3		
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala
Scientific Name	*Melia azedarach*	Common Name	White Cedar
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	5		
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name	*Aristida purpurea*	Common Name	Threeawn aristida
Scientific Name	*Leersia hexandra*	Common Name	Swamp Rice Grass
Scientific Name	*Eragrostis brownii*	Common Name	Brown's Lovegrass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	8		
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Juncus usitatus*	Common Name	Common Rush
Scientific Name	*Wahlenbergia stricta*	Common Name	Australian Blue Bell
Scientific Name	*Stylidium graminifolium*	Common Name	Grass Triggerplant
Scientific Name	*Adiantum atroviride*	Common Name	Maindenhair Fern
Scientific Name	*Cyperus involucratus*	Common Name	Umbrella Sedge
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Evolvulusalsinoides*	Common Name	Evolvulus
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	70.00%		
Scientific Name	*Cinnamomum camphora*	Common Name	Camphor Laurel
Scientific Name	*Erythrina crista-galli*	Common Name	Cockspur Coral Tree
Scientific Name	*Ludwigia longifolia*	Common Name	Primrose Willow
Scientific Name	*Ageratum houstonianum*	Common Name	Blue Billygoat weed
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Heliotropium amplexicaule*	Common Name	Blue Heliotrope
Scientific Name	*Opuntia stricta*	Common Name	Common Pest Pear
Scientific Name	*Gomphocarpus physocarpus*	Common Name	Balloon Cotton Bush
Scientific Name	*Hydrocotyle acutiloba*	Common Name	Pennywort
Scientific Name	*Cirsium vulgare*	Common Name	Spear Thistle
Scientific Name	*Verbena bonariensis*	Common Name	Purple-top Verbena

Scientific Name	*Cyperus polystachyos*	**Common Name**	Bunchy Sedge
Scientific Name	*Sida cordifolia*	**Common Name**	Flannel weed
Scientific Name	*Calyptocarpus vialis*	**Common Name**	Creeping Cinderella Weed
Scientific Name	*Murraya paniculata*	**Common Name**	Mock Orange
Scientific Name	*Solanum mauritianum*	**Common Name**	Wild Tobacco
Scientific Name	*Ulmus parvifolia*	**Common Name**	Lacebark Elm
Scientific Name	*Oxalis corniculata*	**Common Name**	Creeping Oxalis
Scientific Name	*Sporobolus africanus*	**Common Name**	Parramatta Grass

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	**162.00**		
1	0.60	**26**	
2	3.80	**27**	
3	1.70	**28**	
4	3.10	**29**	
5	0.70	**30**	
6	0.50	**31**	
7	1.00	**32**	
8	0.50	**33**	
9	4.30	**34**	
10		**35**	
11		**36**	
12		**37**	
13		**38**	
14		**39**	
15		**40**	
16		**41**	
17		**42**	
18		**43**	
19		**44**	
20		**45**	
21		**46**	
22		**47**	
23		**48**	
24		**49**	
25		**50**	

Ground Cover	**Quadrat 1**	**Quadrat 2**	**Quadrat 3**	**Quadrat 4**	**Quadrat 5**	**Average**
Native perennial grass cover	25%	80%	80%	50%	90%	65%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	15%	10%	0%	0%	0%	5%
Native shrubs	0%	0%	0%	0%	0%	
Non-native grass	0%	0%	0%	0%	7%	1%
Non native forbs and shrubs	30%	5%	15%	45%	3%	20%
Litter	20%	0%	5%	5%	0%	6%
Rock	0%	0%	0%	0%	0%	
Bare Ground	10%	5%	0%	0%	0%	3%
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	540mm	**Number of large eucalypt trees:**	Eucalyptus melanophloia = 710mm; Angophora subvelutina = 770mm, 680mm; Corymbia tessellaris = 1200mm; (Total = 4)
Non- Eucalypt Large tree DBH benchmark used:	NA	**Number of large non eucalypt trees:**	0
Total number of large trees recorded:	4		
Total Number Large Trees per ha:	8		

Median Tree Canopy Height Measurements	**Canopy:**	19.50	**Sub-canopy:**	12	**Emergent:**	NA

Percentage of ecologically dominant layer species regenerating:	**66%**

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	**Canopy:**	36.8%	**Sub-canopy:**	15.70%	**Emergent:**	NA
Shrub canopy cover %	8.20%					

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
T1	5.6	11.0	5.4	**T2**	0.0	1.2	1.2
T1	14.6	30.0	15.4	**T2**	5.4	7.5	2.1
T1	71.0	87.0	16.0	**T2**	74.3	79.0	4.7
T1			0.0	**T2**	79.0	81.3	2.3
T1			0.0	**T2**	85.0	90.4	5.4
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
Shrub	1.0	1.5	0.5	**Shrub**	87.8	88.7	0.9
Shrub	1.7	2.7	1.0	**Shrub**			0.0
Shrub	5.6	6.5	0.9	**Shrub**			0.0
Shrub	9.8	10.5	0.7	**Shrub**			0.0
Shrub	12.0	12.5	0.5	**Shrub**			

Shrub	14.2	15.7	1.5	**Shrub**			
Shrub	28.6	29.1	0.5	**Shrub**			
Shrub	32.5	33.7	1.2	**Shrub**			
Shrub	35.9	36.4	0.5	**Shrub**			

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present *If trees are in the same layer and continuous along the transect you can group them

Part I: GHFF Stem Count

Species Name	Stem Count
Corymbia tessellaris	27
Eucalyptus melanophloia	1
Melia azedarach	1
Total	29
Trotal per hecatre	145

Part J: SAT Survey Results

SAT Survey ID	Sat 4 at Transect 6			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Corymbia tessellaris*	Moreton Bay Ash	160	N
2	*Corymbia tessellaris*	Moreton Bay Ash	120	N
3	*Corymbia tessellaris*	Moreton Bay Ash	120	N
4	*Corymbia tessellaris*	Moreton Bay Ash	150	N
5	*Corymbia tessellaris*	Moreton Bay Ash	190	N
6	*Corymbia tessellaris*	Moreton Bay Ash	170	N
7	*Corymbia tessellaris*	Moreton Bay Ash	130	N
8	*Corymbia tessellaris*	Moreton Bay Ash	270	N
9	*Corymbia tessellaris*	Moreton Bay Ash	180	N
10	*Corymbia tessellaris*	Moreton Bay Ash	200	N
11	*Corymbia tessellaris*	Moreton Bay Ash	170	N
12	*Corymbia tessellaris*	Moreton Bay Ash	130	N
13	*Corymbia tessellaris*	Moreton Bay Ash	150	N
14	*Corymbia tessellaris*	Moreton Bay Ash	300	N
15	*Corymbia tessellaris*	Moreton Bay Ash	370	N
16	*Corymbia tessellaris*	Moreton Bay Ash	160	N
17	*Corymbia tessellaris*	Moreton Bay Ash	470	N
18	*Corymbia tessellaris*	Moreton Bay Ash	420	N
19	*Corymbia tessellaris*	Moreton Bay Ash	590	N
20	*Lophostemon confer*	Brush Box	1080	N
21	*Corymbia tessellaris*	Moreton Bay Ash	420	N
22	*Corymbia intermedia*	Pink Bloodwood	830	N
23	*Corymbia tessellaris*	Moreton Bay Ash	450	N
24	*Corymbia tessellaris*	Moreton Bay Ash	350	N
25	*Corymbia tessellaris*	Moreton Bay Ash	190 100	N
26	*Corymbia tessellaris*	Moreton Bay Ash	280	N
27	*Corymbia tessellaris*	Moreton Bay Ash	200 160	N
28	*Angophora subveluti*	Broad-leaved Apple	960	N
29	*Corymbia tessellaris*	Moreton Bay Ash	200	N
30	*Corymbia tessellaris*	Moreton Bay Ash	310	N
Total	0			

Attach Landscape Photos Here

North

South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T7	Job Number / Property	8414 - Offset Site

Part B - Site Data

Recorders	David Havill & Lisa Fry	Date	11/10/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
AU4	58.79 hectares	12.11.6	12

Site description and Location (including details of discrete polygons within the assessment unit)
AU4 251°W Polygon mapped as Category X (non-remnant) vegetaion but is vegetated with species representative of Least Concern RE12.11.6 described as Corymbia citriodora, Eucalyptus crebra woodland on metamorphics +/- interbedded volcanics.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	3			EDL / Dom / R
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL / Dom / R
Scientific Name	*Acacia salicina*	Common Name	Sally Wattle	
Scientific Name	*Eucalyptus siderophloia*	Common Name	Grey Ironbark	EDL
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	4		
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum
Scientific Name	*Dodonaea viscosa*	Common Name	Hop Bush
Scientific Name	*Bracychiton populneus*	Common Name	Kurrajong
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	1		
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	14		
Scientific Name	*Eustrephus latifolius*	Common Name	Wombat Berry
Scientific Name	*Polymeria calycina*	Common Name	Slender Bindweed
Scientific Name	*Adiantum atroviride*	Common Name	Maidenhair Fern
Scientific Name	*Stylidium graminifolium*	Common Name	Grass Triggerplant
Scientific Name	*Whalenbergua queenslandica*	Common Name	Blue Star
Scientific Name	*Dianella caerulea*	Common Name	Blue Flax-lily
Scientific Name	*Hibbertia stricta*	Common Name	Hibbertia
Scientific Name	*Glycine clandestina*	Common Name	Twining glycine
Scientific Name	*Cheilanthes distans*	Common Name	Bristle Cloak Fern
Scientific Name	*Cyperus gracilis*	Common Name	Slender sedge
Scientific Name	*Neonotonia wightii*	Common Name	Green Glycine
Scientific Name	*Lomandra Multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Ajuga australis*	Common Name	Australian Bugle
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	55.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Melinis repens*	Common Name	Red Natal Grass
Scientific Name	*Praxelis clematidea*	Common Name	Praxelis
Scientific Name	*Lantana montevidensis*	Common Name	Creeping Lantana

Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	160.00		
1	2.00	26	
2	2.10	27	
3	3.00	28	
4	0.50	29	
5	3.20	30	
6	0.80	31	
7	0.70	32	
8	1.80	33	
9	1.90	34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	0%	3%	8%	6%	10%	5%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	7%	4%	5%	2%	12%	6%
Native shrubs	0%	5%	0%	0%	0%	1%
Non-native grass	0%	0%	0%	0%	0%	
Non native forbs and shrubs	3%	3%	0%	4%	0%	2%
Litter	10%	5%	7%	18%	8%	10%
Rock	0%	0%	0%	0%	0%	
Bare Ground	80%	80%	80%	70%	70%	76%
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	500mm	Number of large eucalypt trees:	0
Non- Eucalypt Large tree DBH benchmark used:	N/A	Number of large non eucalypt trees:	0
Total number of large trees recorded:	0		
Total Number Large Trees per ha:	0		

Median Tree Canopy Height Measurements	Canopy:	19	Sub-canopy:	9.00	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	50%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	45.5%	Sub-canopy:	10.80%	Emergent:	
Shrub canopy cover %	9.00%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	0.0	2.8	2.8	T2	14.5	15.6	1.1
T1	8.0	13.3	5.3	T2	17.0	19.2	2.2
T1	14.4	19.0	4.6	T2	44.2	44.8	0.6
T1	20.2	21.9	1.7	T2	64.7	68.0	3.3
T1	25.0	29.0	4.0	T2	79.5	83.1	3.6
T1	33.3	40.9	7.6	T2			0.0
T1	50.0	56.8	6.8	T2			0.0
T1	65.9	69.1	3.2	T2			0.0
T1	72.0	79.7	7.7	T2			0.0
T1	98.2	100.0	1.8	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	20.9	21.2	0.3	Shrub			0.0
Shrub	30.3	32.0	1.7	Shrub			0.0
Shrub	39.7	41.3	1.6	Shrub			0.0
Shrub	42.3	43.4	1.1	Shrub			0.0
Shrub	48.1	48.6	0.5	Shrub			0.0
Shrub	63.9	65.7	1.8	Shrub			0.0
Shrub	71.2	72.2	1.0	Shrub			0.0

Shrub	78.0	79.0	1.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. If trees are in the same layer and continuous along the transect you can group them.

Part I: GHFF Stem Count

Species Name	Stem Count
Corymbia citriodora	69
Eucalyptus siderophloia	7
Total	76
Total per hecatre	380

Part J: SAT Survey Results

SAT Survey ID	SAT 5 at Transect 7			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Coymbia citriodra*	Spotted Gum	230	N
2	*Eucalyptus siderophloia*	Grey Ironbark	120	N
3	*Coymbia citriodra*	Spotted Gum	200	N
4	*Coymbia citriodra*	Spotted Gum	250	N
5	*Coymbia citriodra*	Spotted Gum	180	N
6	*Coymbia citriodra*	Spotted Gum	270	N
7	*Eucalyptus siderophloia*	Grey Ironbark	110	N
8	*Coymbia citriodra*	Spotted Gum	200	N
9	*Coymbia citriodra*	Spotted Gum	170	N
10	*Coymbia citriodra*	Spotted Gum	190	N
11	*Coymbia citriodra*	Spotted Gum	170	N
12	*Eucalyptus siderophloia*	Grey Ironbark	130	N
13	*Coymbia citriodra*	Spotted Gum	190	N
14	*Coymbia citriodra*	Spotted Gum	250	N
15	*Coymbia citriodra*	Spotted Gum	150	N
16	*Coymbia citriodra*	Spotted Gum	310	N
17	*Coymbia citriodra*	Spotted Gum	180	N
18	*Eucalyptus siderophloia*	Grey Ironbark	150	N
19	*Coymbia citriodra*	Spotted Gum	250	N
20	*Coymbia citriodra*	Spotted Gum	270	N
21	*Coymbia citriodra*	Spotted Gum	170	N
22	*Coymbia citriodra*	Spotted Gum	240	N
23	*Coymbia citriodra*	Spotted Gum	180	N
24	*Coymbia citriodra*	Spotted Gum	200	N
25	*Coymbia citriodra*	Spotted Gum	310	N
26	*Eucalyptus siderophloia*	Grey Ironbark	120	N
27	*Coymbia citriodra*	Spotted Gum	290	N
28	*Eucalyptus siderophloia*	Grey Ironbark	170	N
29	*Coymbia citriodra*	Spotted Gum	180	N
30	*Coymbia citriodra*	Spotted Gum	230	N
Total				0/30

Attach Landscape Photos Here

North

South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T8	Job Number / Property	8418 - Offset Site

Part B - Site Data

Recorders	David Havill & Lisa Fry	Date	11/10/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
AU7	25.16 hectares	12.11.6	12

Site description and Location (including details of discrete polygons within the assessment unit)
AU7 - Non remnant (paddock) 288°W Check RE's. Polygon is mapped as Category X with preclear mapping containing Least Concern RE12.11.6 described as Corymbia citriodora, Eucalyptus crebra woodland on metamorphics +/- interbedded volcanics.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	0			EDL / Dom / R
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	2		
Scientific Name	*Trema tomentosa*	Common Name	Poinson Peach
Scientific Name	*Ficus coronata*	Common Name	Sandpaper Fig
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	1		
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	2		
Scientific Name	*Cyperus gracilis*	Common Name	Slender Sedge
Scientific Name	*Polymeria calycina*	Common Name	Slender Bindweed
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	85.00%		
Scientific Name	*Solanum mauritianum*	Common Name	Wild Tobacco
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Cirsium vulgare*	Common Name	Spear Thistle
Scientific Name	*Dichondra repens*	Common Name	Kidney Weed
Scientific Name	*Gomphocarpus physocarpus*	Common Name	Balloon Cotton Bush
Scientific Name	*Tagetes minuta*	Common Name	Stinking Roger
Scientific Name	*Centella asiatica*	Common Name	Indian pennywort
Scientific Name	*Hrdrocotyle acutiloba*	Common Name	Pennywort
Scientific Name	*Sida rhombifolia*	Common Name	Common Sida

Scientific Name	*Oxalis corniculata*	**Common Name**	Creeping Oxalis
Scientific Name	*Calyptocarpus vialis*	**Common Name**	Creeping Cinderella Weed
Scientific Name	*Sida Cordifolia*	**Common Name**	Flannel Weed
Scientific Name	*Heliotropium amplexicaule*	**Common Name**	Blue Heliotrope
Scientific Name	*Ambrosia artemisiifolia*	**Common Name**	Annual Ragweed
Scientific Name	*Urena lobata*	**Common Name**	Urena Burr
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	**6.00**		
1	0.60	**26**	
2		**27**	
3		**28**	
4		**29**	
5		**30**	
6		**31**	
7		**32**	
8		**33**	
9		**34**	
10		**35**	
11		**36**	
12		**37**	
13		**38**	
14		**39**	
15		**40**	
16		**41**	
17		**42**	
18		**43**	
19		**44**	
20		**45**	
21		**46**	
22		**47**	
23		**48**	
24		**49**	
25		**50**	

6

Ground Cover	**0.5**	**Quadrat 2**	**Quadrat 3**	**Quadrat 4**	**Quadrat 5**	**Average**
Native perennial grass cover	15%	70%	0%	0%	0%	17%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	0%	0%	0%	0%	0%	
Native shrubs	0%	0%	0%	0%	0%	
Non-native grass	0%	0%	0%	0%	0%	
Non native forbs and shrubs	70%	30%	85%	35%	85%	61%
Litter	0%	0%	15%	65%	15%	19%
Rock	0%	0%	0%	0%	0%	
Bare Ground	15%	0%	0%	0%	0%	3%
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	500mm	**Number of large eucalypt trees:**	0
Non- Eucalypt Large tree DBH benchmark used:	N/A	**Number of large non eucalypt trees:**	0
Total number of large trees recorded:	0		
Total Number Large Trees per ha:	0		

Median Tree Canopy Height Measurements	**Canopy:**	na	**Sub-canopy:**	NA	**Emergent:**	NA

Percentage of ecologically dominant layer species regenerating:	**0**

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	**Canopy:**	0.0%	**Sub-canopy:**	0.00%	**Emergent:**	NA
Shrub canopy cover %	0.00%					

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			
Shrub			0.0	**Shrub**			
Shrub			0.0	**Shrub**			
Shrub			0.0	**Shrub**			
Shrub			0.0	**Shrub**			

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. If trees are in the same layer and continuous along the transect you can group them.

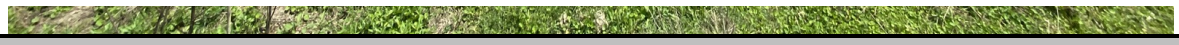
Part I: GHFF Stem Count

Species Name	Stem Count

<u>Attach Landscape Photos Here</u>

North

South



East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T9	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Lisa Fry & Sonya Kaur & Jonny Pickvance	Date	11/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
AU8	20.93 hectares	12.12.5	12

Site description and Location (including details of discrete polygons within the assessment unit)
AU8-non remnant 218°SW. Open paddock area with preclear maps containing Least Concern RE12.12.5 described as Corymbia citridora, Eucalyptus crebra woodland on Mesozoic to Proterozoic igneous rocks. Sourorunding vegetation is consistent with the preclear regional ecosystem community.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	1			EDL / Dom / R
Scientific Name	*Ficus rubignosa*	Common Name	Port Jackson Fig	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	1		
Scientific Name	*Eucalyptus melanophloia*	Common Name	Silver-leaved Ironbark
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	4		
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name	*Eragrostis brownii*	Common Name	Brown's Lovegrass
Scientific Name	*Aristida stricta*	Common Name	Threeawn aristida
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	6		
Scientific Name	*Murdannia graminea*	Common Name	Slug Herb
Scientific Name	*Fimbristylis nutans*	Common Name	A Fringe Rush
Scientific Name	*Cyperus gracilis*	Common Name	Slender Sedge
Scientific Name	*Glycine tomentella*	Common Name	Glycine
Scientific Name	*Wahlenbergia queenslandica*	Common Name	Blue Star
Scientific Name	*Stylidium graminifolium*	Common Name	Grass Triggerplant
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	65.00%		
Scientific Name	*Verbena bonariensis*	Common Name	Purple-top Verbena
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Sporobolus creber*	Common Name	Slender Rats Tail Grass
Scientific Name	*Gomphocarpus physocarpus*	Common Name	*Balloon Cotton Bush*
Scientific Name	*Bidens pilosa*	Common Name	Cobbler's Pegs
Scientific Name	*Oxalis corniculata*	Common Name	Creeping Oxalis
Scientific Name	*Sida cordifolia*	Common Name	Flannel weed

Scientific Name	*Crassocephalum crepidioides*	Common Name	Thickhead
Scientific Name	*Dichondra repens*	Common Name	Kidney Weed
Scientific Name	*Cirsium vulgare*	Common Name	Spear Thistle
Scientific Name	*Sporobolus africanus*	Common Name	Parramatta Grass

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)			
1	0.00	26	
2		27	
3		28	
4		29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	45%	75%	65%	25%	80%	58%
Native other grass						
Native forbs and other species	0%	0%	0%	10%	0%	2%
Native shrubs						
Non-native grass	45%	15%	0%	20%	15%	19%
Non native forbs and shrubs	10%	10%	35%	0%	5%	12%
Litter	0%	0%	0%	45%	0%	9%
Rock						
Bare Ground						
Cryptogram						
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	410mm	Number of large eucalypt trees:	0
Non- Eucalypt Large tree DBH benchmark used:	na	Number of large non eucalypt trees:	0
Total number of large trees recorded:	0		
Total Number Large Trees per ha:	0		

Median Tree Canopy Height Measurements	Canopy:	0	Sub-canopy:	6.50	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	0

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	0.0%	Sub-canopy:	11.30%	Emergent:	
Shrub canopy cover %	1.60%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1			0.0	T2	86.5	97.8	11.3
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	53.8	55.4	1.6	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0

Part I: GHFF Stem Count

Species Name	Stem Count
Ficus rubignosa	1
Total	1
Total per hecatre	5

Attach Landscape Photos Here

North

South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T10	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Eliksa Engeman	Date	14/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
8	20.93	12.12.5	12

Site description and Location (including details of discrete polygons within the assessment unit)
Open paddock, some scattered mature trees. No recruitment some fire damage. Mapped as Category X (non-remnant) vegetation. Preclear regional ecosystem maps Least Concern RE12.12.5 described as Corymbia citriodora, Eucalyptus crebra woodland on Mesozoic to Proterozoic igneous rocks.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	3			EDL / Dom / R
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL
Scientific Name	*Corymbia intermedia*	Common Name	Pink Bloodwood	EDL
Scientific Name	*Angophora subvelutina*	Common Name	Broad-leaved Apple	EDL
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	0		
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	2		
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name	*Aristida purpurea*	Common Name	Threeawn Aristida
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	2		
Scientific Name	*Fimbristylis nutans*	Common Name	A Fringe Rush
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	70.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Glandularia aristigera*	Common Name	Mayne's Pest
Scientific Name	*Solanum seaforthianum*	Common Name	Brazilian Nightshade
Scientific Name	*Oxalis corniculata*	Common Name	Creeping Oxalis
Scientific Name	*Calyptocarpus vialis*	Common Name	Creeping Cinderella Weed
Scientific Name	*Sporobolus africanus*	Common Name	Parramatta Grass
Scientific Name	*Bidens pilosa*	Common Name	Cobbler's Pegs
Scientific Name	*Asclepias curassavica*	Common Name	Red-headed Cotton Bush
Scientific Name	*Cyperus polystachyos*	Common Name	Bunchy Sedge
Scientific Name	*Centella asiatica*	Common Name	Indian Pennywort
Scientific Name	*Hydrocotyle acutiloba*	Common Name	Pennywort

Scientific Name	*Sida cordifolia*	Common Name	Flanned Weed

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	16.00		
1	1.60	26	
2		27	
3		28	
4		29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

6

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	10%	10%	20%	5%	40%	17%
Native other grass						
Native forbs and other species	5%	25%	0%	0%	15%	9%
Native shrubs						
Non-native grass						
Non native forbs and shrubs	10%	20%	45%	80%	5%	32%
Litter	15%	5%	15%	0%	0%	7%
Rock						
Bare Ground	60%	40%	20%	15%	40%	35%
Cryptogram						
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	410mm	Number of large eucalypt trees:	0
Non- Eucalypt Large tree DBH benchmark used:	0	Number of large non eucalypt trees:	0
Total number of large trees recorded:	0		
Total Number Large Trees per ha:	0		

Median Tree Canopy Height Measurements	Canopy:	18	Sub-canopy:	NA	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	0

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	12.3%	Sub-canopy:	0.00%	Emergent:	NA
Shrub canopy cover %	0.00%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	18.7	31.0	12.3	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. If trees are in the same layer and continuous along the transect you can group them.

Part I: GHFF Stem Count

Species Name	Stem Count
Corymbia citriodora	1

Total	1
Total per hecatre	5

Attach Landscape Photos Here

North

South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T11	Job Number / Property	8418 - Offset Site

Part B - Site Data

Recorders	David Havill & Eliksa Engeman	Date	14/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
5	27.09 hectares	12.12.5	12

Site description and Location (including details of discrete polygons within the assessment unit)
81°W towards crest of hill exposed surface rocks. Mapped as Category X (non-remnant) vegetation however contains vegetation representative of Least Concern RE12.12.5 described as Corymbia citridora, Eucalyptus crebra woodland on Mesozoic to Proterozoic igneous rocks.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	5			EDL / Dom / R
Scientific Name	*Corymbia intermedia*	Common Name	Pink Bloodwood	EDL / R
Scientific Name	*Eucalyptus crebra*	Common Name	Narrow Leaf Ironbark	EDL / Dom / R
Scientific Name	*Brachychiton populneus*	Common Name	Kurrajong	
Scientific Name	*Corymbia tesselaris*	Common Name	Moreton Bay Ash	
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	4		
Scientific Name	*Corymbia intermedia*	Common Name	Pink Bloodwood
Scientific Name	*Eucalyptus siderophloia*	Common Name	Grey Ironbark
Scientific Name	*Ficus coronata*	Common Name	Sandpaper Fig
Scientific Name	*Xanthorrhoea glauca*	Common Name	Grass Tree
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	5		
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name	*Aristida purpurea*	Common Name	Threeawn Arisitida
Scientific Name	*Eragrostis brownii*	Common Name	Brown's Love Grass
Scientific Name	*Themeda triandra*	Common Name	Kangaroo Grass
Scientific Name	*Heteropogon contortus*	Common Name	Black Spear Grass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	5		
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Desmodium rhytidophyllum*	Common Name	Hairy Trefoil
Scientific Name	*Cyperus gracilis*	Common Name	Slender Sedge
Scientific Name	*Wahlenbergia queenslandica*	Common Name	Blue Star
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	60.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Calyptocarpus vialis*	Common Name	Creeping Cinderella Weed
Scientific Name	*Macroptilium lathyroides*	Common Name	Phasey Bean
Scientific Name	*Melinis repens*	Common Name	Red Natal Grass
Scientific Name	*Oxalis corniculata*	Common Name	Creeping Oxalis
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	395.50		
1	2.50	26	
2	1.20	27	
3	0.80	28	
4	1.40	29	
5	0.50	30	
6	0.90	31	
7	1.30	32	
8	6.50	33	
9	4.80	34	
10	2.50	35	
11	1.00	36	
12	2.00	37	
13	0.75	38	
14	1.20	39	
15	1.30	40	
16	3.20	41	
17	1.80	42	
18	4.60	43	
19	0.50	44	
20	0.80	45	
21		46	
22		47	
23		48	
24		49	
25		50	

6

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	15%	5%	5%	10%	13%	10%
Native other grass						
Native forbs and other species	20%	5%	7%	15%	2%	10%
Native shrubs						
Non-native grass						
Non native forbs and shrubs	0%	0%	3%	0%	0%	1%
Litter	40%	5%	25%	30%	0%	20%
Rock	0%	30%	45%	0%	45%	24%
Bare Ground	25%	55%	15%	45%	40%	36%
Cryptogram						
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	410mm	Number of large eucalypt trees:	Eucalyptus crebra = 420mm; (total = 1)
Non- Eucalypt Large tree DBH benchmark used:	0	Number of large non eucalypt trees:	0
Total number of large trees recorded:	1		
Total Number Large Trees per ha:	2		

Median Tree Canopy Height Measurements	Canopy:	20	Sub-canopy:	10	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	100%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	18.2%	Sub-canopy:	45.00%	Emergent:	NA
Shrub canopy cover %	8.90%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	21.0	27.4	6.4	T2	0.0	1.8	1.8
T1	35.3	39.3	4.0	T2	5.7	7.8	2.1
T1	78.7	86.5	7.8	T2	7.8	10.7	2.9
T1			0.0	T2	11.5	17.2	5.7
T1			0.0	T2	20.0	21.1	1.1
T1			0.0	T2	25.0	27.6	2.6
T1			0.0	T2	30.9	32.8	1.9
T1			0.0	T2	48.0	50.0	2.0
T1			0.0	T2	50.4	54.7	4.3
T1			0.0	T2	58.0	63.1	5.1
T1			0.0	T2	66.1	69.9	3.8
T1			0.0	T2	86.5	93.0	6.5
T1			0.0	T2	94.8	100.0	5.2
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	2.7	3.0	0.3	Shrub			0.0
Shrub	5.4	6.1	0.7	Shrub			0.0
Shrub	18.4	19.0	0.6	Shrub			0.0
Shrub	25.0	27.6	2.6	Shrub			0.0
Shrub	29.9	30.7	0.8	Shrub			
Shrub	37.6	38.0	0.4	Shrub			
Shrub	48.5	49.6	1.1	Shrub			
Shrub	93.7	95.0	1.3	Shrub			
Shrub			1.1	Shrub			

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present *If trees are in the same layer and continuous along the transect you can group them

Part I: GHFF Stem Count

Species Name	Stem Count
Eucalyptus crebra	57
Corymbia intermedia	27

Corymbia tesselaris	4
Kurrajong	1
Total	89
Total per hectare	445

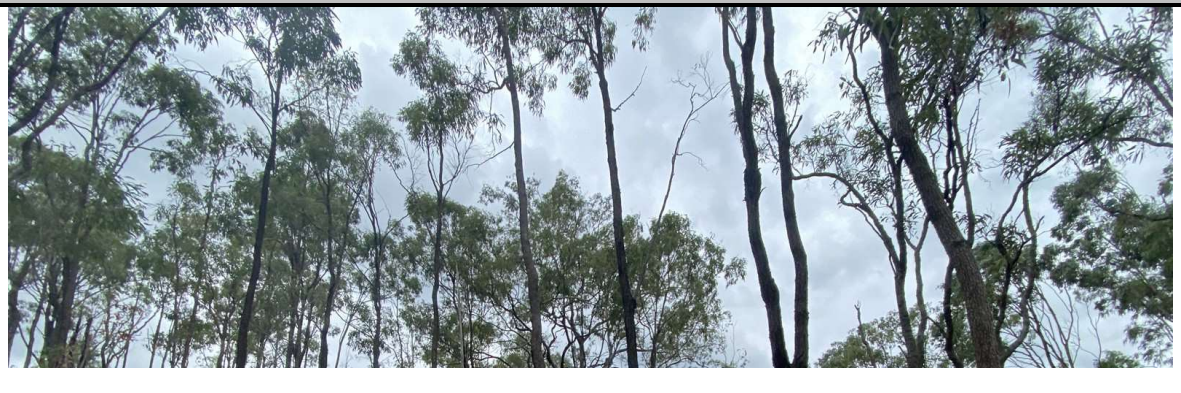
Part J: SAT Survey Results

SAT Survey ID	SAT 6 at Transect 11			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Eucalyptus siderophloia*	Grey Ironbark	*460*	*N*
2	*Corymbia tesselaris*	Moreton Bay Ash	120	*N*
3	*Eucalyptus siderophloia*	Grey Ironbark	160	*N*
4	*Eucalyptus siderophloia*	Grey Ironbark	180	*N*
5	*Corymbia tesselaris*	Moreton Bay Ash	100	*N*
6	*Eucalyptus siderophloia*	Grey Ironbark	180	Y
7	*Corymbia intermedia*	Pink Bloodwood	280	N
8	*Eucalyptus siderophloia*	Grey Ironbark	130	N
9	*Corymbia intermedia*	Pink Bloodwood	270	N
10	*Eucalyptus siderophloia*	Grey Ironbark	190	N
11	*Corymbia intermedia*	Pink Bloodwood	200	N
12	*Corymbia intermedia*	Pink Bloodwood	100	N
13	*Eucalyptus siderophloia*	Grey Ironbark	160	N
14	*Eucalyptus siderophloia*	Grey Ironbark	190	N
15	*Eucalyptus siderophloia*	Grey Ironbark	180	Y
16	*Eucalyptus siderophloia*	Grey Ironbark	160	N
17	*Eucalyptus siderophloia*	Grey Ironbark	150	N
18	*Corymbia tesselaris*	Moreton Bay Ash	180	N
19	*Corymbia intermedia*	Pink Bloodwood	240	N
20	*Eucalyptus siderophloia*	Grey Ironbark	140	N
21	*Corymbia intermedia*	Pink Bloodwood	130	N
22	*Eucalyptus siderophloia*	Grey Ironbark	140	N
23	*Eucalyptus siderophloia*	Grey Ironbark	290	N
24	*Eucalyptus siderophloia*	Grey Ironbark	140	N
25	*Corymbia intermedia*	Pink Bloodwood	300	N
26	*Eucalyptus siderophloia*	Grey Ironbark	100	N
27	*Eucalyptus siderophloia*	Grey Ironbark	130	N
28	*Eucalyptus siderophloia*	Grey Ironbark	180	N
29	*Eucalyptus siderophloia*	Grey Ironbark	140	N
30	*Corymbia intermedia*	Pink Bloodwood	130	N
Total (/30)	2/30			

Attach Landscape Photos Here

North

South



East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T12	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Eliksa Engeman	Date	14/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
8	20.93 hecatres	12.12.5	12

Site description and Location (including details of discrete polygons within the assessment unit)
Site is mapped as containing Landzone 3 however vegetation and soils are more consistent with RE12.12.5. Area is open padodck andmapped as non-remnant.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	2			EDL / Dom / R
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash	
Scientific Name	*Angophora subvelutina*	Common Name	Broad-leaved Apple	EDL / R
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	2		
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash
Scientific Name	*Angophora subvelutina*	Common Name	Broad-leaved Apple
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	4		
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name	*Aristida purpurea*	Common Name	Threeawn aristida
Scientific Name	*Themeda triandra*	Common Name	Kangaroo Grass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	5		
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Cyperus gracilis*	Common Name	Slender Sedge
Scientific Name	*Wahlenbergia queenslandica*	Common Name	Blue Star
Scientific Name	*Fimbristylis nutans*	Common Name	A Fringe Rush
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	80.00%		
Scientific Name	*lantana camara*	Common Name	Lantana
Scientific Name	*Centella asiatica*	Common Name	Indian Pennywort
Scientific Name	*Glandularia aristigera*	Common Name	Mayne's Pest
Scientific Name	*Verbena bonariensis*	Common Name	Purple-top Verbena
Scientific Name	*Gomphocarpus physocarpus*	Common Name	Balloon Cotton Bush
Scientific Name	*Sporobolus africanus*	Common Name	Parramatta Grass
Scientific Name	*Cyperus polystachyos*	Common Name	Bunchy Sedge
Scientific Name	*Passiflora suberosa*	Common Name	Corky Passion Vine
Scientific Name	*Asclepias curassavica*	Common Name	Red-headed Cotton Bush
Scientific Name	*Cirsium vulgare*	Common Name	Spear Thistle
Scientific Name	*Hydrocotyle acutiloba*	Common Name	Pennywort

Scientific Name	*Oxalis corniculata*	Common Name	Creeping Oxalis
Scientific Name	*Calyptocarpus vialis*	Common Name	Creeping Cinderella Weed
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)			
1	0.00	26	
2		27	
3		28	
4		29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	15%	75%	20%	20%	25%	31%
Native other grass						
Native forbs and other species	10%	2%	5%	5%	15%	7%
Native shrubs						
Non-native grass						
Non native forbs and shrubs	45%	20%	75%	70%	50%	52%
Litter	0%	3%	0%	5%	10%	4%
Rock						
Bare Ground	30%	0%	0%	0%	0%	6%
Cryptogram						
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	410mm	Number of large eucalypt trees:	Angophora subvelutina = 540mm (Total = 1)
Non- Eucalypt Large tree DBH benchmark used:	NA	Number of large non eucalypt trees:	0
Total number of large trees recorded:	1		
Total Number Large Trees per ha:	2		

Median Tree Canopy Height Measurements	Canopy:	19.00	Sub-canopy:	7	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	100%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	11.0%	Sub-canopy:	0.00%	Emergent:	NA
Shrub canopy cover %	6.70%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	59.0	70.0	11.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	0.0	1.1	1.1	Shrub			0.0
Shrub	19.3	21.2	1.9	Shrub			0.0
Shrub	30.0	31.8	1.8	Shrub			0.0
Shrub	61.7	63.0	1.3	Shrub			0.0

Shrub	84.8	85.4	0.6	**Shrub**			
Shrub			0.0	**Shrub**			
Shrub			0.0	**Shrub**			
Shrub			0.0	**Shrub**			
Shrub			0.0	**Shrub**			

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present *If trees are in the same layer and continuous along the transect you can group them

Part I: GHFF Stem Count

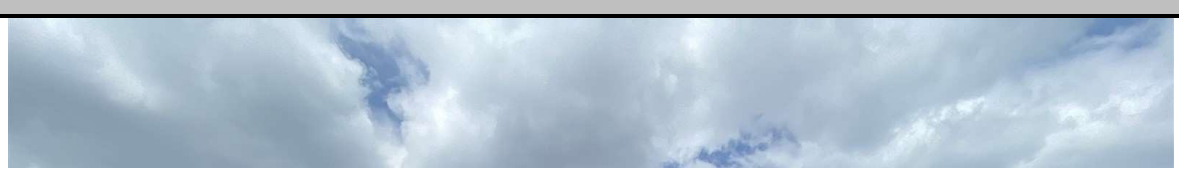
Species Name	Stem Count
Angophora subvelutina	1
Corymbia intermedia	1
Total	2
Total per hecatre	10

Attach Landscape Photos Here

North

South

East



West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T13	Job Number / Property	8414 - Offset Site

Part B - Site Data

Recorders	David Havill & Jonny Pickvance	Date	19/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
4	58.79 hectares	12.11.6	12

Site description and Location (including details of discrete polygons within the assessment unit)
Fire evidence lower slope. Polygon mapped as Category X (non-remnant) however contains vegetation representative of Least Concern RE12.11.6 described as Corymbia citriodora, Eucalyptus crebra woodland on metamorphics +/- interbedded volcanics.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	4			EDL / Dom / R
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL / Dom / R
Scientific Name	*Eucalyptus tereticornis*	Common Name	Forest Red Gum	EDL
Scientific Name	*Corymbia intermedia*	Common Name	Pink Bloodwood	
Scientific Name	*Corymbia tesselaris*	Common Name	Moreton Bay Ash	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	2		
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum
Scientific Name	*Melia azedarach*	Common Name	White Cedar
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	4		
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name	*Eragrostis brownii*	Common Name	Brown's Lovegrass
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name	*Aristida purpurea*	Common Name	Threeawn aristida
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	12		
Scientific Name	*Schenkia australis*	Common Name	Spike Centaury
Scientific Name	*Polymeria calycina*	Common Name	Slender Bindweed
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Cyperus gracilis*	Common Name	Slender Segdge
Scientific Name	*Lobelia purpurascens*	Common Name	White Root
Scientific Name	*wahlenbergia stricta*	Common Name	Australian Blue Bell
Scientific Name	*Wahlenbergia queenslandica*	Common Name	Blue Star
Scientific Name	*Hibbertia stricta*	Common Name	Hibbertia
Scientific Name	*Eustrephus latifolius*	Common Name	Wombat berry
Scientific Name	*Glycine clandestina*	Common Name	Twining glycine
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Fimbristylis nutans*	Common Name	A Fringe Rush
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	65.00%		
Scientific Name	*Sida cordifolia*	Common Name	Flannel Weed
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Conyza sumatrensis*	Common Name	Tall Fleabane
Scientific Name	*Glandularia aristigera*	Common Name	Mayne's Pest
Scientific Name	*Bidens pilosa*	Common Name	Cobbler's Pegs
Scientific Name	*Calyptocarpus vialis*	Common Name	Creeping Cinderella Weed
Scientific Name	*Sporobolus africanus*	Common Name	Parramatta Grass
Scientific Name	*Emilia sonchifolia*	Common Name	Emilia
Scientific Name	*Melinis repens*	Common Name	Red Natal Grass
Scientific Name	*Dichondra repens*	Common Name	Kidney Weed
Scientific Name	*Hydrocotyle acutiloba*	Common Name	Pennywort
Scientific Name		Common Name	

Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	320.00		
1	0.50	26	
2	3.20	27	
3	1.80	28	
4	1.40	29	
5	1.20	30	
6	1.30	31	
7	0.60	32	
8	2.60	33	
9	0.90	34	
10	1.40	35	
11	1.30	36	
12	1.60	37	
13	1.10	38	
14	2.50	39	
15	1.20	40	
16	5.60	41	
17	1.20	42	
18	2.60	43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	10%	2%	15%	30%	50%	21%
Native other grass						
Native forbs and other species						
Native shrubs						
Non-native grass						
Non native forbs and shrubs	10%	3%	75%	40%	20%	30%
Litter	40%	10%	7%	5%	10%	14%
Rock						
Bare Ground	40%	85%	3%	25%	20%	35%
Cryptogram						
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	500mm	Number of large eucalypt trees:	Eucalyptus tereticornis = 790mm (total = 1)
Non- Eucalypt Large tree DBH benchmark used:	N/A	Number of large non eucalypt trees:	0
Total number of large trees recorded:	1		
Total Number Large Trees per ha:	2		

Median Tree Canopy Height Measurements	Canopy:	22	Sub-canopy:	13.00	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	50%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	56.8%	Sub-canopy:	13.70%	Emergent:	
Shrub canopy cover %	1.10%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	0.0	8.5	8.5	T2	13.1	18.2	5.1
T1	8.5	11.3	2.8	T2	21.9	24.1	2.2
T1	13.6	19.8	6.2	T2	79.0	85.4	6.4
T1	22.3	23.6	1.3	T2			0.0
T1	29.5	38.3	8.8	T2			0.0
T1	53.0	58.9	5.9	T2			0.0
T1	68.1	72.5	4.4	T2			0.0
T1	73.0	83.9	10.9	T2			0.0
T1	92.0	100.0	8.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	26.5	27.1	0.6	Shrub			0.0
Shrub	96.0	96.5	0.5	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present *If trees are in the same layer and continuous along the transect you can group them

Part I: GHFF Stem Count

Species Name	Stem Count
Corymbia citriodora	30
Eucalyptus tereticornis	4
Corymbia intermedia	1
Total	35
Total Per Hectare	175

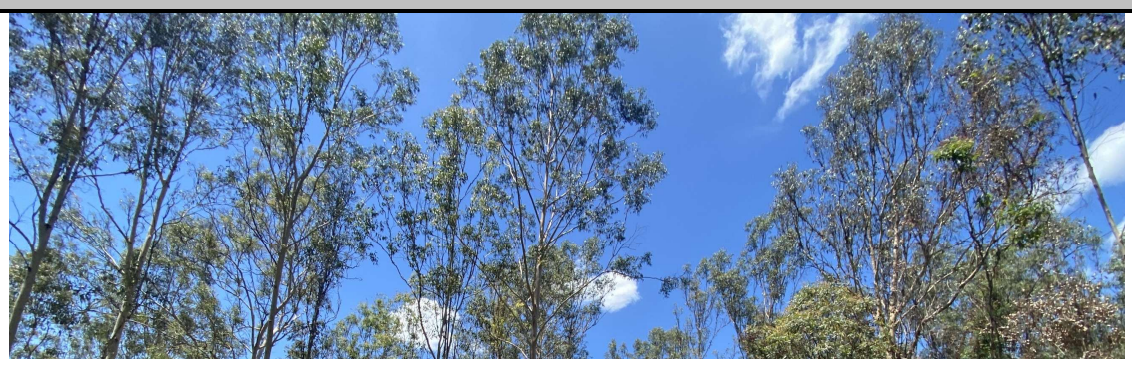
Part J: SAT Survey Results

SAT Survey ID	SAT 7 at Transect 13			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Corymbia citriodora*	Spotted Gum	240	N
2	*Corymbia citriodora*	Spotted Gum	200	N
3	*Corymbia citriodora*	Spotted Gum	230	N
4	*Corymbia citriodora*	Spotted Gum	290	N
5	*Corymbia citriodora*	Spotted Gum	280	N
6	*Corymbia citriodora*	Spotted Gum	420	N
7	*Corymbia citriodora*	Spotted Gum	460	N
8	*Corymbia citriodora*	Spotted Gum	190	N
9	*Eucalyptus tereticornis*	Forest Red Gum	460	N
10	*Corymbia citriodora*	Spotted Gum	200	N
11	*Eucalyptus tereticornis*	Forest Red Gum	790	N
12	*Corymbia citriodora*	Spotted Gum	240	N
13	*Corymbia citriodora*	Spotted Gum	170	N
14	*Eucalyptus tereticornis*	Forest Red Gum	280	N
15	*Corymbia citriodora*	Spotted Gum	260	N
16	*Eucalyptus tereticornis*	Forest Red Gum	220	N
17	*Corymbia citriodora*	Spotted Gum	330	N
18	*Eucalyptus tereticornis*	Forest Red Gum	180	N
19	*Eucalyptus tereticornis*	Forest Red Gum	220	N
20	*Corymbia citriodora*	Spotted Gum	140	N
21	*Corymbia citriodora*	Spotted Gum	150	N
22	*Eucalyptus tereticornis*	Forest Red Gum	130	N
23	*Corymbia citriodora*	Spotted Gum	140	N
24	*Corymbia citriodora*	Spotted Gum	130	N
25	*Eucalyptus tereticornis*	Forest Red Gum	100	N
26	*Corymbia citriodora*	Spotted Gum	620	N
27	*Corymbia citriodora*	Spotted Gum	210	N
28	*Eucalyptus tereticornis*	Forest Red Gum	140	N
29	*Corymbia citriodora*	Spotted Gum	120	N
30	*Corymbia citriodora*	Spotted Gum	320	N
Total				0/30

Attach Landscape Photos Here

North

South



East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T14	Job Number / Property	8418 - Offset Site

Part B - Site Data

Recorders	David Havill	Date	19/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
1	57.09 hectares	12.11.6	12

Site description and Location (including details of discrete polygons within the assessment unit)
311°NW Remnant, recent fire, pig damage. Mid/Lower slope. Mapped remnant Least Concern RE12.11.6 described as Corymbia citriodora, Eucalyptus crebra woodland on metamorphics +/- interbedded volcanics. The fire damage will shhow an increase in weeds in the short term.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	3			EDL / Dom / R
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL / Dom / R
Scientific Name	*Eucalyptus siderophloia*	Common Name	Grey Ironbark	EDL / R
Scientific Name	*Eucalyptus carnea*	Common Name	Broad-leaf White Mahogany	EDL / R
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	4		
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum
Scientific Name	*Eucalyptuis siderophloia*	Common Name	Grey Ironbark
Scientific Name	*Jacksonia scoparia*	Common Name	Dogwood
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	3		
Scientific Name	*Aristida purpurea*	Common Name	*Threeawn aristida*
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	9		
Scientific Name	*Xanthorrhoea glauca*	Common Name	Grass Tree
Scientific Name	*Cyperus gracilis*	Common Name	Slender Sedge
Scientific Name	*Hybanthus stellarioides*	Common Name	Spade Flower
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name	*Desmodium rhytidophyllum*	Common Name	Hairy Trefoil
Scientific Name	*Lomandra Multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Wahlenbergia queenslandica*	Common Name	Blue Star
Scientific Name	*Eustrephus latifolius*	Common Name	Wombat berry
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	5.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Heliotropium amplexicaule*	Common Name	Blue Heliotrope
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	80.00		
1	1.00	26	
2	2.70	27	
3	0.50	28	
4	3.80	29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

6

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	7%	5%	5%	2%	5%	5%
Native other grass						
Native forbs and other species	3%	0%	0%	0%	0%	1%
Native shrubs	0%	0%	3%	0%	0%	1%
Non-native grass						
Non native forbs and shrubs	0%	3%	2%	3%	0%	2%
Litter	5%	20%	40%	10%	10%	17%
Rock						
Bare Ground	85%	72%	50%	85%	85%	75%
Cryptogram						
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	500mm	Number of large eucalypt trees:	0
Non- Eucalypt Large tree DBH benchmark used:	200mm	Number of large non eucalypt trees:	0
Total number of large trees recorded:	0		
Total Number Large Trees per ha:	0		

Median Tree Canopy Height Measurements	Canopy:	22	Sub-canopy:	12	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	100%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	48.3%	Sub-canopy:	34.00%	Emergent:	NA
Shrub canopy cover %	7.50%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	5.4	10.1	4.7	T2	2.2	8.7	6.5
T1	18.5	22.6	4.1	T2	11.9	14.4	2.5
T1	22.7	28.1	5.4	T2	30.0	32.1	2.1
T1	28.1	34.0	5.9	T2	41.3	46.2	4.9
T1	39.5	44.2	4.7	T2	54.5	59.0	4.5
T1	45.2	49.2	4.0	T2	66.0	71.4	5.4
T1	59.0	62.8	3.8	T2	74.8	77.5	2.7
T1	66.0	71.2	5.2	T2	81.4	84.2	2.8
T1	73.0	80.2	7.2	T2	87.6	90.2	2.6
T1	96.7	100.0	3.3	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	3.4	4.7	1.3	Shrub			0.0
Shrub	23.6	25.0	1.4	Shrub			0.0
Shrub	32.6	34.1	1.5	Shrub			0.0
Shrub	36.6	37.4	0.8	Shrub			0.0
Shrub	41.3	42.0	0.7	Shrub			
Shrub	75.4	76.3	0.9	Shrub			
Shrub	94.4	95.3	0.9	Shrub			
Shrub			0.0	Shrub			
Shrub			0.0	Shrub			

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present *If trees are in the same layer and continuous along the transect you can group them

Part I: GHFF Stem Count

Species Name	Stem Count
Corymbia citriodora	49
Eucalyptus siderophloia	34
Eucalyptus carnea	3
Total	86
Total per hecatre	430

Part J: SAT Survey Results

SAT Survey ID	SAT 8 at Transect 18			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Eucalyptus siderophloia*	Grey Ironbark	220	N
2	*Eucalyptus siderophloia*	Grey Ironbark	280	N
3	*Corymbia citriodora*	Spotted Gum	240	N
4	*Corymbia citriodora*	Spotted Gum	230	N
5	*Eucalyptus siderophloia*	Grey Ironbark	180	N
6	*Corymbia citriodora*	Spotted Gum	140	N
7	*Eucalyptus siderophloia*	Grey Ironbark	140	N
8	*Eucalyptus siderophloia*	Grey Ironbark	190	N
9	*Eucalyptus siderophloia*	Grey Ironbark	160	N
10	*Eucalyptus siderophloia*	Grey Ironbark	170	N
11	*Corymbia citriodora*	Spotted Gum	190	N
12	*Corymbia citriodora*	Spotted Gum	190	N
13	*Corymbia citriodora*	Spotted Gum	180	N
14	*Corymbia citriodora*	Spotted Gum	290	N
15	*Eucalyptus siderophloia*	Grey Ironbark	160	N
16	*Corymbia citriodora*	Spotted Gum	220	N
17	*Eucalyptus siderophloia*	Grey Ironbark	180	N
18	*Corymbia citriodora*	Spotted Gum	170	N
19	*Corymbia citriodora*	Spotted Gum	180	N
20	*Eucalyptus siderophloia*	Grey Ironbark	190	N
21	*Corymbia citriodora*	Spotted Gum	320	N
22	*Eucalyptus siderophloia*	Grey Ironbark	170	N
23	*Eucalyptus siderophloia*	Grey Ironbark	160	N
24	*Corymbia citriodora*	Spotted Gum	240	N
25	*Corymbia citriodora*	Spotted Gum	350	N
26	*Eucalyptus siderophloia*	Grey Ironbark	210	N
27	*Corymbia citriodora*	Spotted Gum	160	N
28	*Corymbia citriodora*	Spotted Gum	130	N
29	*Eucalyptus siderophloia*	Grey Ironbark	160	N
30	*Eucalyptus siderophloia*	Grey Ironbark	240	N
Total				0/30

Attach Landscape Photos Here

North

South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T15	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	DH+JP	Date	19/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
5	27.09 hectares	12.12.5	12

Site description and Location (including details of discrete polygons within the assessment unit)
61°NE, Fire evidence. Polygon is mapped as Category X (non-remnant) vegetation. Vegetation on site is representing the preclear Least Concern RE12.12.5 described as Corymbia citriodora, Eucalyptus crebra woodland on Mesozoic to Proterozoic igneous rocks.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	5			EDL / Dom / R
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL / Dom / R
Scientific Name	*Eucalyptus siderophloia*	Common Name	Grey Ironbark	EDL / Dom / R
Scientific Name	*Corymbia intermedia*	Common Name	Pink Bloodwood	EDL / Dom / R
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree	
Scientific Name	*Corymbia tesselaris*	Common Name	Moreton Bay Ash	EDL / Dom / R
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	6		
Scientific Name	*Corymbia intermedia*	Common Name	Pink bloodwood
Scientific Name	*corymbia citriodora*	Common Name	Spotted Gum
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name	*Corymbia tesselaris*	Common Name	Moreton Bay Ash
Scientific Name	*Eicalyptus siderophloia*	Common Name	Grey Ironbark
Scientific Name	*Grewia latifolia*	Common Name	Dogs Balls
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	5		
Scientific Name	*Aristida purpurea*	Common Name	Threeawn aristida
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name	*Themeda triandra*	Common Name	Kangaroo Grass
Scientific Name	*Eragostis brownii*	Common Name	Brown's Love Grass
Scientific Name	*Panicum decompositum*	Common Name	Native Millet
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	10		
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Wahlenbergia queenslandica*	Common Name	Blue Star
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name	*Fimbristylis dichotoma*	Common Name	Common Fringe Rush
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Matrush
Scientific Name	*Eremophila debilis*	Common Name	Winter Apple
Scientific Name	*Brunoniella australis*	Common Name	Blue Trumpet
Scientific Name	*Cyperus gracilis*	Common Name	Slender Sedge
Scientific Name	*Murdannia graminea*	Common Name	Slug Herb
Scientific Name	*Glossocardia bidens*	Common Name	Native Cobblers Peg
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	75.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Lantana montevidensis*	Common Name	Creeping Lantana
Scientific Name	*Cyperus polystachyos*	Common Name	Bunchy Sedge
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	504.00		
1	1.30	26	
2	0.50	27	
3	1.20	28	
4	5.40	29	
5	2.70	30	
6	1.90	31	
7	11.50	32	
8	0.60	33	
9	0.50	34	
10	0.60	35	
11	3.80	36	
12	4.10	37	
13	0.50	38	
14	2.00	39	
15	1.40	40	
16	0.70	41	
17	3.20	42	
18	1.60	43	
19	4.70	44	
20	2.20	45	
21		46	
22		47	
23		48	
24		49	
25		50	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	5%	15%	3%	5%	15%	9%
Native other grass						
Native forbs and other species	1%	3%	1%	0%	5%	2%
Native shrubs						
Non-native grass						
Non native forbs and shrubs	10%	10%	1%	5%	0%	5%
Litter	20%	10%	15%	30%	30%	21%
Rock						
Bare Ground	64%	62%	80%	60%	50%	63%
Cryptogram						
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	410	Number of large eucalypt trees:	Corymbia citriodora = 440mm (Total = 1)
Non- Eucalypt Large tree DBH benchmark used:	-	Number of large non eucalypt trees:	0
Total number of large trees recorded:	1		
Total Number Large Trees per ha:	2		

Median Tree Canopy Height Measurements	Canopy:	18	Sub-canopy:	9.00	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	100%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	24.5%	Sub-canopy:	46.50%	Emergent:	
Shrub canopy cover %	3.10%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	17.7	25.8	8.1	T2	0.0	5.4	5.4
T1	41.6	46.5	4.9	T2	6.9	12.7	5.8
T1	86.4	91.3	4.9	T2	13.8	18.0	4.2
T1	93.4	100.0	6.6	T2	23.8	30.3	6.5
T1			0.0	T2	34.4	35.2	0.8
T1			0.0	T2	35.2	38.3	3.1
T1			0.0	T2	41.5	47.5	6.0
T1			0.0	T2	50.0	56.5	6.5
T1			0.0	T2	64.6	69.2	4.6
T1			0.0	T2	84.7	88.3	3.6
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	3.6	4.0	0.4	Shrub			0.0
Shrub	40.1	41.0	0.9	Shrub			0.0
Shrub	66.7	67.3	0.6	Shrub			0.0
Shrub	87.3	87.9	0.6	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.6	Shrub			0.0

Part I: GHFF Stem Count

Species Name	Stem Count
Eucalyptus siderophloia	20
Alphitonia excelsa	11
Corymbia citriodora	21
Corymbia intermedia	13
Corymbia tesselaris	1

Total	66
Total per hectare	330

Part J: SAT Survey Results

SAT Survey ID	SAT 9 at Transect 15			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Eucalyptus siderophloia*	Grey ironbark	280	Y
2	*Corymbia intermedia*	Pink Bloodwood	160	N
3	*Eucalyptus siderophloia*	Grey ironbark	180	N
4	*Eucalyptus siderophloia*	Grey ironbark	150	N
5	*Corymbia intermedia*	Pink Bloodwood	170	N
6	*Corymbia intermedia*	Pink Bloodwood	140	N
7	*Corymbia intermedia*	Pink Bloodwood	160	N
8	*Eucalyptus siderophloia*	Grey ironbark	340	N
9	*Corymbia intermedia*	Pink Bloodwood	180	N
10	*Corymbia intermedia*	Pink Bloodwood	150	N
11	*Eucalyptus siderophloia*	Grey ironbark	140	N
12	*Eucalyptus siderophloia*	Grey ironbark	100	N
13	*Eucalyptus siderophloia*	Grey ironbark	160	N
14	*Eucalyptus siderophloia*	Grey ironbark	360	N
15	*Eucalyptus siderophloia*	Grey ironbark	240	N
16	*Corymbia intermedia*	Pink Bloodwood	160	N
17	*Corymbia intermedia*	Pink Bloodwood	180	N
18	*Corymbia intermedia*	Pink Bloodwood	160	N
19	*Corymbia intermedia*	Pink Bloodwood	130	N
20	*Eucalyptus siderophloia*	Grey ironbark	100	N
21	*Eucalyptus siderophloia*	Grey ironbark	340	N
22	*Corymbia citirodora*	Spotted Gum	200	N
23	*Alphitonia excelsa*	Soap Tree	140	N
24	*Eucalyptus siderophloia*	Grey ironbark	160	N
25	*Eucalyptus siderophloia*	Grey ironbark	150	N
26	*Eucalyptus siderophloia*	Grey ironbark	100	N
27	*Corymbia intermedia*	Pink Bloodwood	140	N
28	*Eucalyptus siderophloia*	Grey ironbark	140	N
29	*Corymbia Citriodora*	Spotted Gum	160	N
30	*Corymbia tesselaris*	Moreton Bay Ash	140	N
Total				1/30

Attach Landscape Photos Here

North

South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T16	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Jonny Pickvance	Date	19/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
9	2.89 hecatres	12.3.7	12

Site description and Location (including details of discrete polygons within the assessment unit)
Open paddock (non remnant). Mapped as Category X (non-remnant) vegetaion with Preclear RE12.3.7 described as Eucalyptus tereticornis, Casuarina cunninghamiana +/- Melaleuca spp. Fringing woodland. Site is disturbed with evidence of cattle and pig damage. Regrowth dominated by Corymbia tessellaris.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	2			EDL / Dom / R
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash	EDL / Dom / R
Scientific Name	*Melaleuca linariifolia*	Common Name	Snow in Summer	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	1		
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	3		
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name	*Imperata cylindrica*	Common Name	Blady Grass
Scientific Name	*Heteropogon contortus*	Common Name	Black Spear Grass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	0		
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	95.00%		
Scientific Name	*Cirsium vulgare*	Common Name	Spear Thistle
Scientific Name	*Gomphocarpus physocarpus*	Common Name	Balloon Cotton Bush
Scientific Name	*Verbena bonariensis*	Common Name	Purple-top Verbena
Scientific Name	*Sporobolus jacquemontii*	Common Name	American Rat's Tail Grass
Scientific Name	*Conyza sumatrensis*	Common Name	Tall Fleabane
Scientific Name	*Oxalis corniculata*	Common Name	Creeping Oxalis
Scientific Name	*Hrdrocotyle acutiloba*	Common Name	Pennywort
Scientific Name	*Centella asiatica*	Common Name	Indian Pennywort
Scientific Name	*Sporobolus africanus*	Common Name	Parramatta Grass
Scientific Name	*Sida rhombifolia*	Common Name	Common Sida
Scientific Name	*Heliotropium amplexicaule*	Common Name	Blue Heliotrope

Scientific Name	*Calyptocarpus vialis*	Common Name	Creeping Cinderella Weed
Scientific Name	*Crassocephalum crepidioides*	Common Name	Thickhead

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)			
1	0.00	26	
2		27	
3		28	
4		29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

6

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	0%	40%	80%	5%	0%	25%
Native other grass						
Native forbs and other species	0%	5%	0%	0%	0%	1%
Native shrubs	0%	0%	15%	0%	0%	3%
Non-native grass		0%	0%	0%	2%	1%
Non native forbs and shrubs	10%	55%	5%	95%	98%	53%
Litter	5%	0%	0%	0%	0%	1%
Rock						
Bare Ground	85%	0%	0%	0%	0%	17%
Cryptogram						
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	510mm	Number of large eucalypt trees:	Corymbia tessellaris = 620mm (total = 1)
Non- Eucalypt Large tree DBH benchmark used:	360mm	Number of large non eucalypt trees:	0
Total number of large trees recorded:	1		
Total Number Large Trees per ha:	2		

Median Tree Canopy Height Measurements	Canopy:	24	Sub-canopy:	8	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	100%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	11.7%	Sub-canopy:	12.40%	Emergent:	NA
Shrub canopy cover %	2.20%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	5.7	17.4	11.7	T2	0.0	12.4	12.4
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	4.6	6.1	1.5	Shrub			0.0
Shrub	44.1	44.8	0.7	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. If trees are in the same layer and continuous along the transect you can group them.

Part I: GHFF Stem Count

Species Name	Stem Count
Corymbia tessellaris	3

Total	3
Total per hectare	15

Attach Landscape Photos Here

North

South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T17	Job Number / Property	8418 - Offset Site

Part B - Site Data

Recorders	David Havill & Natalie Dale	Date	20/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
1	57.09 hectares	12.11.6	12

Site description and Location (including details of discrete polygons within the assessment unit)
Recently Burnt. Steep east facing slope. Mapped remnant Least Concern RE12.11.6 described as Corymbia citriodora, Eucalyptus crebra woodland on metamorphics +/- interbedded volcanics.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	4			EDL / Dom / R
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL / Dom / R
Scientific Name	*Eucalyptus siderophloia*	Common Name	Grey Ironbark	EDL / R
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree	
Scientific Name	*Bracychiton populneus*	Common Name	Kurrajong	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	5		
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum
Scientific Name	*Eucalyptus siderophloia*	Common Name	Grey Ironbark
Scientific Name	*Xanthorrhoea glauca*	Common Name	Grass Tree
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name	*Acacia falcata*	Common Name	Sickle Wattle
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	4		
Scientific Name	*Imperata cylindrica*	Common Name	Blady Grass
Scientific Name	*Aristida purpurea*	Common Name	Threeawn aristida
Scientific Name	*Eragrostis brownii*	Common Name	Brown's Lovegrass
Scientific Name	*Aristida calycina*	Common Name	Dark Wiregrass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	13		
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Wahlenbergia stricta*	Common Name	Australian Blue Bell
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Neonotonia wightii*	Common Name	Green Glycine
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name	*Hardenbergia violacea*	Common Name	Native Sarsaparilla
Scientific Name	*Lobelia purpurascens*	Common Name	White Root
Scientific Name	*Brunboniella australis*	Common Name	Blue Trumpet
Scientific Name	*Wahlenbergia queenslandica*	Common Name	Blue Star
Scientific Name	*Dianella caerulea*	Common Name	Blue Flax Lily
Scientific Name	*Commelina cyanea*	Common Name	Wandering Jew
Scientific Name	*Cyperus gracilis*	Common Name	Slender Sedge
Scientific Name	*Thysanotus tuberosus*	Common Name	Fringed Lily

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	15.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Cyperus polystachyos*	Common Name	Bunchy Sedge
Scientific Name	*Megathyrsus maximus*	Common Name	Guinea Grass
Scientific Name	*Pseudognaphalium luteoalbum*	Common Name	Jursey Cud Weed
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	287.00		
1	4.80	26	
2	0.50	27	
3	1.30	28	
4	1.10	29	
5	3.00	30	
6	0.80	31	
7	3.80	32	
8	1.00	33	
9	1.10	34	
10	1.00	35	
11	0.50	36	
12	2.20	37	
13	1.70	38	
14	4.60	39	
15	1.30	40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	8%	5%	5%	7%	3%	6%
Native other grass						
Native forbs and other species	10%	5%	7%	3%	20%	9%
Native shrubs	5%	0%	0%	0%	5%	2%
Non-native grass						
Non native forbs and shrubs	0%	0%	0%	10%	2%	2%
Litter	12%	17%	20%	15%	5%	14%
Rock	0%	3%	8%	5%	50%	13%
Bare Ground	65%	70%	60%	60%	15%	54%
Cryptogram						
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	500mm	Number of large eucalypt trees:	0
Non- Eucalypt Large tree DBH benchmark used:	na	Number of large non eucalypt trees:	0
Total number of large trees recorded:	0		
Total Number Large Trees per ha:	0		

Median Tree Canopy Height Measurements	Canopy:	21	Sub-canopy:	10	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	100%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	24.9%	Sub-canopy:	57.00%	Emergent:	NA
Shrub canopy cover %	5.20%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	0.0	3.1	3.1	T2	0.0	5.6	5.6
T1	5.9	9.0	3.1	T2	6.0	9.8	3.8
T1	10.2	14.2	4.0	T2	15.1	17.6	2.5
T1	37.3	45.7	8.4	T2	27.1	31.2	4.1
T1	60.3	66.6	6.3	T2	34.2	37.5	3.3
T1			0.0	T2	38.5	43.5	5.0
T1			0.0	T2	48.0	50.2	2.2
T1			0.0	T2	51.1	53.4	2.3
T1			0.0	T2	56.0	61.7	5.7
T1			0.0	T2	63.5	72.6	9.1
T1			0.0	T2	78.2	81.6	3.4
T1			0.0	T2	87.4	97.4	10.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	6.0	7.6	1.6	Shrub			0.0
Shrub	9.4	10.1	0.7	Shrub			0.0
Shrub	43.3	44.0	0.7	Shrub			0.0
Shrub	60.1	60.8	0.7	Shrub			0.0
Shrub	70.4	70.8	0.4	Shrub			
Shrub	98.4	99.5	1.1	Shrub			
Shrub			0.0	Shrub			
Shrub			0.0	Shrub			
Shrub			0.0	Shrub			

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. If trees are in the same layer and continuous along the transect you can group them.

Part I: GHFF Stem Count

Species Name	Stem Count

Corymbia citriodora	56
Alphitonia excelsa	10
Eucalyptus siderophloia	16
Brachychiton populneus	1
Lophostemon suaveolens	2
Total	85
Total per hectare	425

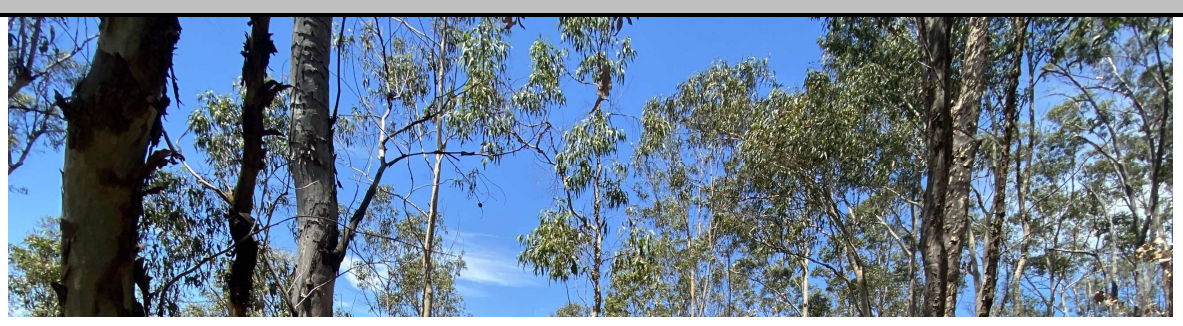
Part J: SAT Survey Results

SAT Survey ID	SAT 10 at Transect 17			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Alphitonia excelsa*	Soap Tree	*200*	N
2	*Corymbia citriodora*	Spotted Gum	230	N
3	*Alphitonia excelsa*	Soap Tree	160	N
4	*Corymbia citriodora*	Spotted Gum	220	Y
5	*Corymbia citriodora*	Spotted Gum	420	N
6	*Corymbia citriodora*	Spotted Gum	210	N
7	*Corymbia citriodora*	Spotted Gum	130	N
8	*Corymbia citriodora*	Spotted Gum	180	N
9	*Corymbia citriodora*	Spotted Gum	200	N
10	*Corymbia citriodora*	Spotted Gum	420	N
11	*Lophostemon suaveolens*	Swamp Box	150	N
12	*Eucalyptus siderophloia*	Grey Ironbark	220	N
13	*Corymbia citriodora*	Spotted Gum	410	N
14	*Corymbia citriodora*	Spotted Gum	390	N
15	*Corymbia citriodora*	Spotted Gum	360	N
16	*Corymbia citriodora*	Spotted Gum	380	Y
17	*Corymbia citriodora*	Spotted Gum	200	N
18	*Corymbia citriodora*	Spotted Gum	220	N
19	*Corymbia citriodora*	Spotted Gum	290	N
20	*Corymbia citriodora*	Spotted Gum	600	N
21	*Corymbia citriodora*	Spotted Gum	400	N
22	*Corymbia citriodora*	Spotted Gum	210	N
23	*Eucalyptus siderophloia*	Grey Ironbark	320	N
24	*Corymbia citriodora*	Spotted Gum	160	N
25	*Corymbia citriodora*	Spotted Gum	380	N
26	*Corymbia citriodora*	Spotted Gum	100	N
27	*Eucalyptus siderophloia*	Grey Ironbark	290	N
28	*Corymbia citriodora*	Spotted Gum	280	N
29	*Eucalyptus siderophloia*	Grey Ironbark	100	N
30	*Corymbia citriodora*	Spotted Gum	310	N
Total (/30)	2/30			

Attach Landscape Photos Here

North

South



East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T18	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Natalie Dale	Date	20/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
2	40.82 hectares	12.12.5	12

Site description and Location (including details of discrete polygons within the assessment unit)
Polygon is mapped as containing remnant Least Concern RE12.12.5 described as Corymbia citriodora, Eucalyptus crebra woodland on Mesozoic to Proterozoic igneous rocks. Very steep slope and recent fire damage.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	4			EDL / Dom / R
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL / Dom / R
Scientific Name	*Eucalyptus siderophloia*	Common Name	Grey Ironbark	EDL / R
Scientific Name	*Corymbia intermedia*	Common Name	Pink Bloodwood	
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	7		
Scientific Name	*Corymbia citriodora*	Common Name	Spottted Gum
Scientific Name	*Eucalyptus siderophloia*	Common Name	Grey Ironbark
Scientific Name	*Brachychiton populneus*	Common Name	Kurrajong
Scientific Name	*Xanthorrhoea glauca*	Common Name	Grass Tree
Scientific Name	*Acacia falcata*	Common Name	Sickle Leaved Wattle
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name	*Jacksonia scoparia*	Common Name	Dogwood
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	6		
Scientific Name	*Eragrostis brownii*	Common Name	Brown's Lovegrass
Scientific Name	*Imperata cylindrica*	Common Name	Blady Grass
Scientific Name	*Aristida calycina*	Common Name	Dark Wiregrass
Scientific Name	*Aristida vagans*	Common Name	Threeawn Speargrass
Scientific Name	*Alloteropsis semialata*	Common Name	Cockatoo Grass
Scientific Name	*Heteropogon contortus*	Common Name	Black Spear Grass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	14		
Scientific Name	*Polymeria calycina*	Common Name	Slender Bindweed
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Dianella caerulea*	Common Name	Blue Flax-lily
Scientific Name	*Wahlenbergia stricta*	Common Name	Australian Blue Bell
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Neonotonia wightii*	Common Name	Green Glycine
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name	*Brunoniella australis*	Common Name	Blue Trumpet
Scientific Name	*Cyperus gracilis*	Common Name	Slender Sedge
Scientific Name	*Cheilanthes distans*	Common Name	Bristle Cloak Fern
Scientific Name	*Hybanthus stellarioides*	Common Name	Spade Flower
Scientific Name	*Chgamaecrista rotundifolia*	Common Name	Round-leaf Cassia
Scientific Name	*Fimbristylis ferruginea*	Common Name	Fringed Rush
Scientific Name	*Grewia latifolia*	Common Name	Dog's Balls
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	20.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Megathyrsus maximus*	Common Name	Guinea Grass
Scientific Name	*Gnaphalium calviceps*	Common Name	Cudweed
Scientific Name	*Sporobolus africanus*	Common Name	Parramatta Grass
Scientific Name	*Lantana montevidensis*	Common Name	Creeping Lantana
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Scientific Name		Common Name	
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Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	178.00		
1	5.00	26	
2	0.50	27	
3	3.80	28	
4	3.70	29	
5	1.10	30	
6	2.00	31	
7	0.50	32	
8	1.20	33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	3%	8%	6%	16%	0%	7%
Native other grass						
Native forbs and other species	1%	7%	0%	0%	5%	3%
Native shrubs	0%	0%	2%	0%	0%	0%
Non-native grass	0%	0%	2%	1%	0%	1%
Non native forbs and shrubs	3%	0%	0%	1%	0%	1%
Litter	8%	25%	15%	7%	15%	14%
Rock	25%	5%	20%	13%	50%	23%
Bare Ground	60%	55%	55%	62%	30%	52%
Cryptogram						
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	410	Number of large eucalypt trees:	Corymbia citriodora = 415mm; 410mm; Eucalyptus siderophloia = 550mm; 550mm, (Total = 4)
Non- Eucalypt Large tree DBH benchmark used:	-	Number of large non eucalypt trees:	0
Total number of large trees recorded:	4		
Total Number Large Trees per ha:	8		

Median Tree Canopy Height Measurements	Canopy:	22.00	Sub-canopy:	9	Emergent:	NA

Percentage of ecologically dominant layer species regenerating:	100%

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	Canopy:	54.7%	Sub-canopy:	17.50%	Emergent:	NA
Shrub canopy cover %	5.40%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	0.0	20.9	20.9	T2	25.0	26.9	1.9
T1	25.9	30.9	5.0	T2	30.1	40.1	10.0
T1	35.2	41.3	6.1	T2	54.6	56.9	2.3
T1	46.2	48.7	2.5	T2	69.5	72.8	3.3
T1	61.0	69.6	8.6	T2			0.0
T1	83.9	93.0	9.1	T2			0.0
T1	96.1	98.6	2.5	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0
T1			0.0	T2			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	29.6	33.9	4.3	Shrub			0.0
Shrub	42.4	43.5	1.1	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			0.0
Shrub			0.0	Shrub			
Shrub			0.0	Shrub			

Shrub			0.0	**Shrub**			
Shrub			0.0	**Shrub**			
Shrub			0.0	**Shrub**			

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present *If trees are in the same layer and continuous along the transect you can group them

Part I: GHFF Stem Count

Species Name	Stem Count
Eucalyptus siderophloia	21
Corymbia citriodora	23
Corymbia intermedia	8
Total	52
Total per hectare	260

Part J: SAT Survey Results

SAT Survey ID	SAT 11 at Transect 18			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Eucalyptus siderophloia*	Grey Ironbark	300	N
2	*Corymbia intermedia*	Pink Bloodwood	120	N
3	*Eucalyptus siderophloia*	Grey Ironbark	240	Y
4	*Corymbia citriodora*	Spotted Gum	460	Y
5	*Corymbia citriodora*	Spotted Gum	210	N
6	*Eucalyptus siderophloia*	Grey Ironbark	220	N
7	*Corymbia citriodora*	Spotted Gum	260	N
8	*Corymbia citriodora*	Spotted Gum	270	N
9	*Corymbia citriodora*	Spotted Gum	320	N
10	*Corymbia intermedia*	Pink Bloodwood	190	N
11	*Corymbia citriodora*	Spotted Gum	160	N
12	*Corymbia citriodora*	Spotted Gum	240	N
13	*Corymbia citriodora*	Spotted Gum	160	N
14	*Eucalyptus siderophloia*	Grey Ironbark	280	N
15	*Corymbia citriodora*	Spotted Gum	110	N
16	*Corymbia citriodora*	Spotted Gum	150	N
17	*Corymbia citriodora*	Spotted Gum	240	N
18	*Corymbia intermedia*	Pink Bloodwood	230	N
19	*Corymbia citriodora*	Spotted Gum	310	N
20	*Corymbia citriodora*	Spotted Gum	280	N
21	*Corymbia citriodora*	Spotted Gum	290	N
22	*Corymbia intermedia*	Pink Bloodwood	160	N
23	*Corymbia citriodora*	Spotted Gum	110	N
24	*Corymbia citriodora*	Spotted Gum	390	N
25	*Corymbia citriodora*	Spotted Gum	230	N
26	*Corymbia citriodora*	Spotted Gum	380	N
27	*Corymbia citriodora*	Spotted Gum	190	N
28	*Corymbia citriodora*	Spotted Gum	300	N
29	*Corymbia citriodora*	Spotted Gum	110	N
30	*Corymbia citriodora*	Spotted Gum	230	N
Total	2/30			

Attach Landscape Photos Here

North

South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T19	Job Number / Property	8414 - Offset Site

Part B - Site Data

Recorders	David Havill & Natalie Dale	Date	20/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
3	10.78 hecatres	12.3.7	12

Site description and Location (including details of discrete polygons within the assessment unit)
Embankment heavily weeded; Transect bearing 80ºE. Polygon is mapped as remnant vegetaion containing Least Concern RE12.3.7 described as Eucalyptus tereticornis, Casuarina cunninghamiana +/- Melaleuca spp, fringing woodland.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	7			EDL / Dom / R
Scientific Name	*Angophora subvelutina*	Common Name	Broad Leaved Apple	EDL / R
Scientific Name	Corymbia intermedia	Common Name	Pink Bloodwood	EDL / R
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala	
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL / R
Scientific Name	*Eucalyptus tereticornis*	Common Name	Forest Red Gum	EDL / R
Scientific Name	*Corymbia tessellaris*	Common Name	Morton Bay Ash	EDL / R
Scientific Name	*Melaleuca bracteata*	Common Name	Black Tea-tree	
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	10		
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala
Scientific Name	*Breynia oblongifolia*	Common Name	Coffee Bush
Scientific Name	*Trema tomentosa*	Common Name	Poison Peach
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name	*Prunus spinosa*	Common Name	Black Thorn
Scientific Name	*Melaleuca bracteata*	Common Name	Black Tea-tree
Scientific Name	*Glochidion ferdinandi*	Common Name	Cheese Tree
Scientific Name	*Ficus coronata*	Common Name	Sand Paper Fig
Scientific Name	*Flindersia australis*	Common Name	Crows Ash
Scientific Name	*Acacia maidenii*	Common Name	Maiden's Wattle

Grass species richness:			
Total number of species	5		
Scientific Name	*Heteropogon contortus*	Common Name	Black Speargrass
Scientific Name	*Eragrostis brownii*	Common Name	Brown's Lovegrass
Scientific Name	*Themeda triandra*	Common Name	Kangaroo Grass
Scientific Name	*Aristida purpurea*	Common Name	Threeawn aristida
Scientific Name	*Cymbopogon refractus*	Common Name	Barbed Wire Grass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	13		
Scientific Name	*Maclura cochinchinensis*	Common Name	Cockspur Thorn
Scientific Name	*Cheilanthes distans*	Common Name	Bristle Cloak Fern
Scientific Name	*Adiantum hispidulum*	Common Name	Rough Maidenhair Fern
Scientific Name	*Lomandra multiflora*	Common Name	Many Flowered Mat Rush
Scientific Name	*Lomandra longifolia*	Common Name	Mat Rush
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Eustrephus latifolius*	Common Name	Wombat Berry
Scientific Name	*Rubus parvifolius*	Common Name	Pink Flowered Native Raspberry
Scientific Name	*Adiantum atroviride*	Common Name	Maidenhair Fern
Scientific Name	*Stephania japonica*	Common Name	Tape Vine
Scientific Name	*Smilax australis*	Common Name	Barbed Wire Vine
Scientific Name	*Juncus usitatus*	Common Name	Common Juncus
Scientific Name	*Lobelia purpurascens*	Common Name	White Root
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	80.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Celtis sinensis*	Common Name	Chinese Elm
Scientific Name	Melinis repens	Common Name	Red Natal Grass
Scientific Name	*Ageratum riparia*	Common Name	Mist Flower

Scientific Name	*Conyza sumatrensis*	**Common Name**	Tall Fleabane
Scientific Name	*Passiflora suberosa*	**Common Name**	Corky Passion Vine
Scientific Name	*Cirsium vulgare*	**Common Name**	Spear Thistle
Scientific Name	*Cyperus rotundus*	**Common Name**	Nut Grass
Scientific Name	*Lantana montevidensis*	**Common Name**	Creeping Lantana
Scientific Name	*Tradescantia fluminensis*	**Common Name**	Wandering Trad
Scientific Name	*Glandularia aristigera*	**Common Name**	Mayne's Pest
Scientific Name	*Setaria sphacelata*	**Common Name**	South African Pigeon Grass
Scientific Name	*Passiflroa foetida*	**Common Name**	Stinking Passion Flower
Scientific Name	*Ligustrum lucidum*	**Common Name**	Broad Leaved Privet
Scientific Name	*Murraya paniculata*	**Common Name**	Mock Orange
Scientific Name	*Ochna serrulata*	**Common Name**	Ochna
Scientific Name	*Solanum nigrum*	**Common Name**	Black Berry Night Shade
Scientific Name		**Common Name**	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	**490.00**		
1	4.80	**26**	
2	2.50	**27**	
3	0.90	**28**	
4	3.80	**29**	
5	6.50	**30**	
6	2.60	**31**	
7	1.40	**32**	
8	0.60	**33**	
9	1.40	**34**	
10	0.90	**35**	
11	1.20	**36**	
12	5.60	**37**	
13	4.10	**38**	
14	0.80	**39**	
15	2.80	**40**	
16	0.70	**41**	
17	0.80	**42**	
18	4.60	**43**	
19	3.00	**44**	
20		**45**	
21		**46**	
22		**47**	
23		**48**	
24		**49**	
25		**50**	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	0%	20%	2%	5%	0%	5%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	0%	15%	30%	5%	0%	10%
Native shrubs	0%	10%	5%	0%	0%	3%
Non-native grass	0%	0%	0%	0%	0%	
Non native forbs and shrubs	85%	35%	0%	85%	100%	61%
Litter	5%	20%	43%	5%	0%	15%
Rock	0%	0%	10%	0%	0%	2%
Bare Ground	10%	0%	10%	0%	0%	4%
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	510mm	**Number of large eucalypt trees:**	Eucalyptus siderophloia = 650; Eucalyptus acmenoides = 850mm, 900mm; Eucalyptus tereticornis = 660mm (total 4)
Non- Eucalypt Large tree DBH benchmark used:	360mm	**Number of large non eucalypt trees:**	0
Total number of large trees recorded:	4		
Total Number Large Trees per ha:	8		

Median Tree Canopy Height Measurements	**Canopy:**	19	**Sub-canopy:**	6.25	**Emergent:**	NA

Percentage of ecologically dominant layer species regenerating:	**100%**

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	**Canopy:**	66.3%	**Sub-canopy:**	63.70%	**Emergent:**	
Shrub canopy cover %	13.30%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	0.0	8.6	8.6	**T2**	1.6	5.5	3.9
T1	11.5	26.1	14.6	**T2**	5.5	15.4	9.9
T1	27.2	32.4	5.2	**T2**	24.5	30.4	5.9
T1	34.0	37.1	3.1	**T2**	34.6	43.0	8.4
T1	37.1	42.0	4.9	**T2**	43.0	47.0	4.0
T1	42.0	51.0	9.0	**T2**	51.0	58.7	7.7
T1	58.7	69.7	11.0	**T2**	59.0	68.5	9.5
T1	72.2	78.4	6.2	**T2**	81.2	89.6	8.4
T1	96.3	100.0	3.7	**T2**	89.6	95.6	6.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

T1			0.0	**T2**			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	8.0	14.1	6.1	**Shrub**			0.0
Shrub	22.0	23.7	1.7	**Shrub**			0.0
Shrub	29.2	30.4	1.2	**Shrub**			0.0
Shrub	47.0	49.0	2.0	**Shrub**			0.0
Shrub	56.1	57.0	0.9	**Shrub**			0.0
Shrub	65.0	66.4	1.4	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. If trees are in the same layer and continuous along the transect you can group them.

Part I: GHFF Stem Count

Species Name	Stem Count
Angophora subvelutina	11
Corymbia citriodora	5
Corymbia intermedia	2
Corymbia tessellaris	8
Eucalyptus acmenoides	2
Eucalyptus tereticornis	6
Melaleuca bracteata	8
Mallotus philippensis	8
Total	50
Total per Hecatre	250

Part J: SAT Survey Results

SAT Survey ID	SAT 12 at Transect 19			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Mallotus philippensis*	Red Kamala	200	Nil
2	*Mallotus philippensis*	Red Kamala	200	Nil
3	*Croton insularis*	Silver Croton	180	Nil
4	*Celtis sinensis*	Chinese Elm	120	Nil
5	*Ligustrum lucidum*	Broad Leaved Privet	130	Nil
6	*Mallotus philippensis*	Red Kamala	140	Nil
7	*Eucalyptus acmenoides*	White Mahogany	850	Nil
8	*Angophora subvelutina*	Broad Leaved Apple	250	Nil
9	*Melaleuca bracteata*	Black Tea-tree	360	Nil
10	*Corymbia intermedia*	Pink Bloodwood	330	Nil
11	*Eucalyptus crebra*	Narrow Leaf Ironbark	110	Nil
12	*Corymbia citriodora*	Spotted Gum	150	Nil
13	*Eucalyptus crebra*	Narrow Leaf Ironbark	140	Yes
14	*Eucalyptus crebra*	Narrow Leaf Ironbark	170	Nil
15	*Corymbia intermedia*	Pink Bloodwood	280	Nil
16	*Corymbia citriodora*	Spotted Gum	120	Nil
17	*Corymbia citriodora*	Spotted Gum	300	Nil
18	*Eucalyptus siderophloia*	Grey Ironbark	110	Nil
19	*Corymbia citriodora*	Spotted Gum	190	Nil
20	*Corymbia intermedia*	Pink Bloodwood	230	Nil
21	*Corymbia citriodora*	Spotted Gum	160	Nil
22	*Corymbia citriodora*	Spotted Gum	160	Nil
23	*Corymbia citriodora*	Spotted Gum	140	Nil
24	*Corymbia citriodora*	Spotted Gum	560	Nil
25	*Corymbia tessellaris*	Moreton Bay Ash	100	Nil
26	*Corymbia intermedia*	Pink Bloodwood	110	Nil
27	*Corymbia tessellaris*	Moreton Bay Ash	220	Nil
28	*Corymbia citriodora*	Spotted Gum	160	Nil
29	*Corymbia intermedia*	Pink Bloodwood	180	Nil
30	*Eucalyptus siderophloia*	Grey Ironbark	460	Nil
Total				1/30

Attach Landscape Photos Here

North

South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T20	Job Number / Property	8418 - Offset Site

Part B - Site Data

Recorders	David Havill & Jonny Pickvance	Date	25/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
2	40.82 hecatres	12.12.5	12

Site description and Location (including details of discrete polygons within the assessment unit)
Site is adjacent to the crest of the mountain. Steep slope. Mapped as containing remnant Least Concern RE 12.12.5 described as Corymbia citridora, Eucalyptus crebra woodland on Mesozoic to Proterozoic igneous rocks.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	9			EDL / Dom / R
Scientific Name	*Eucalyptus crebra*	Common Name	Narrow Leaf Ironbark	EDL / Dom / R
Scientific Name	*Eucalyptus tereticornis*	Common Name	Forest Red Gum	EDL / R
Scientific Name	*Corymbia intermedia*	Common Name	Pink Bloodwood	EDL / R
Scientific Name	*Acacia melanoxylon*	Common Name	Australian Blackwood	
Scientific Name	*Erythrina vespertilio*	Common Name	Bat Wing Coral Tree	
Scientific Name	*Allocasuarina torulosa*	Common Name	Forset She Oak	
Scientific Name	*Angophora subvelutina*	Common Name	Broad Leaved Apple	EDL / R
Scientific Name	*Eucalyptus melanophloia*	Common Name	Silver Leaved Ironbark	EDL / R
Scientific Name	*Eucalyptus acmenoides*	Common Name	White Mahogany	EDL
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	5		
Scientific Name	*Xanthorrhoea johnsonii*	Common Name	Johnson's Grass Tree
Scientific Name	*Eucalyptus crebra*	Common Name	Narrow Leaf Ironbark
Scientific Name	*Eucalyptus tereticornis*	Common Name	Forest Red Gum
Scientific Name	*Acacia melanoxylon*	Common Name	Australian Blackwood
Scientific Name	*Myoporum montanum*	Common Name	Boobialla
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	6		
Scientific Name	*Imperata cylindrica*	Common Name	*Blady Grass*
Scientific Name	*Themeda triandra*	Common Name	Kangaroo GARss
Scientific Name	*Cymbopogon refractus*	Common Name	Barbed Wire Grass
Scientific Name	*Aristida stricta*	Common Name	Threeawn Wire Grass
Scientific Name	*Alloteropsis semialata*	Common Name	Cockatoo Grass
Scientific Name	*Heteropogon contortus*	Common Name	Black Spear Grass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	16		
Scientific Name	*Eustrephus latifolius*	Common Name	Wombat Berry
Scientific Name	*Lobelia purpurascens*	Common Name	White Root
Scientific Name	*Chrysocephalum apiculatum*	Common Name	Yellow Buttons
Scientific Name	*Drynaria rigidula*	Common Name	Basket Fern
Scientific Name	*Hardenbergia violacea*	Common Name	Native Sarsparilla
Scientific Name	*Schenkia australis*	Common Name	Spike Centaury
Scientific Name	*Thysanotus tuberosus*	Common Name	Fringed Lily
Scientific Name	*Hybanthus stellarioides*	Common Name	Spade Flower
Scientific Name	*Wahlenbergia queenslandica*	Common Name	Queensland Bluebell
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name	*Glycine tabacina*	Common Name	Glycine
Scientific Name	*Desmodium rhytidophyllum*	Common Name	Hairy Trefoil
Scientific Name	*Dianella caerulea*	Common Name	Blue Flax Lily
Scientific Name	*Hydrocotyle tripartita*	Common Name	Small-leaved Pennywort
Scientific Name	*Lomandra longifolia*	Common Name	Mat Rush
Scientific Name	*Wahlenbergia stricta*	Common Name	Australian Bluebell
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	\
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	75.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana

Scientific Name	*Hydrocotyle acutiloba*	**Common Name**	Pennywort
Scientific Name	*Glandularia aristigera*	**Common Name**	Mayne's Pest
Scientific Name	*Sporobolus africanus*	**Common Name**	Paramatta Grass
Scientific Name	*Melinis repens*	**Common Name**	Red Natal Grass
Scientific Name	*Bidens pilosa*	**Common Name**	Cobblers Pegs
Scientific Name	*Cyperus polystachyos*	**Common Name**	Bunchy Sedge
Scientific Name	*Gomphocarpus physocarpus*	**Common Name**	Balloon Cotton Bush
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	**214.00**		
1	6.80	**26**	
2	0.70	**27**	
3	2.10	**28**	
4	2.70	**29**	
5	2.10	**30**	
6	7.00	**31**	
7		**32**	
8		**33**	
9		**34**	
10		**35**	
11		**36**	
12		**37**	
13		**38**	
14		**39**	
15		**40**	
16		**41**	
17		**42**	
18		**43**	
19		**44**	
20		**45**	
21		**46**	
22		**47**	
23		**48**	
24		**49**	
25		**50**	

Ground Cover	**Quadrant 1**	**Quadrat 2**	**Quadrat 3**	**Quadrat 4**	**Quadrat 5**	**Average**
Native perennial grass cover	15%	30%	40%	10%	20%	23%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	20%	10%	5%	15%	0%	10%
Native shrubs	10%	0%	5%	0%	0%	3%
Non-native grass	0%	0%	0%	0%	0%	
Non native forbs and shrubs	30%	10%	10%	25%	30%	21%
Litter	25%	10%	10%	20%	10%	15%
Rock	0%	0%	0%	0%	0%	
Bare Ground	0%	40%	30%	30%	40%	28%
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	410mm	**Number of large eucalypt trees:**	Eucalyptus melanophloia = 430mm (Total = 1)
Non- Eucalypt Large tree DBH benchmark used:	N/A	**Number of large non eucalypt trees:**	1
Total number of large trees recorded:	1		
Total Number Large Trees per ha:	2		

Median Tree Canopy Height Measurements	**Canopy:**	21	**Sub-canopy:**	12	**Emergent:**	NA

Percentage of ecologically dominant layer species regenerating:	**83%**

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	**Canopy:**	53.8%	**Sub-canopy:**	27.50%	**Emergent:**	NA
Shrub canopy cover %	11.80%					

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
T1	5.0	12.1	7.1	**T2**	0.0	3.5	3.5
T1	27.5	34.0	6.5	**T2**	12.0	15.8	3.8
T1	38.4	44.7	6.3	**T2**	18.6	21.0	2.4
T1	45.2	51.9	6.7	**T2**	21.0	24.8	3.8
T1	51.9	55.8	3.9	**T2**	37.6	39.4	1.8
T1	55.8	60.0	4.2	**T2**	62.5	65.9	3.4
T1	75.7	82.4	6.7	**T2**	65.9	68.6	2.7
T1	84.0	88.0	4.0	**T2**	69.2	72.0	2.8
T1	91.6	100.0	8.4	**T2**	82.3	85.6	3.3
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	1.8	3.6	1.8	**Shrub**			0.0
Shrub	6.9	8.5	1.6	**Shrub**			0.0
Shrub	15.4	15.7	0.3	**Shrub**			0.0
Shrub	24.4	25.5	1.1	**Shrub**			0.0
Shrub	32.1	33.0	0.9	**Shrub**			
Shrub	35.0	36.6	1.6	**Shrub**			
Shrub	45.5	47.0	1.5	**Shrub**			
Shrub	65.4	66.9	1.5	**Shrub**			
Shrub	98.1	99.6	1.5	**Shrub**			

Note: Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present *If trees are in the same layer and continuous along the transect you can group them

Part I: GHFF Stem Count

Species Name	Stem Count
Eucalyptus tereticornis	35
Eucalyptus crebra	25
Eucalyptus melanophloia	8
Angophora subvelutina	2
Corymbia intermedia	8
Allocasuarina torulosa	3
Eucalyptus acmenoides	2
Total	83
Total per hectare	415

Part J: SAT Survey Results

SAT Survey ID	SAT 13 at Transect 20			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Eucalyptus tereticornis*	Forest Red Gum	260	Yes
2	*Eucalyptus tereticornis*	Forest Red Gum	300	Yes
3	*Eucalyptus melanophloia*	Silver Leaved Ironbark	220	Nil
4	*Eucalyptus melanophloia*	Silver Leaved Ironbark	160	Nil
5	*Eucalyptus crebra*	Narrow Leaf Ironbark	260	Nil
6	*Eucalyptus crebra*	Narrow Leaf Ironbark	140	Nil
7	*Eucalyptus crebra*	Pink Bloodwood	220	Nil
8	*Corymbia intermedia*	Pink Bloodwood	160	Nil
9	*Corymbia intermedia*	Pink Bloodwood	190	Nil
10	*Eucalyptus tereticornis*	Forest Red Gum	320	Nil
11	*Eucalyptus tereticornis*	Forest Red Gum	180	Nil
12	*Eucalyptus tereticornis*	Forest Red Gum	210	Nil
13	*Eucalyptus tereticornis*	Forest Red Gum	360	Nil
14	*Allocasuarina torulosa*	Forest She Oak	140	Nil
15	*Eucalyptus crebra*	Narrow Leaf Ironbark	290	Nil
16	*Corymbia intermedia*	Pink Bloodwood	160	Nil
17	*Eucalyptus melanophloia*	Silver Leaved Ironbark	210	Nil
18	*Allocasuarina torulosa*	Forest She Oak	240	Nil
19	*Eucalyptus crebra*	Narrow Leaf Ironbark	180	Nil
20	*Eucalyptus crebra*	Narrow Leaf Ironbark	220	Nil
21	*Eucalyptus crebra*	Narrow Leaf Ironbark	240	Nil
22	*Corymbia intermedia*	Pink Bloodwood	180	Nil
23	*Eucalyptus melanophloia*	Silver Leaved Ironbark	190	Nil
24	*Eucalyptus crebra*	Narrow Leaf Ironbark	240	Nil
25	*Eucalyptus crebra*	Narrow Leaf Ironbark	300	Nil
26	*Eucalyptus crebra*	Narrow Leaf Ironbark	270	Nil
27	*Eucalyptus tereticornis*	Forest Red Gum	230	Yes
28	*Eucalyptus tereticornis*	Forest Red Gum	160	Nil
29	*Eucalyptus tereticornis*	Forest Red Gum	180	Nil
30	*Eucalyptus tereticornis*	Forest Red Gum	190	Nil
Total				3/30

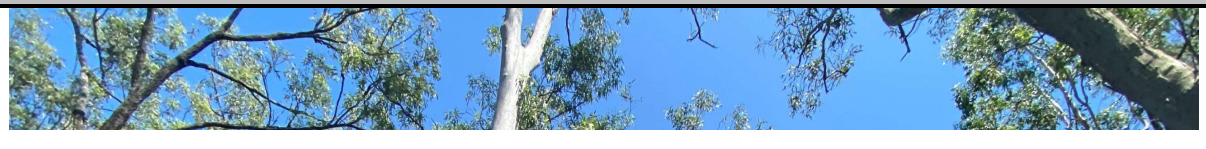
Attach Landscape Photos Here

North

South

East

West



Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T21	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Jonny Pickvance	Date	25/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
3	10.78 hecatres	12.3.7	12

Site description and Location (including details of discrete polygons within the assessment unit)
Polygon is mapped as containing remnnat Least Concern RE12.3.7 described as Eucalyptus tereticornis, Casuarina cunninghamiana +/- Melaleuca spp fringing woodland.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	8			EDL / Dom / R
Scientific Name	*Corymbia intermedia*	Common Name	Pink Bloodwood	EDL
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala	
Scientific Name	*Lophostemon suaveolens*	Common Name	Swamp Box	
Scientific Name	*Euclayptus tereticornis*	Common Name	Forest Red Gum	EDL / Dom / R
Scientific Name	*Allocasuarina torulosa*	Common Name	Forest She Oak	
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree	
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash	EDL / R
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	7		
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala
Scientific Name	*Trema tomentosa*	Common Name	Poison Peach
Scientific Name	*Lopshotemon suaveolens*	Common Name	Swamp Box
Scientific Name	*Acacia melanoxylon*	Common Name	Australian Blackwood
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name	*Eucalyptus tereticornis*	Common Name	Forest Red Gum
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	2		
Scientific Name	*Oplismenus aemulus*	Common Name	Creepng Beard Grass
Scientific Name	*Heteropogon contortus*	Common Name	Black Spear Grass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	7		
Scientific Name	*Cyperus gracilis*	Common Name	Slender Flat Sedge
Scientific Name	*Adiantum atroviride*	Common Name	Maidenhair Fern
Scientific Name	*Adiantum hispidulum*	Common Name	Rough Maidenhair Fern
Scientific Name	*Eustrephus latifolius*	Common Name	Wombat Berry
Scientific Name	*Malaisia scandens*	Common Name	Burny Vine
Scientific Name	*Calochlaena dubia*	Common Name	Soft Bracken
Scientific Name	*Scchenkia australis*	Common Name	Spike Centuary
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	85.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Solanum nigrum*	Common Name	Blackberry Nightshade
Scientific Name	*Solanum lycopersicum*	Common Name	Cherry Tomato
Scientific Name	*Conyza sumatrensis*	Common Name	Tall Fleabane
Scientific Name	*Cirsium vulgare*	Common Name	Spear Thsitle
Scientific Name	*Verbena bonariensis*	Common Name	Purpletop Vervain

Scientific Name	*Senna pendula*	**Common Name**	Easter Cassia
Scientific Name	*Solanum seaforthianum*	**Common Name**	Brazilian Night Shade
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	**193.00**		
1	5.20	**26**	
2	7.00	**27**	
3	3.50	**28**	
4	3.10	**29**	
5	0.50	**30**	
6		**31**	
7		**32**	
8		**33**	
9		**34**	
10		**35**	
11		**36**	
12		**37**	
13		**38**	
14		**39**	
15		**40**	
16		**41**	
17		**42**	
18		**43**	
19		**44**	
20		**45**	
21		**46**	
22		**47**	
23		**48**	
24		**49**	
25		**50**	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5	Average
Native perennial grass cover	10%	60%	10%	0%	0%	16%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	0%	3%	0%	5%	0%	2%
Native shrubs	0%	0%	0%	0%	0%	
Non-native grass	0%	0%	0%	0%	0%	
Non native forbs and shrubs	70%	17%	10%	5%	3%	21%
Litter	5%	5%	50%	60%	77%	39%
Rock	0%	0%	0%	0%	0%	
Bare Ground	15%	15%	30%	30%	20%	22%
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	550mm	**Number of large eucalypt trees:**	Corymbia citriodora = 570mm (Total = 1)
Non- Eucalypt Large tree DBH benchmark used:	360mm	**Number of large non eucalypt trees:**	0
Total number of large trees recorded:	1		
Total Number Large Trees per ha:	2		

Median Tree Canopy Height Measurements	**Canopy:**	23	**Sub-canopy:**	12.00	**Emergent:**	NA

Percentage of ecologically dominant layer species regenerating:	**50%**

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	**Canopy:**	26.6%	**Sub-canopy:**	68.00%	**Emergent:**	
Shrub canopy cover %	11.70%					

Layer	Start	End	Interval	Layer	Start	End	Interval
T1	0.0	5.4	5.4	**T2**	0.0	3.3	3.3
T1	35.1	44.7	9.6	**T2**	6.3	17.4	11.1
T1	66.6	78.2	11.6	**T2**	17.6	22.0	4.4
T1			0.0	**T2**	24.3	31.7	7.4
T1			0.0	**T2**	42.0	68.5	26.5
T1			0.0	**T2**	77.6	85.0	7.4
T1			0.0	**T2**	92.1	100.0	7.9
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub	0.0	1.1	1.1	**Shrub**	81.0	81.6	0.6
Shrub	9.0	11.9	2.9	**Shrub**			0.6
Shrub	17.4	18.6	1.2	**Shrub**			0.0
Shrub	30.4	31.7	1.3	**Shrub**			0.0
Shrub	42.0	43.0	1.0	**Shrub**			0.0
Shrub	50.0	51.2	1.2	**Shrub**			0.0
Shrub	52.6	53.1	0.5	**Shrub**			0.0
Shrub	61.3	62.1	1.3	**Shrub**			0.0

Part I: GHFF Stem Count

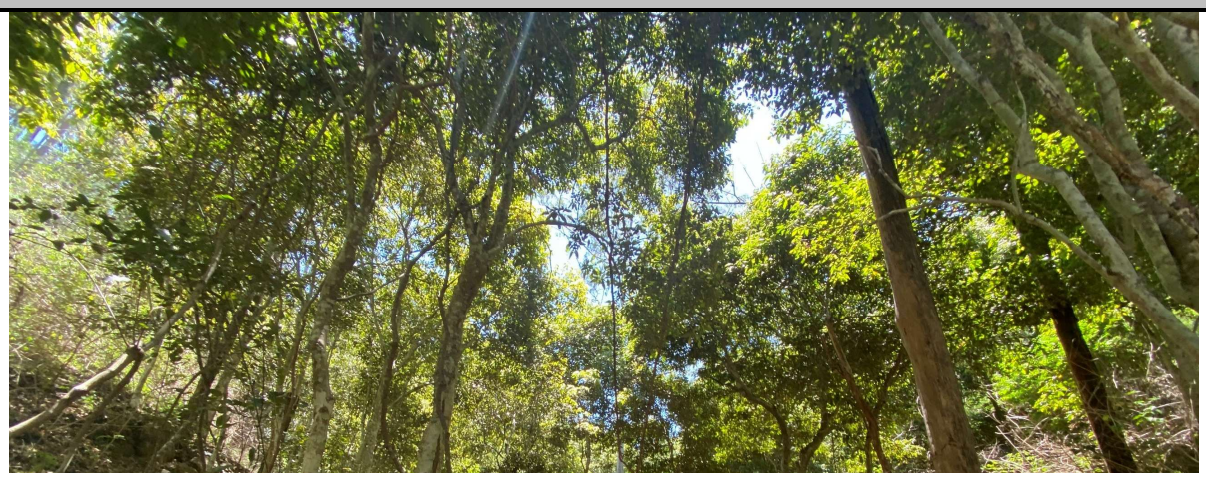
Species Name	Stem Count
Mallotus philippensis	67
Eucalyptus crebra	2
Corymbia tessellaris	4
Eucalyptus tereticornis	4
Corymbia intermedia	1
Corymbia citriodora	2
Total	80
Total per hectare	400

Part J: SAT Survey Results

SAT Survey ID	SAT 14 at Transect 21			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Mallotus philippensis*	Red Kamala	180	Nil
2	*Mallotus philippensis*	Red Kamala	160	Nil
3	*Mallotus philippensis*	Red Kamala	160	Nil
4	*Mallotus philippensis*	Red Kamala	140	Nil
5	*Mallotus philippensis*	Red Kamala	170	Nil
6	*Mallotus philippensis*	Red Kamala	200	Nil
7	*Mallotus philippensis*	Red Kamala	100	Nil
8	*Mallotus philippensis*	Red Kamala	120	Nil
9	*Mallotus philippensis*	Red Kamala	140	Nil
10	*Mallotus philippensis*	Red Kamala	220	Nil
11	*Mallotus philippensis*	Red Kamala	140	Nil
12	*Eucalyptus tereticornis*	Forest Red Gum	220	Nil
13	*Corymbia citriodora*	Spotted Gum	460	Nil
14	*Mallotus philippensis*	Red Kamala	180	Nil
15	*Mallotus philippensis*	Red Kamala	170	Nil
16	*Alphitonia excelsa*	Soap Tree	160	Nil
17	*Corymbia tessellaris*	Moreton Bay Ash	160	Nil
18	*Corymbia tessellaris*	Moreton Bay Ash	180	Nil
19	*Mallotus philippensis*	Red Kamala	140	Nil
20	*Mallotus philippensis*	Red Kamala	160	Nil
21	*Mallotus philippensis*	Red Kamala	150	Nil
22	*Mallotus philippensis*	Red Kamala	150	Nil
23	*Mallotus philippensis*	Red Kamala	170	Nil
24	*Mallotus philippensis*	Red Kamala	140	Nil
25	*Mallotus philippensis*	Red Kamala	130	Nil
26	*Mallotus philippensis*	Red Kamala	130	Nil
27	*Mallotus philippensis*	Red Kamala	100	Nil
28	*Lophostemon suaveolens*	Swamp Box	220	Nil
29	*Eucalyptus tereticornis*	Forest Red Gum	160	Nil
30	*Eucalyptus crebra*	Narrow Leaf Ironbark	320	Nil
Total				0/30

Attach Landscape Photos Here

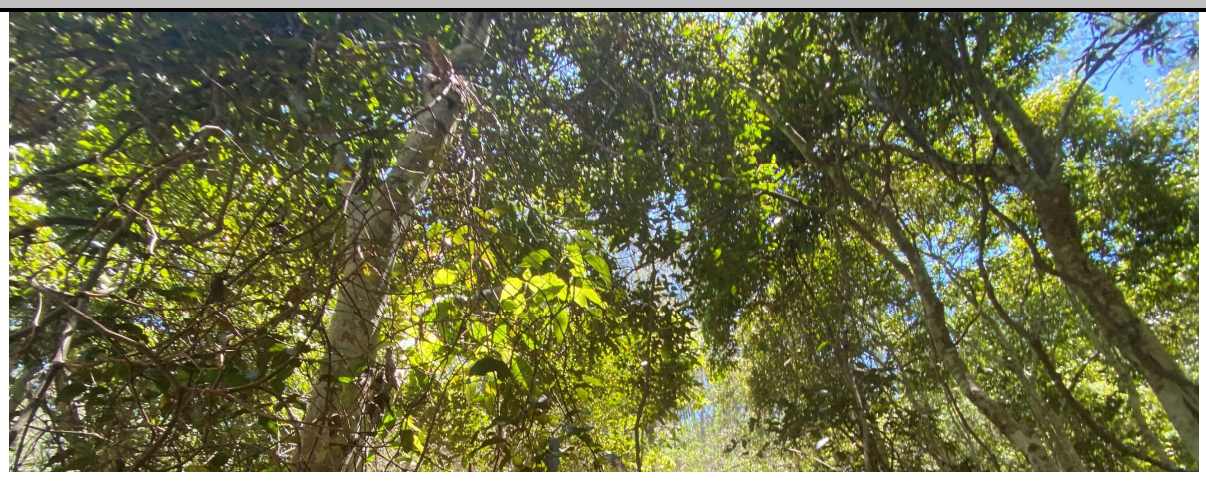
North



South

East

West



Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T22	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Jonny Pickvance	Date	25/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
6	10.39 hectraes	12.3.7	12

Site description and Location (including details of discrete polygons within the assessment unit)
Polygon is mapped as Category X (non-remnant) vegetation however contains vegetation representative of Least Concern RE12.3.7 described as Eucalyptus tereticornis, Casuarina cunninghamiana +/- Melaleuca spp fringing woodland. Site is heavily weeded.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	8			EDL / Dom / R
Scientific Name	*Corymbia citriodora*	Common Name	Spotted Gum	EDL
Scientific Name	*Eucalyptus crebra*	Common Name	Narrow Leaf Ironbark	EDL
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala	
Scientific Name	*Angophora subvelutina*	Common Name	Broad Leaved Apple	EDL
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash	EDL
Scientific Name	*Corymbia intermedia*	Common Name	Pink Bloodwood	
Scientific Name	*Jagera pseudorhus*	Common Name	Foambark	
Scientific Name	*Eucalyptus tereticornis*	Common Name	Forest Red Gum	EDL
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	3		
Scientific Name	*Alphitonia excelsa*	Common Name	Soap Tree
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala
Scientific Name	*Ficus coronata*	Common Name	Sand Paper Fig
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	3		
Scientific Name	*Aristida calycina*	Common Name	Dark Wiregrass
Scientific Name	*Heteropogon contortus*	Common Name	Black Spear Grass
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	7		
Scientific Name	*Sida cordifolia*	Common Name	Flannel Weed
Scientific Name	*Schenkia australis*	Common Name	Spike Centaury
Scientific Name	*Cyperus gracilis*	Common Name	Slender Flat Sedge
Scientific Name	*Maclura cochinchinensis*	Common Name	Cockpur Thorn
Scientific Name	*Lobelia purpurascens*	Common Name	White Root
Scientific Name	*Polymeria calycina*	Common Name	Slander Bindweed
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	90.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Conyza sumatrensis*	Common Name	Tall Fleabane
Scientific Name	*Cirsium vulgare*	Common Name	Spear Thsitle
Scientific Name	*Verbena bonariensis*	Common Name	Purpletop Vervain
Scientific Name	*Cyperus polystachyos*	Common Name	Bunchy Sedge
Scientific Name	*Asclepias curassavica*	Common Name	Red Head Cotton Bush

Scientific Name	*Bidens pilosa*	**Common Name**	Cobbler's Pegs
Scientific Name	*Solanum seaforthianum*	**Common Name**	Brazilian Night Shade
Scientific Name	*Sporobolus africanus*	**Common Name**	Paramatta Grass
Scientific Name	*Hydrocotyle acutiloba*	**Common Name**	Pennywort
Scientific Name	*Emilia sonchifolia*	**Common Name**	Emilia
Scientific Name	*Passiflora suberosa*	**Common Name**	Corky Passion Vine
Scientific Name	*Gandularia aristigera*	**Common Name**	Maynes Pest
Scientific Name	*Ambrosia artemisiifolia*	**Common Name**	Maynes Pest
Scientific Name	*Tagetes minuta*	**Common Name**	Stinking Roger
Scientific Name	*Calyyptocarpus vialis*	**Common Name**	Creeping Cinderella Weed
Scientific Name	*Desmodium uncinatum*	**Common Name**	Silverleaf Desmodium
Scientific Name	*Gomphocarpus physocarpus*	**Common Name**	Balloon Cotton Bush

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)			
1	0.00	**26**	
2		**27**	
3		**28**	
4		**29**	
5		**30**	
6		**31**	
7		**32**	
8		**33**	
9		**34**	
10		**35**	
11		**36**	
12		**37**	
13		**38**	
14		**39**	
15		**40**	
16		**41**	
17		**42**	
18		**43**	
19		**44**	
20		**45**	
21		**46**	
22		**47**	
23		**48**	
24		**49**	
25		**50**	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	**Quadrat 1**	**Quadrat 2**	**Quadrat 3**	**Quadrat 4**	**Quadrat 5**	**Average**
Native perennial grass cover	70%	40%	0%	55%	0%	33%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	0%	0%	3%	0%	0%	1%
Native shrubs	0%	0%	0%	0%	0%	
Non-native grass	0%	0%	0%	0%	0%	
Non native forbs and shrubs	30%	60%	27%	45%	85%	49%
Litter	0%	0%	0%	0%	15%	3%
Rock	0%	0%	0%	0%	0%	
Bare Ground	0%	0%	70%	0%	0%	14%
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	510mm	**Number of large eucalypt trees:**	0
Non- Eucalypt Large tree DBH benchmark used:	360mm	**Number of large non eucalypt trees:**	0
Total number of large trees recorded:	0		
Total Number Large Trees per ha:	0		

Median Tree Canopy Height Measurements	**Canopy:**	23	**Sub-canopy:**	10.00	**Emergent:**	NA

Percentage of ecologically dominant layer species regenerating:	**0**

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	**Canopy:**	32.2%	**Sub-canopy:**	10.20%	**Emergent:**	
Shrub canopy cover %	9.08%					

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
T1	10.5	19.5	9.0	**T2**	24.7	30.4	5.7
T1	62.0	69.8	7.8	**T2**	55.9	60.4	4.5
T1	75.2	83.2	8.0	**T2**			0.0
T1	83.2	87.3	4.1	**T2**			0.0
T1	96.7	100.0	3.3	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**

Shrub	6.7	7.7	1.0	**Shrub**			0.0
Shrub	13.7	15.0	1.3	**Shrub**			0.0
Shrub	30.2	30.7	0.5	**Shrub**			0.0
Shrub	50.0	51.7	1.7	**Shrub**			0.0
Shrub	65.6	66.1	0.5	**Shrub**			0.0
Shrub	72.2	74.1	1.9	**Shrub**			0.0
Shrub	79.5	80.0	0.5	**Shrub**			0.0
Shrub	82.5	85.0	1.7	**Shrub**			0.0

Part I: GHFF Stem Count

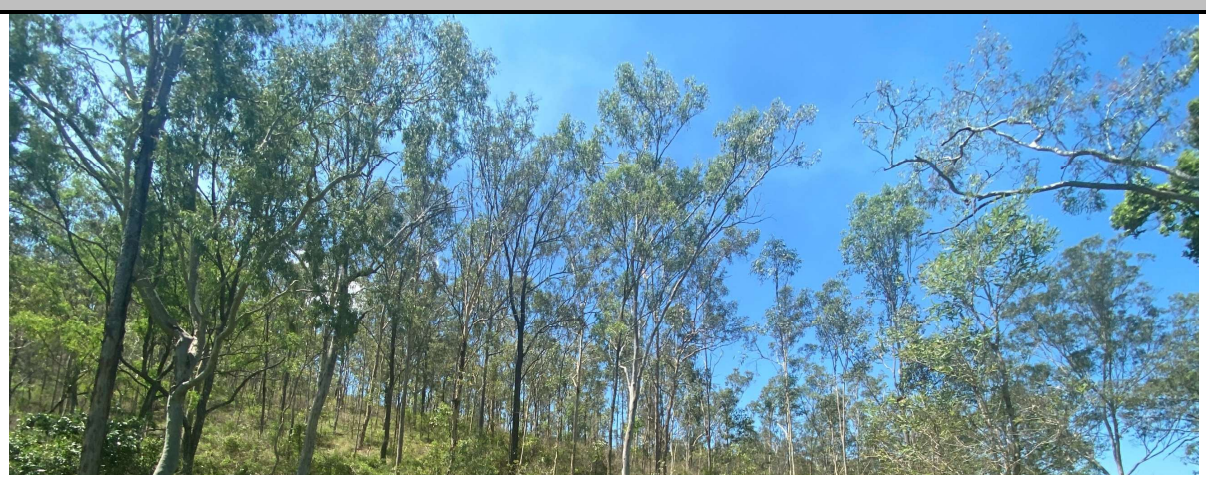
Species Name	Stem Count
Corymbia citridora	11
Corymbia intermedia	2
Corymbia tessellaris	3
Eucalyptus tereticornis	3
Angophora subvelutina	2
Jagera pseudorhus	1
Lophostemon suaveolens	1
Total	23
Total per hectare	115

Part J: SAT Survey Results

SAT Survey ID	SAT 15 at Transect 22			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Eucalyptus tereticornis*	Forest Red Gum	330	Nil
2	*Eucalyptus tereticornis*	Forest Red Gum	270	Nil
3	*Eucalyptus tereticornis*	Forest Red Gum	360	Nil
4	*Corymbia citridora*	Spotted Gum	310	Nil
5	*Corymbia tessellaris*	Moreton Bay Ash	460	Nil
6	*Lophostemon suaveolens*	Swamp Box	200	Nil
7	*Corymbia intermedia*	Pink Bloodwood	240	Nil
8	*Angophora subvelutina*	Broad Leaved Apple	360	Nil
9	*Angophora subvelutina*	Broad Leaved Apple	100	Nil
10	*Corymbia tessellaris*	Moreton Bay Ash	100	Nil
11	*Corymbia tessellaris*	Moreton Bay Ash	360	Nil
12	*Corymbia citridora*	Spotted Gum	300	Nil
13	*Corymbia citridora*	Spotted Gum	220	Nil
14	*Corymbia citridora*	Spotted Gum	160	Nil
15	*Corymbia citridora*	Spotted Gum	280	Nil
16	*Corymbia citridora*	Spotted Gum	260	Nil
17	*Corymbia citridora*	Spotted Gum	220	Nil
18	*Corymbia citridora*	Spotted Gum	240	Nil
19	*Corymbia citridora*	Spotted Gum	190	Nil
20	*Corymbia intermedia*	Pink Bloodwood	180	Nil
21	*Eucalyptus crebra*	Narrow Leaf Ironbark	140	Nil
22	*Eucalyptus crebra*	Narrow Leaf Ironbark	200	Nil
23	*Eucalyptus crebra*	Narrow Leaf Ironbark	360	Nil
24	*Eucalyptus crebra*	Narrow Leaf Ironbark	180	Nil
25	*Corymbia intermedia*	Pink Bloodwood	160	Nil
26	*Eucalyptus crebra*	Narrow Leaf Ironbark	150	Nil
27	*Corymbia citridora*	Spotted Gum	200	Nil
28	*Corymbia citridora*	Spotted Gum	220	Nil
29	*Corymbia citridora*	Spotted Gum	190	Nil
30	*Corymbia citridora*	Spotted Gum	100	Nil
Total				0/30

Attach Landscape Photos Here

North



South

East

West

Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T23	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill & Jonny Pickvance	Date	25/11/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
6	10.39 hectares	12.3.7	12

Site description and Location (including details of discrete polygons within the assessment unit)
Polygon is mapped as Category X (non-remnant) vegetation however contains vegetation representative of Least Concern RE12.3.7 described as Eucalyptus tereticornis, Casuarina cunninghamiana +/- Melaleuca spp fringing woodland.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	7			EDL / Dom / R
Scientific Name	*Corymbia citriodra*	Common Name	Spotted Gum	EDL / R
Scientific Name	*Eucalyptus tereticornis*	Common Name	Forest Red Gum	EDL
Scientific Name	*Melalueca bracteata*	Common Name	Black Tea-tree	
Scientific Name	*Mallotus philippensis*	Common Name	Red Kamala	
Scientific Name	*Casuarina cunninghamii*	Common Name	River She Oak	
Scientific Name	*Lophostemon suaveolens*	Common Name	Swamp Box	
Scientific Name	*Corymbia tessellaris*	Common Name	Moreton Bay Ash	EDL / Dom / R
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	5		
Scientific Name	*Melaleuca bracteata*	Common Name	Black Tea-tree
Scientific Name	*Casuarina cunninghamii*	Common Name	River She Oak
Scientific Name	*Melia azedarach*	Common Name	White Cedar
Scientific Name	*Ficus coronata*	Common Name	Sand Paper Fig
Scientific Name	*Acacia melanoxylon*	Common Name	Australian Blackwood
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	5		
Scientific Name	*Capillipedium spicigerum*	Common Name	Scented Top Grass
Scientific Name	*Leersia hexandra*	Common Name	Swamp Rice Grass
Scientific Name	*Cynodon dactylon*	Common Name	Green Couch
Scientific Name	*Imperata cylindrica*	Common Name	Blady Grass
Scientific Name	*Oplismenus aemulus*	Common Name	Creeping Beard Grass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	8		
Scientific Name	*Schenkia australis*	Common Name	Spike Centaury
Scientific Name	*Maclura cochinchinensis*	Common Name	Cockpur Thorn
Scientific Name	*Adiantum hispidulum*	Common Name	Rough Maidenhair Fern
Scientific Name	*Adiantum atroviride*	Common Name	Maidenhair Fern
Scientific Name	*Machaerina rubiginosa*	Common Name	Common Twigrush
Scientific Name	*Rubus parvifolius*	Common Name	Pink Flowered Native Raspberry
Scientific Name	*Juncus usitatus*	Common Name	Common Rush
Scientific Name	*Persicaria lapathifolia*	Common Name	Smartweed
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	50.00%		
Scientific Name	*Megathyrsus maximus*	Common Name	Guinea Grass
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Ageratum houstonianum*	Common Name	Blue Billygoat Weed
Scientific Name	*Sida rhombifolia*	Common Name	Arrowleaf Sida
Scientific Name	*Calyptocarpus vialis*	Common Name	Creeping Cinderella Weed
Scientific Name	*Conyza sumatrensis*	Common Name	Tall Fleabane
Scientific Name	*Solanum mauritianum*	Common Name	Wild Tobacco
Scientific Name	*Gomphocarpus physocarpus*	Common Name	Balloon Cotton Bush
Scientific Name	*Asclepias cuurassavica*	Common Name	Red Head Cotton Bush
Scientific Name	*Cyperus rotundus*	Common Name	Nut Grass
Scientific Name	*Bidens pilosa*	Common Name	Cobblers Pegs

Scientific Name	*Ambrosia artemisiifolia*	**Common Name**	Annual Rag Weed
Scientific Name	*Celtis sinensis*	**Common Name**	Chinese Elm
Scientific Name	*Chloris gayana*	**Common Name**	Rhodes Grass
Scientific Name	*Gandularia artistigera*	**Common Name**	Maynes Pest
Scientific Name	*Cirsium vulgare*	**Common Name**	Spear Thistle
Scientific Name	*Callisia repens*	**Common Name**	Creeping Inch Weed
Scientific Name	*Desmodium uncinatum*	**Common Name**	Silver Leaf Desmodium
Scientific Name	*Verbena bonariensis*	**Common Name**	Purpletop Vervain
Scientific Name	*Argemone ochroleuca*	**Common Name**	Mexican Poppy
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	**59.00**		
1	0.80	**26**	
2	1.40	**27**	
3	0.60	**28**	
4	3.10	**29**	
5		**30**	
6		**31**	
7		**32**	
8		**33**	
9		**34**	
10		**35**	
11		**36**	
12		**37**	
13		**38**	
14		**39**	
15		**40**	
16		**41**	
17		**42**	
18		**43**	
19		**44**	
20		**45**	
21		**46**	
22		**47**	
23		**48**	
24		**49**	
25		**50**	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	**Quadrat 1**	**Quadrat 2**	**Quadrat 3**	**Quadrat 4**	**Quadrat 5**	**Average**
Native perennial grass cover	45%	30%	97%	90%	90%	70%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	0%	0%	0%	10%	5%	3%
Native shrubs	0%	0%	0%	0%	0%	
Non-native grass	0%	0%	0%	0%	0%	
Non native forbs and shrubs	15%	0%	3%	0%	5%	5%
Litter	0%	0%	0%	0%	0%	
Rock	20%	5%	0%	0%	0%	5%
Bare Ground	20%	65%	0%	0%	0%	17%
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	510mm	**Number of large eucalypt trees:**	Eucalyptus tereticornis = 1410mm; Corymbia citridora = 810mm; Angophora subvellutina = 620mm; Lophostemon suaveolens = 640mm, 720mm, 780mm; (Total = 6)
Non- Eucalypt Large tree DBH benchmark used:	N/A	**Number of large non eucalypt trees:**	Mellaueca bracteata = 770/370mm; 940mm (total = 2)
Total number of large trees recorded:	8		
Total Number Large Trees per ha:	16		

Median Tree Canopy Height Measurements	**Canopy:**	26	**Sub-canopy:**	14.00	**Emergent:**	NA

Percentage of ecologically dominant layer species regenerating:	**66%**

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	**Canopy:**	14.8%	**Sub-canopy:**	24.50%	**Emergent:**	
Shrub canopy cover %	4.50%					

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
T1	2.6	12.4	9.8	**T2**	13.4	25.3	11.9
T1	95.0	100.0	5.0	**T2**	66.9	73.4	6.5
T1			0.0	**T2**	89.3	95.4	6.1
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**

Shrub	7.5	8.6	1.1	**Shrub**			0.0
Shrub	12.0	13.4	1.4	**Shrub**			0.0
Shrub	29.8	30.4	0.6	**Shrub**			0.0
Shrub	37.4	38.1	0.7	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.7	**Shrub**			0.0

Part I: GHFF Stem Count

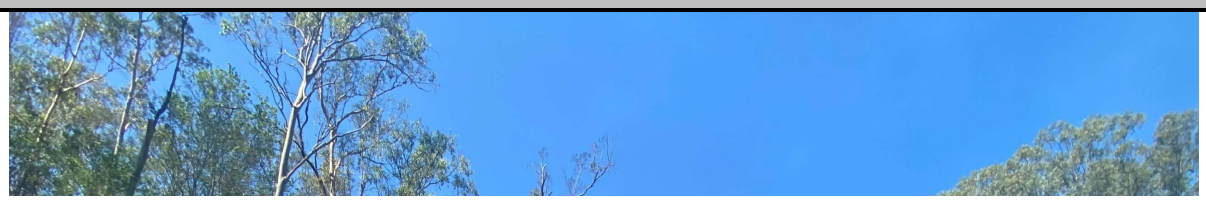
Species Name	Stem Count
Corymbia tessellaris	10
Lophostemon suaveolens	3
Anbgophora subvelutina	1
Casuarina cunninghamii	1
Corymbia citridora	6
Melaleuca bracteata	3
Eucalyptus tereticornis	1
Total	25
Total per hectare	125

Part J: SAT Survey Results

SAT Survey ID	SAT 16 at Transect 23			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1	*Melaleuca bracteata*	Black Tea-tree	470	Nil
2	*Corymbia citriodora*	Spotted Gum	200	Nil
3	*Eucalyptus tereticornis*	Forest Red Gum	1410	Nil
4	*Casuarina cunninghamii*	River She Oak	220	Nil
5	*Melaleuca bracteata*	Black Tea-tree	400	Nil
6	*Corymbia citriodora*	Spotted Gum	360	Nil
7	*Corymbia citriodora*	Spotted Gum	290	Nil
8	*Angophora subvelutina*	Broad Leaved Apple	620	Nil
9	*Corymbia citriodora*	Spotted Gum	810	Nil
10	*Melaleuca bracteata*	Black Tea-tree	940	Nil
11	*Lophostemon suaveolens*	Swamp Box	640	Nil
12	*Lophostemon suaveolens*	Swamp Box	220	Nil
13	*Lophostemon suaveolens*	Swamp Box	780	Nil
14	*Corymbia tessellaris*	Moreton Bay Ash	180	Nil
15	*Corymbia tessellaris*	Moreton Bay Ash	220	Nil
16	*Corymbia tessellaris*	Moreton Bay Ash	360	Nil
17	*Corymbia tessellaris*	Moreton Bay Ash	320	Nil
18	*Corymbia tessellaris*	Moreton Bay Ash	160	Nil
19	*Corymbia tessellaris*	Moreton Bay Ash	100	Nil
20	*Casuarina cunninghamii*	River She Oak	660	Nil
21	*Lophostemon suaveolens*	Swamp Box	490	Nil
22	*Lophostemon suaveolens*	Swamp Box	120	Nil
23	*Lophostemon suaveolens*	Swamp Box	140	Nil
24	*Lophostemon suaveolens*	Swamp Box	160	Nil
25	*Corymbia citriodora*	Spotted Gum	200	Nil
26	*Corymbia citriodora*	Spotted Gum	200	Nil
27	*Corymbia citriodora*	Spotted Gum	220	Nil
28	*Corymbia citriodora*	Spotted Gum	180	Nil
29	*Corymbia citriodora*	Spotted Gum	200	Nil
30	*Corymbia citriodora*	Spotted Gum	160	Nil
Total				0/30

Attach Landscape Photos Here

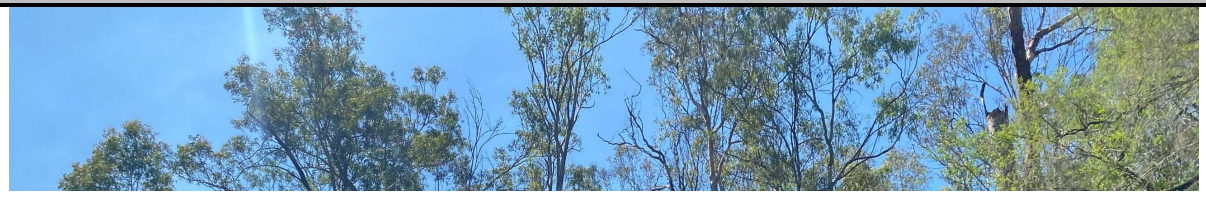
North



South

East

West



Habitat Quality Assessment Unit Score Sheet

Part A - Administrative

Transect ID	T24	Job Number / Property	8418 - Offset

Part B - Site Data

Recorders	David Havill	Date	18/12/2025

Assessment Unit:	Assessment Unit Area (ha)	RE	Bioregion Number
9	2.89 hecatres	12.3.7	12

Site description and Location (including details of discrete polygons within the assessment unit)
Polygon is mapped as Category X (non-remnant) vegetation with most vegation cleraed. Preclear regional ecosystem mapping maps Least Concern RE12.3.7 described as Eucalyptus tereticornis, Casuarina cunninghamiana +/- Melaleuca spp fringing woodland.

Part C - Native Species Richness: (*list species below)

Tree species richness:				
Total number of species	0			EDL / Dom / R
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		
Scientific Name		Common Name		

Shrub species richness:			
Total number of species	0		
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Grass species richness:			
Total number of species	6		
Scientific Name	*Cynondon dactylon*	Common Name	Green Couch
Scientific Name	*Aristida stricta*	Common Name	Three-awn Wiregrass
Scientific Name	*Capillpedium spicigerum*	Common Name	Scentedtop Garss
Scientific Name	*Heteropogon contortus*	Common Name	Black Spear Grass
Scientific Name	*Eragrostis brownii*	Common Name	Browns Love Grass
Scientific Name	*Chloris truncata*	Common Name	Windmill Grass
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Forbs and others (non grass ground) species richness:			
Total number of species	3		
Scientific Name	*Glycine clandestina*	Common Name	Twining Glycine
Scientific Name	*Schenkia australis*	Common Name	Spiked Centuary
Scientific Name	*Fimbristylis dichotoma*	Common Name	Common Fringe Rush
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	
Scientific Name		Common Name	

Part D - Non-Native Plant Cover: (*list species below)

Total percentage cover within plot	90.00%		
Scientific Name	*Lantana camara*	Common Name	Lantana
Scientific Name	*Solanum mauritianum*	Common Name	Wild Tobacco
Scientific Name	*Sporobolus africanus*	Common Name	Paramatta Grass
Scientific Name	*Cyperus polystachyos*	Common Name	Bunchy Sedge
Scientific Name	*Conyza sumatrensis*	Common Name	Tall Fleabane
Scientific Name	*Glandularia aristigera*	Common Name	Mayne's Pest
Scientific Name	*Cirisium vulgare*	Common Name	Spear Thistle
Scientific Name	*Gomphocarpus physocarpus*	Common Name	Balloon Cotton Bush
Scientific Name	*Sida cordifolia*	Common Name	Flannel Weed
Scientific Name	*Oxalis stricta*	Common Name	Yellow Woodsorrel
Scientific Name	*Calyptocarpus vialis*	Common Name	Creeping Cinderella Weed

Scientific Name	*Salonum nigrum*	**Common Name**	Black Berry Nightshade
Scientific Name	*Chloris gayana*	**Common Name**	Rhodes Grass
Scientific Name	*Asclepias curassavica*	**Common Name**	Red-head Cotton Bush
Scientific Name	*Hydrocotyle acutiloba*	**Common Name**	Pennywort
Scientific Name	*Tagetes minuta*	**Common Name**	Stinking Roger
Scientific Name	*Sporobolus fertilis*	**Common Name**	Rats Tail Grass
Scientific Name	*Passiflora subuerosa*	**Common Name**	Corky Passion Vine
Scientific Name	*Emilia sonchifolia*	**Common Name**	Emilia
Scientific Name	*Verbena bonariensis*	**Common Name**	Purpletop Vervain
Scientific Name	*Urochloa decumbens*	**Common Name**	Signal Grass
Scientific Name	*Centella asiatica*	**Common Name**	Pennywort
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	
Scientific Name		**Common Name**	

Part E - Coarse Woody Debris: (*list lengths of individual logs in meters)

Total Length of Course Woody Debris (Meters per hectare)	**107.00**		
1	0.50	**26**	
2	1.20	**27**	
3	0.90	**28**	
4	0.80	**29**	
5	0.80	**30**	
6	0.70	**31**	
7	1.30	**32**	
8	1.20	**33**	
9	1.10	**34**	
10	0.90	**35**	
11	0.80	**36**	
12	0.50	**37**	
13		**38**	
14		**39**	
15		**40**	
16		**41**	
17		**42**	
18		**43**	
19		**44**	
20		**45**	
21		**46**	
22		**47**	
23		**48**	
24		**49**	
25		**50**	

Part F - Native perennial grass cover, organic litter: (*provide percentage cover within each quadrat, and provide average cover)

Ground Cover	**Quadrat 1**	**Quadrat 2**	**Quadrat 3**	**Quadrat 4**	**Quadrat 5**	**Average**
Native perennial grass cover	98%	50%	22%	2%	0%	34%
Native other grass	0%	0%	0%	0%	0%	
Native forbs and other species	0%	0%	0%	0%	0%	
Native shrubs	0%	0%	0%	0%	0%	
Non-native grass	0%	0%	0%	0%	15%	3%
Non native forbs and shrubs	2%	50%	70%	68%	85%	55%
Litter	0%	0%	8%	0%	0%	2%
Rock	0%	0%	0%	30%	0%	6%
Bare Ground	0%	0%	0%	0%	0%	
Cryptogram	0%	0%	0%	0%	0%	
Total	100%	100%	100%	100%	100%	100%

Part G- Number of large trees , tree canopy height, recruitment of woody perennial species:

Eucalypt Large tree DBH benchmark used :	510mm	**Number of large eucalypt trees:**	0
Non- Eucalypt Large tree DBH benchmark used:	360mm	**Number of large non eucalypt trees:**	0
Total number of large trees recorded:	0		
Total Number Large Trees per ha:	0		

Median Tree Canopy Height Measurements	**Canopy:**	na	**Sub-canopy:**	na	**Emergent:**	NA

Percentage of ecologically dominant layer species regenerating:	**0**

Part H - Tree canopy cover, Shrub canopy cover

Tree canopy cover %	**Canopy:**	0.0%	**Sub-canopy:**	0.00%	**Emergent:**	
Shrub canopy cover %	0.00%					

Layer	**Start**	**End**	**Interval**	**Layer**	**Start**	**End**	**Interval**
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0
T1			0.0	**T2**			0.0

Layer	Start	End	Interval	Layer	Start	End	Interval
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0
Shrub			0.0	**Shrub**			0.0

Part I: GHFF Stem Count

Species Name	Stem Count
Total	0
Total per hectare	0

Part J: SAT Survey Results

SAT Survey ID	No SAT			
Tree Number	**Scientific Name**	**Common Name**	**DBH**	**Scat (Y/N)**
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
Total				0/30

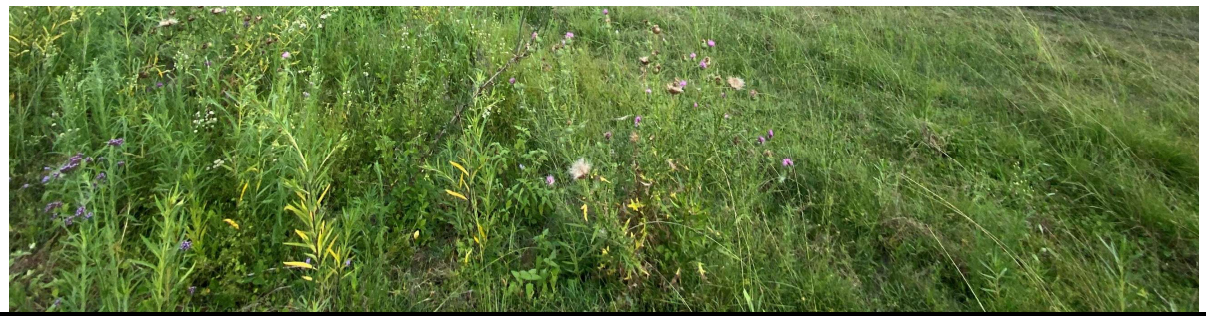
Attach Landscape Photos Here

North

South

East

West



Appendix G

Milestone Framework

TEC Environmental Outcomes – AU3

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 75% of the benchmark. If recruitment dos not achieve 90% by 15 years then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 125% of the benchmark. If the tree species richness falls below 90% then remedial actions to improve will be applied. These include remedial plantings.
Native plant species richness - Shrubs	5	5	5	5	5	Immediate	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 106% of the benchmark. If the shrub species richness falls below than 90% then remedial actions will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 58.33% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 20 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Native forb species richness between greater than 90% of the benchmark will be maintained as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently 58.82% of the benchmark. 90% of the benchmark will be achieved by year 15. If the forb species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	4	4	4	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree canopy cover is currently 149.84% and sub-canopy 286.30% of the benchmark. If average canopy cover is not improved to be between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	If the shrub canopy cover is not maintained between 50% and 200% at 15 years will be applied.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter is not maintained at greater than 50% at 15 years then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Coarse woody debris	5	5	5	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris between 50% and 200% will be maintained. If during year 15 it is not between 50% and 200% of the benchmark then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 82.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score	52	52	54.5	63	65				
Overall Site Condition Score out of 3	**4.55**	**4.55**	**4.77**	**5.51**	**5.69**				

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	0	0	0	0	0	NA	NA	NA	NA
Context	0	0	0	0	0	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including bushfire, weed incursion and land management practices including routine clearing and grazing will be reduced to low levels by specific management actions 1 to 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species, unsuitable land management practices and creation of a bushfire management plan will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.
Site Context Score	**28**	**36**	**36**	**36**	**36**				
Overall Site Context Score (out of 3)	**1.83**	**2.35**	**2.35**	**2.35**	**2.35**				
Total Habitat Quality Scores	**6.38**	**6.90**	**7.12**	**7.86**	**8.04**				

TEC Environmental Outcomes – AU6

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 38.67% of the benchmark. If recruitment does not achieve 75%or greater by 15 years then remedial actions to improve recruitment will be applied to increase the prospect of achieving >75% by 20 years. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If the tree species richness is not maintained as >90% then remedial actions will be applied. These include remedial plantings.
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 66.67% of the benchmark. If the shrub species richness has not improved to >75% at 10 years then remedial actions to improve the prospect of

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 66.67% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 54.90% of the benchmark. If the forb species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not maintained between 15% and 200% then remedial actions will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 32.24% of the benchmark. If the shrub canopy cover has not improved to between 50% and 200% at 15 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 54.32 of the benchmark. If organic litter is not between 50% and 200% then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 15.29% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% in year 10 then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 73.33% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									refining weed control methods.
Site Condition Score **Overall Site Condition Score out of 3**	45.5 **3.98**	45.5 **3.98**	50.5 **4.42**	61 **5.34**	65 **5.69**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	0	0	0	0	0	NA	NA	NA	NA
Context	0	0	0	0	0	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including bushfire, weed incursion and land management practices including routine clearing and grazing will be reduced to low levels by specific management actions 1 to 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species, unsuitable land management practices and creation of a bushfire management plan will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Site Context Score	28	36	36	36	36				
Overall Site Context Score (out of 3)	1.83	2.35	2.35	2.35	2.35				
Total Habitat Quality Scores	5.81	6.33	6.77	7.69	8.04				

TEC Environmental Outcomes – AU9

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species of >75% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 50% of the benchmark. If recruitment is not at least 75% at 15years then remedial actions to improve recruitment will be applied in order to improve prospects of achieving .75% of the benchmark at year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	0	0	0	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 16.67% of the benchmark. If the tree species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	0	0	0	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 6.25% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 75% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	0	0	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Forb species richness is currently at 8.82% of the benchmark. If the grass species richness has not improved to greater

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10 15, and 20 years.	than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	3	3	3	5	5	15 years	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height above 70% is not achieved at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	2	2	2	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover does not achieve between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Shrub canopy cover	0	0	0	3	5	20 years	Shrub canopy cover between 50% and 200% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently 5% of the benchmark. If shrub canopy cover between 50% and 200% is not achieved at 10 years, then remedial plantings are to be applies. By Year 15 species plantings to be a minimum of 50% of the shrub canopy cover benchmark.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	0	0	0	3	5	20 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 5.56% of the benchmark. If organic litter is not between 50% and 200% of the benchmark at 10 years then remedial actions to improve the prospect of achieving between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	0	0	0	2	5	20 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 8.02% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 92.50% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score Overall Site Condition Score out of 3	20.5 **1.79**	22.5 **1.97**	30 **2.63**	53.5 **4.68**	65 **5.69**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	0	0	0	0	0	NA	NA	NA	NA
Context	0	0	0	0	0	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall	5	5	5	5	5	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
population in the state									
Threats to the species	7	15	15	15	15	5 years	Threats to species including bushfire, weed incursion and land management practices including routine clearing and grazing will be reduced to low levels by specific management actions 1 to 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species, unsuitable land management practices and creation of a bushfire management plan will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.
Site Context Score	**28**	**36**	**36**	**36**	**36**				
Overall Site Context Score (out of 3)	**1.83**	**2.35**	**2.35**	**2.35**	**2.35**				
Total Habitat Quality Scores	**3.62**	**4.32**	**4.97**	**7.03**	**8.04**				

TEC Environmental Outcomes – AU10

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will be >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 33% of the benchmark. If recruitment of at least 75% is not achieved by year 15 then remedial actions to improve recruitment will be applied to improve the prospect of achieving >75% of the benchmark at year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	5	5	15 years	Tree species .90% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 70% of the benchmark. If tree species richness does not reach 75% by year 10 then remedial actions to improve will be applied to improve prospects of achieving 90% by year 15. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 40% of the benchmark. If the shrub species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 33.33% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Forb species to be >90% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Forb species richness is currently at 28% of the benchmark. If the shrub species richness has not improved to greater

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15years will be applied. These include remedial plantings.
Tree canopy height	4	4	4	5	5	15 years	A median tree height greater than 70% of the benchmark will be achieved as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height >70% of the benchmark is not achieved at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	3.5	3.5	3.5	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20 years	Canopy cover to be between 50% and 200% of the	Baseline Site Condition attributes are established.	Shrub canopy cover is currently at 603.75% of the

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	benchmark. If the shrub canopy cover has not improved to between 50% and 200% at 15 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include remedial plantings.
Native perennial grass cover	3	3	3	3	5	20 years	Native grass cover to be at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Native perennial grass cover is currently 65.38% of the benchmark. If the native perennial grass cover is not greater than 90% in 10 years then remedial actions will be applied to improve prospects of achieving >90% in 20years . These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	If organic litter is not between 50% and 200% of the benchmark at 10 years then remedial actions to improve the prospect of

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10, 15 and 20 years.	achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 35.71% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% at 10 years then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 67.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score	36.5	38.5	43.5	59	65				
Overall Site Condition Score out of 3	**3.19**	**3.37**	**3.81**	**5.16**	**5.69**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	0	0	0	0	0	NA	NA	NA	NA
Context	0	0	0	0	0	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall	5	5	5	5	5	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
population in the state									
Threats to the species	7	15	15	15	15	5 years	Threats to species including bushfire, weed incursion and land management practices including routine clearing and grazing will be reduced to low levels by specific management actions 1 to 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species, unsuitable land management practices and creation of a bushfire management plan will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.
Site Context Score	**28**	**36**	**36**	**36**	**36**				
Overall Site Context Score (out of 3)	**1.83**	**2.35**	**2.35**	**2.35**	**2.35**				
Total Habitat Quality Scores	**5.02**	**5.72**	**6.15**	**7.51**	**8.04**				

Koala Environmental Outcomes – AU1

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	5	5	5	5	5	Immediate	Recruitment of EDL dominant species will be maintained >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 88.67% of the benchmark. If recruitment falls to less than 75% then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species will be maintained by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at >100% of the benchmark. Recruitment of tree species is to be maintained. If tree species richness falls below 75% then remedial actions to improve will be applied. These include remedial plantings of advanced stock.
Native plant species richness - Shrubs	5	5	5	5	5	Immediate	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 94.44% of the benchmark. If the shrub species richness falls below 75% then remedial actions to improve will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	All of the expected grass species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Grass species richness is currently at 30.30% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 42.53% of the benchmark. If the forb species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% at 15 years, then the prospect of extending the management period may be investigated.
Tree canopy cover	4	4	4	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover does not reach 50% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Shrub canopy cover	5	5	5	5	5	Immediate	Canopy cover to be maintained between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 75.50% of the benchmark. If the shrub canopy cover is not maintained then remedial actions to improve the prospect of achieving will be applied. These include remedial plantings.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to be maintained at 90% of the benchmark or higher by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% in 15 years then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter has not achieved between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris to be greater than 50% and less than 200% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 38.23% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not between 50 and 200% by year 10 then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	5	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 21.67% of the benchmark. If improvement below 5% has not been achieved by the end of Year 10 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained as high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently High. All site condition remedial actions also apply to this criterium and as such if it is not found to be high required remedial actions will be taken.
Quality and availability of shelter	10	10	10	10	10	Immediate	Quality and availability of shelter will be maintained as high by specific management	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed	Quality and availability of shelter is currently High. All site condition remedial actions also apply to this criterium and as such if it is not found to be high required remedial actions will be taken.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	by suitably qualified professionals at 5, 10, 15 and 20years.	
Site Condition Score	74	74	79	90	90				
Overall Site Condition Score out of 3	**2.22**	**2.22**	**2.37**	**2.70**	**2.70**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	4	4	4	4	4	NA	NA	NA	NA
Context	5	5	5	5	5	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 Years	Threats to species including barbed wire fencing, non-native predators and WONS will be reduced to low levels by specific management actions 1 to 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.
Species mobility capacity	10	10	10	10	10	Immediate	Species mobility capacity will be maintained as to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently minorly restricted. This will be maintained. All site condition remedial actions, as well as threat reductions also apply to this criterium maintaining a high rating. If species mobility is found to increase to 25% restriction or

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									greater than required remedial actions will be taken.
Site Context Score	47	**55**	55	55	55				
Overall Site Context Score (out of 3)	2.52	**2.95**	**2.95**	**2.95**	**2.95**				
Presence	10	10	10	10	10	Immediate	NA - Not anticipated to change	Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	NA - Not anticipated to change
Usage	15	15	15	15	15	Immediate	It is anticipated that under the management actions specified under management actions 1 to 6 outlined in **Table 78** Koala usage of the site will be maintained.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If usage levels are not maintained at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly.
Approximate Density	10	10	10	10	10	Immediate	It is anticipated that under the management actions specified in management actions 1 to 6 outlined in **Table 78** at least low level Koala activity (>0% -<22.52%) scats recorded using the East Coast med-high population category will be maintained.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If density levels are not maintained at low level at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	40	40	40	40	40				
SSR Score out of 4	**2.29**	**2.29**	**2.29**	**2.29**	**2.29**				
Total Habitat Quality Scores	**7.02**	**7.45**	**7.60**	**7.93**	**7.93**				

Koala Environmental Outcomes – AU2

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	5	5	5	5	5	Immediate	Recruitment of EDL dominant species will be maintained as >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 88.67% of the benchmark. If recruitment is not maintained as 75% or greater post weed removal in 15 years then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species will be maintained by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 100% of the benchmark. Recruitment of tree species is to be maintained. If tree species richness falls below 75% then remedial actions to improve will be applied. These include remedial plantings of advanced stock.
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	Immediate	All of the expected shrub species to be increase as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Shrub species richness is currently at 66.67% of the benchmark. If the shrub species richness is not 75% of the benchmark by year 10 than

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	remedial actions will be taken to improve the prospect of achieving 90% by year 15. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 54.55% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**..	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 88.24% of the benchmark. If the forb species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	4	4	4	5	5	15 years	Tree canopy cover of between 50% and 200% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree canopy cover is currently 132.32% of canopy cover and 225% subcanopy cover of the benchmark. An average canopy and subcanopy score of between 50% and 200% of the benchmark will be achieved at 15 years. If it has not been achieved then the prospect of extending the management period may be investigated.
Shrub canopy cover	3	3	3	3	5	20 years	Shrub canopy cover greater than 50% but below 200% of the benchmark will be achieved as a result of specific management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Shrub canopy cover is currently 286.67% of the benchmark. If shrub canopy cover is not above 50% but below 200% of the

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10, 15 and 20 years.	benchmark at 15 years, then remedial actions including review of fire regimes will be investigated to improve the prospect of achieving between 50% and 200% of the benchmark by 20years.
Native perennial grass cover	3	3	3	3	5	20 years	Native perennial grass cover greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Native perennial grass-cover is currently 54.29% of the benchmark. 75% of the benchmark for native perennial grass cover will be achieved by year 15. If this is not achieved than remedial actions will be reviewed in order to improve the prospect of achieving 90% of the benchmark by 20years. Remedial actions include review of fire regimes and remedial plantings.

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Organic litter	3	3	3	5	5	15 years	Organic litter between 50% and 200% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Organic litter is currently 41.43% of the benchmark. Organic littler will be between 50% and 200% by year 10. If monitoring indicates that litter cover is not achieved between 50% and 200% then remedial actions will be applied to improve the prospect of achieving 90% in 20 years will be applied. These include a review of action that impact on organic litter such as fire regimes and importing native organic litter if necessary.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Coarse woody debris is currently 33.91% of the benchmark. If monitoring indicates that coarse woody debris is not between 50% and 200% in year 10 then remedial actions will be applied to improve the prospect of achieving this benchmark in 15 years. Remedial actions include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	3	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 47.50% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									refining weed control methods.
Quality and availability of food and foraging habitat	5	5	5	10	10	15 years	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	5	5	5	10	10	15 years	Quality and availability of shelter will be increase to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of shelter is currently moderate. This will be improved to high. If a high quality and availability of shelter is not achieved by year 10 then remedial actions will be investigated to increase the prospect of achieving high condition by 15 years. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Site Condition Score	55.5	57.5	62.5	86	90				
Overall Site Condition Score out of 3	**1.67**	**1.73**	**1.88**	**2.58**	**2.70**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	4	4	4	4	4	NA	NA	NA	NA
Context	5	5	5	5	5	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing, non-native predators and weeds will be reduced to low levels by specific management actions 1 to 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.
Species mobility capacity	10	10	10	10	10	Immediate	Species mobility capacity will be maintained as minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be	Species mobility is currently minority restricted. If the sites restrictions is not maintained at minor than remedial actions will be taken. All site condition remedial

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								completed by suitably qualified professionals at 5, 10, 15 and 20 years.	actions, as well as threat reductions also apply to this criterium achieving a high rating.
Site Context Score	47	55	55	55	55				
Overall Site Context Score (out of 3)	**2.52**	**2.95**	**2.95**	**2.95**	**2.95**				
Presence	10	10	10	10	10	Immediate	NA - Not anticipated to change	Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	NA - Not anticipated to change
Usage	15	15	15	15	15	Immediate	It is anticipated that under the management actions specified under management actions 1 to 6 outlined in **Table 78** Koala usage of the site will be maintained.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If usage levels are not maintained at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly.
Approximate Density	10	10	10	10	10	Immediate	It is anticipated that under the management actions specified in management actions 1 to 6 outlined in **Table 78** at least low level Koala activity (<22.52% scats recorded using the East Coast med-high population	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If density levels are not maintained at low level at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly.

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							category) will be maintained.		
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	**40**	**40**	**40**	**40**	**40**				
SSR Score out of 4	**2.29**	**2.29**	**2.29**	**2.29**	**2.29**				
Total Habitat Quality Scores	**6.47**	**6.96**	**7.11**	**7.81**	**7.93**				

Koala Environmental Outcomes – AU3

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 75% of the benchmark. If recruitment dos not achieve 90% by 15 years then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 125% of the benchmark. If the tree species richness falls below 90% then remedial actions to improve will be applied. These include remedial plantings.
Native plant species richness - Shrubs	5	5	5	5	5	Immediate	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 106% of the benchmark. If the shrub species richness falls below than 90% then remedial actions will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 58.33% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 20 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Native forb species richness between greater than 90% of the benchmark will be maintained as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently 58.82% of the benchmark. 90% of the benchmark will be achieved by year 15. If the forb species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	4	4	4	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree canopy cover is currently 149.84% and sub-canopy 286.30% of the benchmark. If average canopy cover is not improved to be between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	If the shrub canopy cover is not maintained between 50% and 200% at 15 years will be applied.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter is not maintained at greater than 50% at 15 years then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Coarse woody debris	5	5	5	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris between 50% and 200% will be maintained. If during year 15 it is not between 50% and 200% of the benchmark then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 82.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Quality and availability of food and foraging habitat	5	5	5	10	10	15 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	5	5	5	10	10	15 Years	Quality and availability of shelter will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Quality and availability of shelter is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Site Condition Score	62	67	72	88	90				
Overall Site Condition Score out of 3	**1.86**	**2.01**	**2.16**	**2.64**	**2.70**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	4	4	4	4	4	NA	NA	NA	NA
Context	5	5	5	5	5	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall	5	5	5	5	5	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
population in the state									
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing, non-native predators and weeds will be reduced to low levels by specific management actions 2 and 3 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.
Species mobility capacity	10	10	10	10	10	Immediate	Species mobility capacity will be maintained as minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Restrictions on species mobility is currently minor. This will be maintained. If restrictions on mobility are observed to increase that remedial actions will be applied. All site condition remedial actions, as well as threat reductions also apply to this criterium achieving a high rating.
Site Context Score	**47**	**55**	**55**	**55**	**55**				

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Overall Site Context Score (out of 3)	**2.52**	**2.95**	**2.95**	**2.95**	**2.95**				
Presence	10	10	10	10	10	Immediate	NA - Not anticipated to change	Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	NA - Not anticipated to change
Usage	15	15	15	15	15	Immediate	It is anticipated that under the management actions specified under management actions 1 to 6 outlined in **Table 78** Koala usage of the site will be maintained.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If usage levels are not maintained at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala usage has not improved to breeding level by 15 years then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala usage.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Approximate Density	10	10	10	10	10	Immediate	It is anticipated that under the management actions specified in management actions 1 to 6 outlined in **Table 78** at least low level Koala activity (<22.52% scats recorded using the East Coast med-high population category) will be maintained.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If density levels are not maintained at low level at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala activity has not improved to low level by Year 15 then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala activity.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	**40**	**40**	**40**	**40**	**40**				
SSR Score out of 4	**2.29**	**2.29**	**2.29**	**2.29**	**2.29**				
Total Habitat Quality Scores	**6.66**	**7.24**	**7.39**	**7.87**	**7.93**				

Koala Environmental Outcomes – AU4

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 66.67% of the benchmark. If recruitment dos not achieve 75% by 15 years then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 83.33% of the benchmark. If the tree species richness has not improved to greater than 90% at 15 years then remedial actions to improve the prospect of achieving 90% in 20 years will be applied. These include remedial plantings.
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Shrub species richness is currently at 61.11% of the benchmark. If the shrub species richness has not improved to greater

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 27.27% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Forb species richness is currently at 41.38% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not ,maintained above 70% at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not maintained between 50% and 200% at 15 years then remedial actions will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Shrub canopy cover than 50% between 50% and 200% of the benchmark will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If shrub canopy cover is not maintained between 50% and 200% at 15 years, then remedial plantings are to be applies. By Year 20 species plantings to be a minimum of 50% of the shrub

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									canopy cover benchmark.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% in 10 years then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 42.22% of the benchmark. If organic litter is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a	Baseline Site Condition attributes are established. Habitat quality transects to be completed by	It is anticipated that the number of large trees will be maintained between 0% and 50%.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							result of management actions 11 to 6 outlined in **Table 78**.	suitably qualified professionals at 5, 10, 15 and 20 years.	Remedial actions are not anticipated.
Coarse woody debris	5	5	5	5	5	Immediate	Course woody debris greater than 50% and less than 200% of the benchmark will be maintained by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris between 50% and 200% of the benchmark will be maintained. If at year 15 it is not between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 63.33% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Quality and availability of food and foraging habitat	5	5	5	10	10	15 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	5	5	5	10	10	15 Years	Quality and availability of shelter will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Quality and availability of shelter is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Site Condition Score	56	61	66	85.5	90				
Overall Site Condition Score out of 3	**1.68**	**1.83**	**1.98**	**2.57**	**2.70**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	4	4	4	4	4	NA	NA	NA	NA
Context	5	5	5	5	5	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall	5	5	5	5	5	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
population in the state									
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing, non-native predators and weeds will be reduced to low levels by specific management actions 1 to 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.
Species mobility capacity	10	10	10	10	10	Immediate	Species mobility capacity will be maintained as minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently minorly restricted . This will be maintained. If increase restrictions on mobility are observed than remedial actions will be taken. All site condition remedial actions, as well as threat reductions also apply to this criterium achieving a high rating.
Site Context Score	**47**	55	55	55	55				
Overall Site Context Score (out of 3)	**2.52**	**2.95**	**2.95**	**2.95**	**2.95**				

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Presence	10	10	10	10	10	Immediate	NA - Not anticipated to change	Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	NA - Not anticipated to change
Usage	5	5	5	15	15	15 years	It is anticipated that under the management actions specified under management actions 1 to 6 outlined in **Table 78** Koala usage of the site will be increased to foraging /breeding habitat.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Koala usage of the site is currently dispersal. If usage levels has not increased to foraging/breeding (Score 15 out of 15) by year 10, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala usage has not improved to breeding level by 15 years then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala usage.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Approximate Density	0	0	0	10	10	Immediate	It is anticipated that under the management actions specified in management actions 1 to 6 outlined in **Table 78** at least low level Koala activity (<22.52% scats recorded using the East Coast med-high population category) will be achieved.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Koala density levels are currently 0% as no Scats were located in this transect, If density levels are not increased to low level at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala activity has not improved to low level by Year 15 then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala activity.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	**20**	**20**	**20**	**40**	**40**				
SSR Score out of 4	**1.14**	**1.14**	**1.14**	**2.29**	**2.29**				

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Total Habitat Quality Scores	5.34	5.92	6.07	7.80	7.93				

Koala Environmental Outcomes – AU5

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	5	5	5	5	5	Immediate	Recruitment of EDL dominant species will be maintained as >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 100% of the benchmark. If recruitment is below 90% then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 100% of the benchmark. If the tree species richness fall below 90% at then remedial actions to improve the prospect of achieving 90% in 20 years will be applied. These include remedial plantings.
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 55.56% of the benchmark. If the shrub species richness has not improved to greater than 75% at 10 years then remedial

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 45.45% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 44.12% of the benchmark. If the forb species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height above 70% is not maintained at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	4	4	4	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy above 50% but below 200% is not achieved at 10years then remedial actions to improve the prospect of achieving between 50% and 200% the remedial actions will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Shrub canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy between 50% and 200% is not maintained at then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native perennial grass cover	1	1	1	1	5	20 years	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover at greater than 90% is not achieved in 15 years then remedial actions will be applied to increase the prospect of achieving greater than 90% by year 20. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter falls below 50% then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Coarse woody debris	5	5	5	5	5	Immediate	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 77.81% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not remaining between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 67.50% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Quality and availability of food and foraging habitat	5	5	5	10	10	15 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	5	5	5	10	10	15 Years	Quality and availability of shelter will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Quality and availability of shelter is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Site Condition Score	57.5	62.5	67.5	86	90				
Overall Site Condition Score out of 3	**1.73**	**1.88**	**2.03**	**2.58**	**2.70**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	4	4	4	4	4	NA	NA	NA	NA
Context	5	5	5	5	5	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall	5	5	5	5	5	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
population in the state									
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing, non-native predators and weeds will be reduced to low levels by specific management actions 2 and 3 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.
Species mobility capacity	10	10	10	10	10	Immediate	Species mobility capacity will be maintained at minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently minorly restricted. If restrictions on mobility are observed to be increasing than remedial actions will be taken. All site condition remedial actions, as well as threat reductions also apply to this criterium achieving a high rating.
Site Context Score	47	55	55	55	55				
Overall Site Context Score (out of 3)	**2.52**	**2.95**	**2.95**	**2.95**	**2.95**				

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Presence	10	10	10	10	10	Immediate	NA - Not anticipated to change	Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	NA - Not anticipated to change
Usage	15	15	15	15	15	Immediate	It is anticipated that under the management actions specified under management actions 1 to 6 outlined in **Table 78** Koala usage of the site will be maintained.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If usage levels are not maintained at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala usage has not improved to breeding level by 15 years then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala usage.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Approximate Density	10	10	10	10	10	Immediate	It is anticipated that under the management actions specified in management actions 1 to 6 outlined in **Table 78** at least low level Koala activity (<22.52% scats recorded using the East Coast med-high population category) will be maintained.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If low density levels are not maintained at the 15 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala activity has not improved to low level by Year 15 then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala activity.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	40	40	40	40	40				
SSR Score out of 4	**2.29**	**2.29**	**2.29**	**2.29**	**2.29**				
Total Habitat Quality Scores	**6.53**	**7.11**	**7.26**	**7.81**	**7.93**				

Koala Environmental Outcomes – AU6

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 38.67% of the benchmark. If recruitment does not achieve 75%or greater by 15 years then remedial actions to improve recruitment will be applied to increase the prospect of achieving >75% by 20 years. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If the tree species richness is not maintained as >90% then remedial actions will be applied. These include remedial plantings.
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 66.67% of the benchmark. If the shrub species richness has not improved to >75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 66.67% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 54.90% of the benchmark. If the forb species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not maintained between 15% and 200% then remedial actions will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 32.24% of the benchmark. If the shrub canopy cover has not improved to between 50% and 200% at 15 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 54.32 of the benchmark. If organic litter is not between 50% and 200% then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 15.29% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% in year 10 then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 73.33% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									refining weed control methods.
Quality and availability of food and foraging habitat	5	5	5	10	10	15 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	5	5	5	10	10	15 Years	Quality and availability of shelter will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Quality and availability of shelter is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	55.5 **1.67**	60.5 **1.82**	65.5 **1.97**	86 **2.58**	90 **2.70**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	4	4	4	4	4	NA	NA	NA	NA
Context	5	5	5	5	5	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing, non-native predators and weeds will be reduced to low levels by specific management actions 1 to 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.
Species mobility capacity	10	10	10	10	10	Immediate	Species mobility capacity will be maintained as minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently minorly restricted. If restrictions to mobility are observed to be increasing on site remedial actions will be investigated. All site condition remedial actions, as well as threat reductions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Site Context Score	**47**	55	55	55	55				
Overall Site Context Score (out of 3)	**2.52**	**2.95**	**2.95**	**2.95**	**2.95**				
Presence	10	10	10	10	10	Immediate	NA - Not anticipated to change	Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	NA - Not anticipated to change
Usage	15	15	15	15	15	Immediate	It is anticipated that under the management actions specified under management actions 1 to 6 outlined in **Table 78** Koala usage of the site will be maintained.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If usage levels are not maintained at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala usage has not improved to breeding level by 15 years then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala usage.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Approximate Density	10	10	10	10	10	Immediate	It is anticipated that under the management actions specified in management actions 1 to 6 outlined in **Table 78** at least low level Koala activity (<22.52% scats recorded using the East Coast med-high population category) will be maintained.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If density levels are not maintained at low level at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala activity has not improved to low level by Year 15 then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala activity.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	40	40	40	40	40				
SSR Score out of 4	**2.29**	**2.29**	**2.29**	**2.29**	**2.29**				
Total Habitat Quality Scores	**6.47**	**7.05**	**7.20**	**7.81**	**7.93**				

Koala Environmental Outcomes – AU7

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	0	0	0	3	5	15 years	Recruitment of EDL dominant species >75% will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 0% of the benchmark. If recruitment does not achieve 75% by 15 years then remedial actions to improve recruitment will be applied in order to improve the prospect of achieving >75% by 20 years. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 25% of the benchmark. If the tree species richness has not improved to greater than 90% at 15 years then remedial actions to improve the prospect of achieving >90% in 20 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 33.33% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	0	0	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 9.09% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	0	0	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Forb species richness is currently at 17.24% of the benchmark. If the grass species richness has not improved to greater

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10 15, and 20 years.	than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	0	0	3	5	5	15 years	A median tree height greater than 70% of the benchmark will be achieved as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree height is currently 0% of the benchmark. If tree height is not above 70% of the benchmark at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	0	0	0	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is currently 0% of the benchmark. If tree canopy cover is not between 50% and 200% 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20 years	Shrub canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If shrub canopy cover between 50% and 200% is not achieved at 15 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include remedial plantings of advanced stock.
Native perennial grass cover	3	3	3	3	5	20 years	Native grass cover to achieve at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Native perennial grass cover is currently 70% of the benchmark. If the native perennial grass cover does not achieve greater than 90% in 15 years then remedial actions will be applied in order to improve the prospects of achieving >90 in 20 years. These include refining weed and fire control methods to

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 27.78% of the benchmark. If organic litter is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	0	0	0	0	0	Immediate	The number of large trees will be maintained at 0% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained at 0% Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Coarse woody debris is currently 10.63% of the benchmark. If monitoring indicates that coarse woody debris is not between 50% and 200% in year 10 then remedial actions will be applied in order to improve the prospect of it being achieved in year 15.. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 70% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									refining weed control methods.
Quality and availability of food and foraging habitat	1	1	1	5	10	20 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently low. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 Years	Quality and availability of shelter will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Quality and availability of shelter is currently low. All site condition remedial actions also apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	18 **0.54**	23 **0.69**	36 **1.08**	66.5 **2.00**	85 **2.55**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	4	4	4	4	4	NA	NA	NA	NA
Context	5	5	5	5	5	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing, non-native predators and weeds will be reduced to low levels by specific management actions 2 and 3 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.
Species mobility capacity	10	10	10	10	10	Immediate	Species mobility capacity will be maintained as minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently minorly restricted. If restrictions to mobility are observed to be increasing remedial actions will be taken. All site condition remedial actions, as well as threat reductions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Site Context Score	47	55	55	55	55				
Overall Site Context Score (out of 3)	**2.52**	**2.95**	**2.95**	**2.95**	**2.95**				
Presence	10	10	10	10	10	Immediate	NA - Not anticipated to change	Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	NA - Not anticipated to change
Usage	5	5	5	15	15	Immediate	It is anticipated that under the management actions specified under management actions 1 to 6 outlined in **Table 78** Koala usage of the site will be increased.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If usage levels have not increased to foraging/breeding (Score 15 out of 15) at the 10 year mark then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala usage has not improved to breeding level by 15 years then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala usage.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Approximate Density	0	0	0	10	10	15 years	It is anticipated that under the management actions specified in management actions 1 to 6 outlined in **Table 78** at least low level Koala activity (<22.52% scats recorded using the East Coast med-high population category) will be achieved.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If 'low' density levels are not achieved at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala activity has not improved to low level by Year 15 then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala activity.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	20	20	20	40	40				
SSR Score out of 4	**1.14**	**1.14**	**1.14**	**2.29**	**2.29**				
Total Habitat Quality Scores	**4.20**	**4.78**	**5.17**	**7.23**	**7.78**				

Koala Environmental Outcomes – AU8

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will be maintained >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 33.33% of the benchmark. If recruitment of 75% of the benchmark is not achieved by year 15 then remedial actions to improve recruitment will be applied in order to improve the prospect of achieving >75% in year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 40% of the benchmark. If the tree species richness has not improved to greater than 90% at 15 years then remedial actions to improve the prospect of achieving >90% in 20 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	0	0	0	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 11.11% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 30.30% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Forb species richness is currently at 25.49% of the benchmark. If the grass species richness has not improved to greater

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10 15, and 20 years.	than 90% at 10years then remedial actions to improve the prospect of achieving >90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	3	3	3	5	5	15 years	A median tree height greater than 70% of the benchmark will be achieved as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not above 70% at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	2	2	2	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover does not achieve between 50% and 20% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Shrub canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 92.22% of the benchmark. If the shrub canopy cover falls below 50% or becomes greater than 200%then remedial actions will be applied. These include remedial plantings.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Native perennial grass cover is currently 100.95% of the benchmark. If the native perennial grass cover is not maintained at greater than 90% in then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 19.05% of the benchmark. If organic litter is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	0	0	0	2	5	20 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 0.92% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 71.67% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	5	5	5	10	10	15 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	5	5	5	10	10	15 Years	Quality and availability of shelter will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by	Quality and availability of shelter is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								suitably qualified professionals at 5, 10, 15 and 20years.	
Site Condition Score	43.5	48.5	53.5	82.5	90				
Overall Site Condition Score out of 3	**1.31**	**1.46**	**1.61**	**2.48**	**2.70**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	4	4	4	4	4	NA	NA	NA	NA
Context	5	5	5	5	5	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing, non-native predators and weeds will be reduced to low levels by specific management actions 2 and 3 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the management plan will require amendment and improved control demonstrated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Species mobility capacity	10	10	10	10	10	Immediate	Species mobility capacity will be maintained as minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently minorly restricted. If restrictions on mobility are observed to be increasing remedial actions will be taken. All site condition remedial actions, as well as threat reductions also apply to this criterium achieving a high rating.
Site Context Score	47	55	55	55	55				
Overall Site Context Score (out of 3)	**2.52**	**2.95**	**2.95**	**2.95**	**2.95**				
Presence	10	10	10	10	10	Immediate	NA - Not anticipated to change	Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	NA - Not anticipated to change
Usage	5	5	5	15	15	15 years	It is anticipated that under the management actions specified under management actions 1 to 6 outlined in **Table 78** Koala usage of the site will become foraging/breeding.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If usage levels are not increased to foraging/breeding (**Score 15 out of 15**) at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									usage has not improved to breeding level by 15 years then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala usage.
Approximate Density	0	0	0	10	10	15 years	It is anticipated that under the management actions specified in management actions 1 to 6 outlined in **Table 78** at least low level Koala activity (<22.52% scats recorded using the East Coast med-high population category) will be achieved.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If 'low level' density is not achieved at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala activity has not improved to low level by Year 15 then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									impacting on Koala activity.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	20	20	20	40	40				
SSR Score out of 4	**1.14**	**1.14**	**1.14**	**2.29**	**2.29**				
Total Habitat Quality Scores	**4.97**	**5.54**	**5.69**	**7.71**	**7.93**				

Koala Environmental Outcomes – AU9

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species of >75% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 50% of the benchmark. If recruitment is not at least 75% at 15years then remedial actions to improve recruitment will be applied in order to improve prospects of achieving .75% of the benchmark at year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	0	0	0	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 16.67% of the benchmark. If the tree species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	0	0	0	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 6.25% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 75% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	0	0	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Forb species richness is currently at 8.82% of the benchmark. If the grass species richness has not improved to greater

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10 15, and 20 years.	than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	3	3	3	5	5	15 years	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height above 70% is not achieved at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	2	2	2	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover does not achieve between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Shrub canopy cover	0	0	0	3	5	20 years	Shrub canopy cover between 50% and 200% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently 5% of the benchmark. If shrub canopy cover between 50% and 200% is not achieved at 10 years, then remedial plantings are to be applies. By Year 15 species plantings to be a minimum of 50% of the shrub canopy cover benchmark.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	0	0	0	3	5	20 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 5.56% of the benchmark. If organic litter is not between 50% and 200% of the benchmark at 10 years then remedial actions to improve the prospect of achieving between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	0	0	0	2	5	20 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 8.02% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 92.50% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	1	1	1	5	10	20 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently low. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Quality and availability of shelter	1	1	1	5	10	20 Years	Quality and availability of shelter will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Quality and availability of shelter is currently low. All site condition remedial actions also apply to this criterium achieving a high rating.
Site Condition Score Overall Site Condition Score out of 3	22.5 **0.68**	27.5 **0.83**	35 **1.05**	68.5 **2.06**	90 **2.70**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	4	4	4	4	4	NA	NA	NA	NA
Context	5	5	5	5	5	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing, non-native predators and weeds will be reduced to low levels by specific management actions 2 and 3 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									management plan will require amendment and improved control demonstrated.
Species mobility capacity	10	10	10	10	10	Immediate	Species mobility capacity will be maintained as minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently minorly restricted by the absence of habitat and presence of weeds and pests. If restrictions to mobility are observed to be increasing remedial actions will be taken. All site condition remedial actions, as well as threat reductions also apply to this criterium achieving a high rating.
Site Context Score	47	55	55	55	55				
Overall Site Context Score (out of 3)	**2.52**	**2.95**	**2.95**	**2.95**	**2.95**				
Presence	10	10	10	10	10	Immediate	NA - Not anticipated to change	Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	NA - Not anticipated to change

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Usage	5	5	5	15	15	15 years	It is anticipated that under the management actions specified under management actions 1 to 6 outlined in **Table 78** Koala usage of the site will be improved to foraging/breeding.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If usage levels are not increased to foraging/breeding at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala usage has not improved to breeding level by 15 years then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala usage.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Approximate Density	0	0	0	10	10	15 years	It is anticipated that under the management actions specified in management actions 1 to 6 outlined in **Table 78** at least low level Koala activity (<22.52% scats recorded using the East Coast med-high population category) will be achieved.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If 'low level' density is not achieved at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala activity has not improved to low level by Year 15 then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala activity.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	**20**	**20**	**20**	**40**	**40**				
SSR Score out of 4	**1.14**	**1.14**	**1.14**	**2.29**	**2.29**				
Total Habitat Quality Scores	**4.34**	**4.91**	**5.14**	**7.29**	**7.93**				

Koala Environmental Outcomes – AU10

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will be >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 33% of the benchmark. If recruitment of at least 75% is not achieved by year 15 then remedial actions to improve recruitment will be applied to improve the prospect of achieving >75% of the benchmark at year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	5	5	15 years	Tree species .90% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 70% of the benchmark. If tree species richness does not reach 75% by year 10 then remedial actions to improve will be applied to improve prospects of achieving 90% by year 15. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 40% of the benchmark. If the shrub species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 33.33% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Forb species to be >90% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Forb species richness is currently at 28% of the benchmark. If the shrub species richness has not improved to greater

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15years will be applied. These include remedial plantings.
Tree canopy height	4	4	4	5	5	15 years	A median tree height greater than 70% of the benchmark will be achieved as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height >70% of the benchmark is not achieved at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	3.5	3.5	3.5	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20 years	Canopy cover to be between 50% and 200% of the	Baseline Site Condition attributes are established.	Shrub canopy cover is currently at 603.75% of the

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	benchmark. If the shrub canopy cover has not improved to between 50% and 200% at 15 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include remedial plantings.
Native perennial grass cover	3	3	3	3	5	20 years	Native grass cover to be at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Native perennial grass cover is currently 65.38% of the benchmark. If the native perennial grass cover is not greater than 90% in 10 years then remedial actions will be applied to improve prospects of achieving >90% in 20years . These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	If organic litter is not between 50% and 200% of the benchmark at 10 years then remedial actions to improve the prospect of

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10, 15 and 20 years.	achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 35.71% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% at 10 years then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 67.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	5	5	5	10	10	15 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Quality and availability of shelter	5	5	5	10	10	15 Years	Quality and availability of shelter will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Quality and availability of shelter is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Site Condition Score	46.5	51.5	56.5	74	90				
Overall Site Condition Score out of 3	**1.40**	**1.55**	**1.70**	**2.22**	**2.70**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	4	4	4	4	4	NA	NA	NA	NA
Context	5	5	5	5	5	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing, non-native predators and weeds will be reduced to low levels by specific management actions 2 and 3 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the suppression and control of pest species and weeds. Pest monitoring will be evaluated as per the pest management program.	The control of pest species will provide an immediate and large reduction in threats. If monitoring as per the pest management program indicates pest species are not reduced then the

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									management plan will require amendment and improved control demonstrated.
Species mobility capacity	10	10	10	10	10	Immediate	Species mobility capacity will be maintained as minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently minorly restricted. If restrictions to mobility are observed to be increasing than remedial actions will be taken. All site condition remedial actions, as well as threat reductions also apply to this criterium achieving a high rating.
Site Context Score	47	55	55	55	55				
Overall Site Context Score (out of 3)	**2.52**	**2.95**	**2.95**	**2.95**	**2.95**				
Presence	10	10	10	10	10	Immediate	NA - Not anticipated to change	Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	NA - Not anticipated to change

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Usage	5	5	5	15	15	15 years	It is anticipated that under the management actions specified under management actions 1 to 6 outlined in **Table 78** Koala usage of the site will improve to foraging/breeding.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If usage levels are not improved to foraging/ breeding (Scor of 15 out of 15) at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala usage has not improved to breeding level by 15 years then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala usage.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Approximate Density	0	0	0	10	10	15 years	It is anticipated that under the management actions specified in management actions 1 to 6 outlined in **Table 78** at least low level Koala activity (<22.52% scats recorded using the East Coast med-high population category) will be achieved.	Baseline SAT attributes are established. Koala SAT surveys will be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If 'low level' density is not achieved at the 10 year mark, then broader Koala population surveys will be undertaken to ascertain potential external causes and the management actions re-visited accordingly. If Koala activity has not improved to low level by Year 15 then the management period may be extended and further remedial actions applied in consideration of other scoring improvements relative to potential external factors impacting on Koala activity.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	20	20	20	40	40				
SSR Score out of 4	**1.14**	**1.14**	**1.14**	**2.29**	**2.29**				
Total Habitat Quality Scores	**5.06**	**5.63**	**5.78**	**7.45**	**7.93**				

GHFF Environmental Outcomes – AU1

Assessment Unit - Regional Ecosystem	AU 1 Remnant (Cat B) RE12.11.6											
Site Reference	**Transect 3**	**Transect 14**	**Transect 17**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**
Vegetation Condition	20	20	20	**20**	**20**	**20**	**20**	**20**	**20**	Remnant status will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be maintained. Remedial actions not required.
Species Richness	5	5	5	**5**	**5**	**5**	**5**	**5**	**5**	Species richness will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that species richness will be maintained. Remedial actions not required.
Flower Score	0.4250	0.6630	0.4030	**0.50**	**5**	**5**	**5**	**5**	**5**	Flower Score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.
Timing of Biological Shortages	7	8.5	8.5	**8**	**8**	**8**	**8**	**8**	**8**	Timing of biological shortages will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that timing of biological shortages will be maintained. Remedial actions not required.

Quality of Foraging Habitat	2	2	2	**2.00**	**5**	**5**	**5**	**5**	**5**	Quality of foraging habitat will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.
Non-native Plant Cover	45.00	5.00	15.00	**18.00**	**10**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 18% of the benchmark. If improvement below 5% non-native plant cover has not been achieved by the end of Year 10 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score					**53.00**	**53.00**	**63.00**	**63.00**	**63.00**			
MAX Site Condition Score					***100***	***100***	***100***	***100***	***100***			
Site Condition Score - out of 4					**2.12**	**2.12**	**2.52**	**2.52**	**2.52**			
Size of patch	>200ha	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Connectedness	1 active camps within 20km	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA
Context	33.8%	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA
Ecological Corridors	Within	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA
Threats to the species	5	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 78**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.
Site Context Score					**35**	**40**	**40**	**40**	**40**			
MAX Site Context Score					***60***	***60***	***60***	***60***	***60***			
Site Context Score - out of 3					**1.75**	**2.00**	**2.00**	**2.00**	**2.00**			
GHFF Foraging Tree Density - Recorded	96	86	85									

GHFF Foraging Tree Density - per hectare	480	430	425	**445.00**	**6**	**6**	**6**	**6**	**6**	Foraging tree density will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree density will be maintained. Remedial actions not required.
Species Stocking Rate Score					*6*	*6*	*6*	*6*	*6*			
MAX Species Stocking Rate Score					*10*	*10*	*10*	*10*	*10*			
Species Stocking Rate Score - out of 3					1.80	1.80	1.80	1.80	1.80			
Total					5.67	5.92	6.32	6.32	6.32			

GHFF Environmental Outcomes – AU2

Assessment Unit - Regional Ecosystem	AU 2 Remnant (Cat B) RE12.12.5										
Site Reference	**Transect 18**	**Transect 20**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**
Vegetation Condition	20	20	**20**	**20**	**20**	**20**	**20**	**20**	Remnant status will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be maintained. Remedial actions not required.
Species Richness	3	6	**4.5**	**10**	**10**	**10**	**10**	**10**	Tree species richness will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that tree species richness will be maintained. Remedial actions not required.
Flower Score	0.7733	0.5190	**0.6462**	**8**	**8**	**8**	**8**	**8**	Flower score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.
Timing of Biological Shortages	10	10	**10**	**10**	**10**	**10**	**10**	**10**	Timing of biological shortages will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.

Quality of Foraging Habitat	3	4	**3.5**	**5**	**5**	**5**	**5**	**5**	Quality of foraging habitat will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.
Non-native Plant Cover	20.00	75.00	**47.50**	**5**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 47.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score				**58.00**	**63.00**	**73.00**	**73.00**	**73.00**			
MAX Site Condition Score				***100***	***100***	***100***	***100***	***100***			
Site Condition Score - out of 4				**2.32**	**2.52**	**2.92**	**2.92**	**2.92**			
Size of patch	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Connectedness	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA
Context	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA
Ecological Corridors	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA
Threats to the species	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 78**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.
Site Context Score				**35**	**40**	**40**	**40**	**40**			
MAX Site Context Score				***60***	***60***	***60***	***60***	***60***			
Site Context Score - out of 3				**1.75**	**2.00**	**2.00**	**2.00**	**2.00**			
GHFF Foraging Tree Density - Recorded	52	83									

GHFF Foraging Tree Density - per hectare	260	415	**337.5**	**4**	**4**	**4**	**4**	**4**	Foraging tree density will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.
Species Stocking Rate Score				***4***	***4***	***4***	***4***	***4***			
MAX Species Stocking Rate Score				***10***	***10***	***10***	***10***	***10***			
Species Stocking Rate Score - out of 3				**1.20**	**1.20**	**1.20**	**1.20**	**1.20**			
Total				**5.27**	**5.72**	**6.12**	**6.12**	**6.12**			

GHFF Environmental Outcomes – AU3

Assessment Unit - Regional Ecosystem	AU 3 Remnant (Cat B) RE12.3.7										
Site Reference	**Transect 19**	**Transect 21**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**
Vegetation Condition	20	20	**20**	**20**	**20**	**20**	**20**	**20**	Remnant status will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be maintained. Remedial actions not required.
Species Richness	6	5	**5.5**	**10**	**10**	**10**	**10**	**10**	Species richness will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that species richness will be maintained. Remedial actions not required.
Flower Score	0.2100	0.7133	**0.4617**	**5**	**5**	**5**	**5**	**5**	Flower score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.
Timing of Biological Shortages	10	10	**10**	**10**	**10**	**10**	**10**	**10**	Timing of biological shortages will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that timing of biological shortages will be maintained. Remedial actions not required.

Quality of Foraging Habitat	4	4	**4**	**10**	**10**	**10**	**10**	**10**	Quality of foraging habitat will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.
Non-native Plant Cover	80.00	85.00	**82.50**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 82.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score				**56.00**	**65.00**	**75.00**	**75.00**	**75.00**			
MAX Site Condition Score				***100***	***100***	***100***	***100***	***100***			
Site Condition Score - out of 4				**2.24**	**2.60**	**3.00**	**3.00**	**3.00**			
Size of patch	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Connectedness	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA
Context	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA
Ecological Corridors	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA
Threats to the species	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 78**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.
Site Context Score				**35**	**40**	**40**	**40**	**40**			
MAX Site Context Score				***60***	***60***	***60***	***60***	***60***			
Site Context Score - out of 3				**1.75**	**2.00**	**2.00**	**2.00**	**2.00**			
GHFF Foraging Tree Density - Recorded	50	80									

GHFF Foraging Tree Density - per hectare	250	400	**325**	**6**	**6**	**6**	**6**	**6**	Foraging tree density will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree density will be maintained. Remedial actions not required.
Species Stocking Rate Score				*6*	*6*	*6*	*6*	*6*			
MAX Species Stocking Rate Score				*10*	*10*	*10*	*10*	*10*			
Species Stocking Rate Score - out of 3				**1.80**	**1.80**	**1.80**	**1.80**	**1.80**			
Total				**5.79**	**6.40**	**6.80**	**6.80**	**6.80**			

GHFF Environmental Outcomes – AU4

Assessment Unit - Regional Ecosystem	AU 4 Non-Remnant (Cat X) Vegetated RE12.11.6										
Site Reference	**Transect 1**	**Transect 7**	**Transect 13**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**
Vegetation Condition	5	5	5	**5**	**5**	**5**	**10**	**20**	**20**	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 15 years. If remnant status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.
Species Richness	1	2	3	**2**	**5**	**5**	**5**	**10**	**10**	Tree species richness will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that tree species richness score will improve to 10 species by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Flower Score	0.2167	0.7300	0.7133	**0.5533**	**8**	**8**	**8**	**8**	**8**	Flower score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.

Timing of Biological Shortages	4	7	10	**7**	**7**	**7**	**7**	**9**	**9**	Timing of biological shortages will improve to 10 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should timing of biological shortages not improve to 9 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.
Quality of Foraging Habitat	1	2	3	**2**	**5**	**5**	**5**	**10**	**10**	Quality of foraging habitat will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree species richness will improve to a score of 10 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Non-native Plant Cover	70.00	55.00	65.00	**63.33**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 63.33% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% non-native plant cover has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score					**31.00**	**40.00**	**55.00**	**77.00**	**77.00**			
MAX Site Condition Score					***100***	***100***	***100***	***100***	***100***			
Site Condition Score - out of 4					**1.24**	**1.60**	**2.20**	**3.08**	**3.08**			
Size of patch	>200ha	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Connectedness	1 active camps within 20km	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA
Context	33.8%	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA
Ecological Corridors	Within	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA

Threats to the species	5	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 78**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.
Site Context Score					**35**	**40**	**40**	**40**	**40**			
MAX Site Context Score					***60***	***60***	***60***	***60***	***60***			
Site Context Score - out of 3					**1.75**	**2.00**	**2.00**	**2.00**	**2.00**			
GHFF Foraging Tree Density - Recorded	77	76	35									
GHFF Foraging Tree Density - per hectare	385	380	175	**313.33**	**4**	**4**	**4**	**6**	**6**	Foraging tree density will improve to score 6 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 6 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.
Species Stocking Rate Score					***4***	***4***	***4***	***6***	***6***			
MAX Species Stocking Rate Score					***10***	***10***	***10***	***10***	***10***			
Species Stocking Rate Score - out of 3					**1.20**	**1.20**	**1.20**	**1.80**	**1.80**			
Total					**4.19**	**4.80**	**5.40**	**6.88**	**6.88**			

GHFF Environmental Outcomes – AU5

Assessment Unit - Regional Ecosystem	AU 5 Non-Remnant (Cat X) Vegetated RE12.12.5										
Site Reference	**Transect 11**	**Transect 15**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**
Vegetation Condition	5	5	**5**	**5**	**5**	**10**	**20**	**20**	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 15 years. If remnant status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension if the offset period of required.
Species Richness	3	4	**3.5**	**5**	**5**	**5**	**10**	**10**	Tree species richness will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that tree species richness will improve to a score of 10 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Flower Score	0.4775	0.5440	**0.5108**	**8**	**8**	**8**	**8**	**8**	Flower score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.

Timing of Biological Shortages	8.5	10	**9.25**	**9.25**	**9.25**	**9.25**	**9.25**	**9.25**	Timing of biological shortages will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.
Quality of Foraging Habitat	2	3	**2.5**	**5**	**5**	**5**	**5**	**5**	Quality of foraging habitat will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.
Non-native Plant Cover	60.00	75.00	**67.50**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 67.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score				**33.25**	**42.25**	**57.25**	**72.25**	**72.25**			
MAX Site Condition Score				***100***	***100***	***100***	***100***	***100***			
Site Condition Score - out of 4				**1.33**	**1.69**	**2.29**	**2.89**	**2.89**			
Size of patch	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Connectedness	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA
Context	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA
Ecological Corridors	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA

Threats to the species	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 78**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.
Site Context Score				**35**	**40**	**40**	**40**	**40**			
MAX Site Context Score				***60***	***60***	***60***	***60***	***60***			
Site Context Score - out of 3				**1.75**	**2.00**	**2.00**	**2.00**	**2.00**			
GHFF Foraging Tree Density - Recorded	89	66									
GHFF Foraging Tree Density - per hectare	445	330	**387.5**	**6**	**6**	**6**	**6**	**6**	Foraging tree density will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.
Species Stocking Rate Score				***6***	***6***	***6***	***6***	***6***			
MAX Species Stocking Rate Score				***10***	***10***	***10***	***10***	***10***			
Species Stocking Rate Score - out of 3				**1.80**	**1.80**	**1.80**	**1.80**	**1.80**			
Total				**4.88**	**5.49**	**6.09**	**6.69**	**6.69**			

GHFF Environmental Outcomes – AU6

Assessment Unit - Regional Ecosystem	AU 6 Non-Remnant (Cat X) Vegetated RE12.3.7											
Site Reference	**Transect 2**	**Transect 22**	**Transect 23**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**
Vegetation Condition	5	5	5	**5**	**5**	**5**	**10**	**20**	**20**	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 15 years. If remnant status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.
Species Richness	5	6	5	**5.3333**	**10**	**10**	**10**	**10**	**10**	Species richness will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that species richness will be maintained. Remedial actions not required.
Flower Score	0.458	0.4700	0.3471	**0.4250**	**5**	**5**	**5**	**5**	**5**	Flower score will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will be maintained. Remedial actions not required.
Timing of Biological Shortages	10	10	10	**10**	**10**	**10**	**10**	**10**	**10**	Timing of biological shortages will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that timing of biological shortages will be maintained. Remedial actions not required.

Quality of Foraging Habitat	2	3	2	**2.3333**	**5**	**5**	**5**	**5**	**5**	Quality of foraging habitat will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat will be maintained. Remedial actions not required.
Non-native Plant Cover	80.00	90.00	50.00	**73.33**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 73.33% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score					**31.00**	**45.00**	**60.00**	**70.00**	**70.00**			
MAX Site Condition Score					***100***	***100***	***100***	***100***	***100***			
Site Condition Score - out of 4					**1.24**	**1.80**	**2.40**	**2.80**	**2.80**			
Size of patch	>200ha	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Connectedness	1 active camps within 20km	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA
Context	33.8%	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA
Ecological Corridors	Within	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA
Threats to the species	5	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 78**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.
Site Context Score					**35**	**40**	**40**	**40**	**40**			
MAX Site Context Score					***60***	***60***	***60***	***60***	***60***			
Site Context Score - out of 3					**1.75**	**2.00**	**2.00**	**2.00**	**2.00**			
GHFF Foraging Tree Density - Recorded	45	23	25									

GHFF Foraging Tree Density - per hectare	225	115	125	**155**	**4**	**4**	**4**	**6**	**6**	Foraging tree density will improve to score 6 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 6 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.
Species Stocking Rate Score					*4*	*4*	*4*	*6*	*6*			
MAX Species Stocking Rate Score					*10*	*10*	*10*	*10*	*10*			
Species Stocking Rate Score - out of 3					**1.20**	**1.20**	**1.20**	**1.80**	**1.80**			
Total					**4.19**	**5.00**	**5.60**	**6.60**	**6.60**			

GHFF Environmental Outcomes – AU7

Assessment Unit - Regional Ecosystem	AU 7 Non-remnant (Cat X) Paddock RE12.11.6										
Site Reference	**Transect 5**	**Transect 8**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**
Vegetation Condition	5	5	**5**	**5**	**5**	**5**	**10**	**20**	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 20 years. If regrowth status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.
Species Richness	1	0	**0.5**	**0**	**0**	**0**	**10**	**10**	Flower score will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that species richness will improve to average 10 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Flower Score	0.5000	0.0000	**0.2500**	**2**	**2**	**2**	**8**	**8**	Flower score will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will improve to a score of 10 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.

Timing of Biological Shortages	3	0	**1.5**	**1.5**	**1.5**	**1.5**	**8.5**	**8.5**	Flower score will improve to a score of 8.5 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will improve to average 8.5 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Quality of Foraging Habitat	1	0	**0.5**	**0**	**0**	**0**	**10**	**10**	Quality of foraging habitat will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree species richness will improve to 4 species by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Non-native Plant Cover	55.00	85.00	**70.00**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 70% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% weed cover has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score				**9.50**	**18.50**	**28.50**	**66.50**	**76.50**			
MAX Site Condition Score				***100***	***100***	***100***	***100***	***100***			
Site Condition Score - out of 4				**0.38**	**0.74**	**1.14**	**2.66**	**3.06**			
Size of patch	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Connectedness	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA
Context	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA
Ecological Corridors	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA

Threats to the species	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 78**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.
Site Context Score				**35**	**40**	**40**	**40**	**40**			
MAX Site Context Score				***60***	***60***	***60***	***60***	***60***			
Site Context Score - out of 3				**1.75**	**2.00**	**2.00**	**2.00**	**2.00**			
GHFF Foraging Tree Density - Recorded	1	0									
GHFF Foraging Tree Density - per hectare	5	0	**2.5**	**2**	**2**	**4**	**6**	**6**	Foraging tree density will improve to score 6 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 6 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.
Species Stocking Rate Score				***2***	***2***	***4***	***6***	***6***			
MAX Species Stocking Rate Score				***10***	***10***	***10***	***10***	***10***			
Species Stocking Rate Score - out of 3				**0.6**	**0.6**	**1.20**	**1.80**	**1.80**			
Total				**2.73**	**3.34**	**4.34**	**6.46**	**6.86**			

GHFF Environmental Outcomes – AU8

Assessment Unit - Regional Ecosystem	AU 8 Non-remnant (Cat X) Paddock RE12.12.5											
Site Reference	**Transect 9**	**Transect 10**	**Transect 12**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**
Vegetation Condition	5	5	5	**5**	**5**	**5**	**5**	**10**	**20**	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 20 years. If regrowth status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.
Species Richness	0	1	2	**1**	**1**	**1**	**1**	**10**	**10**	Tree species richness will improve to a score of 10 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that tree species richness will improve to a score of 10 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Flower Score	0.0000	0.6500	0.6050	**0.4183**	**5**	**5**	**5**	**8**	**8**	Flower score will improve to a score of 8 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will improve to a score of 8 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.

Timing of Biological Shortages	0	4	4.5	**2.8333**	**2.8333**	**2.8333**	**2.8333**	**7.6667**	**7.6667**	Timing of biological shortages will improve to 7.6667 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should timing of biological shortages not improve to 7.6667 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.
Quality of Foraging Habitat	0	1	1	**0.6667**	**0**	**0**	**0**	**5**	**5**	Quality of foraging habitat will improve to a score of 5 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree species richness will improve to a score of 5 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Non-native Plant Cover	65.00	70.00	80.00	**71.67**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 71.67% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% non-native plant cover has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score					**14.83**	**23.83**	**33.83**	**60.67**	**70.67**			
MAX Site Condition Score					***100***	***100***	***100***	***100***	***100***			
Site Condition Score - out of 4					**0.59**	**0.95**	**1.35**	**2.43**	**2.83**			
Size of patch	>200ha	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Connectedness	1 active camps within 20km	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA
Context	33.8%	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA
Ecological Corridors	Within	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA

Threats to the species	5	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 78**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.
Site Context Score					**35**	**40**	**40**	**40**	**40**			
MAX Site Context Score					***60***	***60***	***60***	***60***	***60***			
Site Context Score - out of 3					**1.75**	**2.00**	**2.00**	**2.00**	**2.00**			
GHFF Foraging Tree Density - Recorded	17	45	50									
GHFF Foraging Tree Density - per hectare	85	225	250	**186.67**	**4**	**4**	**4**	**6**	**6**	Foraging tree density will improve to score 6 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 6 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.
Species Stocking Rate Score					***4***	***4***	***4***	***4***	***6***			
MAX Species Stocking Rate Score					***10***	***10***	***10***	***10***	***10***			
Species Stocking Rate Score - out of 3					**1.20**	**1.20**	**1.20**	**1.20**	**1.80**			
Total					**3.54**	**4.15**	**4.55**	**6.23**	**6.63**			

GHFF Environmental Outcomes – AU9

Assessment Unit - Regional Ecosystem	AU 9 Non-remnant (Cat X) Paddock RE12.3.7										
Site Reference	**Transect 16**	**Transect 24**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**
Vegetation Condition	5	5	**5**	**5**	**5**	**5**	**10**	**20**	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 20 years. If regrowth status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.
Species Richness	1	0	**0.5**	**0**	**0**	**0**	**5**	**5**	Tree species richness will improve to a score of 5 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that tree species richness will improve toa score of 5 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Flower Score	0.4000	0.0000	**0.2000**	**2**	**2**	**2**	**8**	**8**	Flower score will improve to a score of 8 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will improve to average 0.525 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.

Timing of Biological Shortages	4.5	0	**2.25**	**2.25**	**2.25**	**2.25**	**10**	**10**	Timing of biological shortages will improve to 10 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should timing of biological shortages not improve to 10 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.
Quality of Foraging Habitat	1	0	**0.5**	**0**	**0**	**0**	**5**	**5**	Quality of foraging habitat will improve to a score of 5 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that foraging tree species richness will improve to a score of 5 by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Non-native Plant Cover	95.00	90.00	**92.50**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 92.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% non-native plant cover has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score				**10.25**	**19.25**	**29.25**	**58.00**	**68.00**			
MAX Site Condition Score				***100***	***100***	***100***	***100***	***100***			
Site Condition Score - out of 4				**0.41**	**0.77**	**1.17**	**2.32**	**2.72**			
Size of patch	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Connectedness	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA
Context	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA
Ecological Corridors	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA

Threats to the species	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 78**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.
Site Context Score				**35**	**40**	**40**	**40**	**40**			
MAX Site Context Score				***60***	***60***	***60***	***60***	***60***			
Site Context Score - out of 3				**1.75**	**2.00**	**2.00**	**2.00**	**2.00**			
GHFF Foraging Tree Density - Recorded	3	0									
GHFF Foraging Tree Density - per hectare	15	0	**7.5**	**2**	**2**	**2**	**4**	**4**	Foraging tree density will improve to score 4 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 4 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.
Species Stocking Rate Score				***2***	***2***	***2***	***4***	***4***			
MAX Species Stocking Rate Score				***10***	***10***	***10***	***10***	***10***			
Species Stocking Rate Score - out of 3				**0.60**	**0.60**	**0.60**	**1.20**	**1.20**			
Total				**2.76**	**3.37**	**3.77**	**5.52**	**5.92**			

GHFF Environmental Outcomes – AU10

Assessment Unit - Regional Ecosystem	AU 10 Non-Remnant (Cat X) Paddock RE12.3.3										
Site Reference	**Transect 4**	**Transect 6**	**Average Score**	**AU Score**	**5 years**	**10 years**	**15 years**	**20 years**	**Justification / management Actions / Timing**	**Monitoring**	**KPIs and Adaptive Management**
Vegetation Condition	5	5	**5**	**5**	**5**	**5**	**10**	**20**	Remnant status will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that remnant status will be achieved by 20 years. If regrowth status is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings and extension of the offset period if required.
Species Richness	0	0	**0**	**0**	**0**	**0**	**5**	**5**	Species richness will improve to a score of 5 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that species richness will improve to a score of 5 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Flower Score	0.0000	0.4450	**0.2225**	**2**	**2**	**2**	**8**	**8**	Flower score will improve to a score of 8 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that flower score will improve to a score of 8 by 15 years. If the target flower score is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.

Timing of Biological Shortages	0	10	**5**	**5**	**5**	**5**	**9.25**	**9.25**	Timing of biological shortages will improve to 9.25 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should timing of biological shortages not improve to 9.25 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.
Quality of Foraging Habitat	0	0	**0**	**0**	**0**	**0**	**5**	**10**	Quality of foraging habitat will improve to a score of 5 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that quality of foraging habitat score will improve to 5 species by 15 years. If the target species richness is not achieved by 15 years, then remedial actions will be required. These will include advanced stock plantings.
Non-native Plant Cover	65.00	70.00	**67.50**	**1**	**10**	**20**	**20**	**20**	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Weed cover is currently 67.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% non-native plant cover has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Site Condition Score				**13.00**	**22.00**	**32.00**	**57.25**	**72.25**			
MAX Site Condition Score				***100***	***100***	***100***	***100***	***100***			
Site Condition Score - out of 4				**0.52**	**0.88**	**1.28**	**2.29**	**2.89**			
Size of patch	>200ha	>200ha	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Connectedness	1 active camps within 20km	1 active camps within 20km	**3**	**3**	**3**	**3**	**3**	**3**	NA	NA	NA
Context	33.8%	33.8%	**6**	**6**	**6**	**6**	**6**	**6**	NA	NA	NA
Ecological Corridors	Within	Within	**10**	**10**	**10**	**10**	**10**	**10**	NA	NA	NA
Role of site location to species overall population in the state	1 active level 3 camp	1 active level 3 camp	**1**	**1**	**1**	**1**	**1**	**1**	NA	NA	NA

Threats to the species	5	5	**5**	**5**	**10**	**10**	**10**	**10**	Threats to species including barbed wire fencing will be removed by specific management action 6 outlined in **Table 78**.	Baseline attributes are established. This criterium is reliant upon removal of barbed wire threats.	The removal of barbed wire threats will provide an immediate reduction in threat levels.
Site Context Score				**35**	**40**	**40**	**40**	**40**			
MAX Site Context Score				***60***	***60***	***60***	***60***	***60***			
Site Context Score - out of 3				**1.75**	**2.00**	**2.00**	**2.00**	**2.00**			
GHFF Foraging Tree Density - Recorded	0	29									
GHFF Foraging Tree Density - per hectare	0	145	**72.5**	**4**	**4**	**4**	**6**	**6**	Foraging tree density will improve to score 6 as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Should foraging tree density not improve to score 6 by 15 years, then remedial actions will be required. These include remedial plantings of advanced stock.
Species Stocking Rate Score				***4***	***4***	***4***	***6***	***6***			
MAX Species Stocking Rate Score				***10***	***10***	***10***	***10***	***10***			
Species Stocking Rate Score - out of 3				**1.20**	**1.20**	**1.20**	**1.80**	**1.80**			
Total				**3.47**	**4.08**	**4.48**	**6.09**	**6.69**			

Greater Glider Environmental Outcomes – AU1

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	5	5	5	5	5	Immediate	Recruitment of EDL dominant species will be maintained >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 88.67% of the benchmark. If recruitment falls to less than 75% then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species will be maintained by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at >100% of the benchmark. Recruitment of tree species is to be maintained. If tree species richness falls below 75% then remedial actions to improve will be applied. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	5	5	5	5	5	Immediate	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 94.44% of the benchmark. If the shrub species richness falls below 75% then remedial actions to improve will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	All of the expected grass species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Grass species richness is currently at 30.30% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 42.53% of the benchmark. If the forb species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% at 15 years, then the prospect of extending the management period may be investigated.
Tree canopy cover	4	4	4	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover does not reach 50% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Canopy cover to be maintained between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 75.50% of the benchmark. If the shrub canopy cover is not maintained then remedial actions to improve the prospect of achieving will be applied. These

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									include remedial plantings.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to be maintained at 90% of the benchmark or higher by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% in 15 years then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter has not achieved between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a	Baseline Site Condition attributes are established. Habitat quality transects to be completed by	It is anticipated that the number of large trees will be maintained between 0% and 50%.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							result of management actions 1 to 6 outlined in **Table 78**.	suitably qualified professionals at 5, 10, 15 and 20 years.	Remedial actions are not anticipated.
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris to be greater than 50% and less than 200% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 38.23% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not between 50 and 200% by year 10 then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	5	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track	Weed cover is currently 21.67% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								progress to the Year 5 milestone objective.	reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score	51	51	53.5	75	95				
Overall Site Condition Score out of 3	**1.53**	**1.53**	**1.61**	**2.25**	**2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently moderately restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	10	10	10	15	15	15 years	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	15	15	15	20	20				
SSR Score out of 4	0.86	**0.86**	**0.86**	**1.14**	**1.14**				
Total Habitat Quality Scores	**4.58**	**5.01**	**5.09**	**6.18**	**6.78**				

Greater Glider Environmental Outcomes – AU2

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	5	5	5	5	5	Immediate	Recruitment of EDL dominant species will be maintained as >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 88.67% of the benchmark. If recruitment is not maintained as 75% or greater post weed removal in 15 years then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species will be maintained by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 100% of the benchmark. Recruitment of tree species is to be maintained. If tree species richness falls below 75% then remedial actions to improve will be applied. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	Immediate	All of the expected shrub species to be increase as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 66.67% of the benchmark. If the shrub species richness is not 75% of the benchmark by year 10 than remedial actions will be taken to improve the prospect of achieving 90% by year 15. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 54.55% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Forb species richness is currently at 88.24% of the benchmark. If the forb species richness has not improved to greater

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							outlined in **Table 78**..	professionals at 5, 10, 15 and 20 years.	than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	4	4	4	5	5	15 years	Tree canopy cover of between 50% and 200% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree canopy cover is currently 132.32% of canopy cover and 225% subcanopy cover of the benchmark. An average canopy and subcanopy score of between 50% and 200% of the benchmark will be achieved at 15 years. If it has not been achieved then the prospect of

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									extending the management period may be investigated.
Shrub canopy cover	3	3	3	3	5	20 years	Shrub canopy cover greater than 50% but below 200% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently 286.67% of the benchmark. If shrub canopy cover is not above 50% but below 200% of the benchmark at 15 years, then remedial actions including review of fire regimes will be investigated to improve the prospect of achieving between 50% and 200% of the benchmark by 20years.
Native perennial grass cover	3	3	3	3	5	20 years	Native perennial grass cover greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Native perennial grass-cover is currently 54.29% of the benchmark. 75% of the benchmark for native perennial grass cover will be achieved by year 15. If this is not achieved than remedial actions will

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									be reviewed in order to improve the prospect of achieving 90% of the benchmark by 20years. Remedial actions include review of fire regimes and remedial plantings.
Organic litter	3	3	3	5	5	15 years	Organic litter between 50% and 200% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Organic litter is currently 41.43% of the benchmark. Organic littler will be between 50% and 200% by year 10. If monitoring indicates that litter cover is not achieved between 50% and 200% then remedial actions will be applied to improve the prospect of achieving 90% in 20 years will be applied. These include a review of action that impact on organic litter such as fire regimes and importing native organic litter if necessary.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							management actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10 15, and 20 years.	
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Coarse woody debris is currently 33.91% of the benchmark. If monitoring indicates that coarse woody debris is not between 50% and 200% in year 10 then remedial actions will be applied to improve the prospect of achieving this benchmark in 15 years. Remedial actions include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	3	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is	Weed cover is currently 47.50% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								recommended at Year 3 to track progress to the Year 5 milestone objective.	of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium maintaining a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	46.75 **1.40**	47.75 **1.43**	50.25 **1.51**	73 **2.19**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently moderately restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	10	10	10	15	15	15 years	Species usage will be improved to breeding by specific	Baseline attributes are established. Establish strategic photo monitoring	Usage quality will improve to breeding. All site condition remedial

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							management actions 1 to 6 outlined in Table 78.	points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	actions also apply to this criterium achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	15	15	15	20	20				
SSR Score out of 4	0.86	**0.86**	**0.86**	**1.14**	**1.14**				
Total Habitat Quality Scores	**4.46**	**4.91**	**4.99**	**6.12**	**6.78**				

Greater Glider Environmental Outcomes – AU3

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 75% of the benchmark. If recruitment dos not achieve 90% by 15 years then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 125% of the benchmark. If the tree species richness falls below 90% then remedial actions to improve will be applied. These include remedial plantings.
Native plant species richness - Shrubs	5	5	5	5	5	Immediate	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 106% of the benchmark. If the shrub species richness falls below than 90% then remedial actions will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 58.33% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 20 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Native forb species richness between greater than 90% of the benchmark will be maintained as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently 58.82% of the benchmark. 90% of the benchmark will be achieved by year 15. If the forb species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	4	4	4	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree canopy cover is currently 149.84% and sub-canopy 286.30% of the benchmark. If average canopy cover is not improved to be between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the	Baseline Site Condition attributes are established.	If the shrub canopy cover is not maintained between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	50% and 200% at 15 years will be applied.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter is not maintained at greater than 50% at 15 years then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.		
Coarse woody debris	5	5	5	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris between 50% and 200% will be maintained. If during year 15 it is not between 50% and 200% of the benchmark then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 82.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	10	10	10	10	10	Immediate	Quality and availability of shelter will be maintained at high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The will HMMP outline monitoring procedures.	Quality and availability of shelter is currently high. Remedial actions including creation of hollows will apply if required for this criterium maintaining a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	86 **2.58**	88.5 **2.66**	91 **2.73**	94 **2.82**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently moderately restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	15	15	15	15	15	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	20	20	20	20	20				

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
SSR Score out of 4	1.14	1.14	1.14	1.14	1.14				
Total Habitat Quality Scores	5.92	6.42	6.50	6.75	6.78				

Greater Glider Environmental Outcomes – AU4

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 66.67% of the benchmark. If recruitment dos not achieve 75% by 15 years then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 83.33% of the benchmark. If the tree species richness has not improved to greater than 90% at 15 years then remedial actions to improve the prospect of achieving 90% in 20 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 61.11% of the benchmark. If the shrub species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 27.27% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Forb species richness is currently at 41.38% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not ,maintained above 70% at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not maintained between 50% and 200% at 15 years then remedial actions will be applied. These include remedial

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Shrub canopy cover than 50% between 50% and 200% of the benchmark will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If shrub canopy cover is not maintained between 50% and 200% at 15 years, then remedial plantings are to be applies. By Year 20 species plantings to be a minimum of 50% of the shrub canopy cover benchmark.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% in 10 years then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 42.22% of the benchmark. If organic litter is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	5	5	5	5	5	Immediate	Course woody debris greater than 50% and less than 200% of the benchmark will be maintained by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris between 50% and 200% of the benchmark will be maintained. If at year 15 it is not between 50% and 200% then remedial actions will be applied. These

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 63.33% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	47 **1.41**	49.5 **1.49**	52 **1.56**	72.25 **2.18**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management	Baseline attributes are established. Establish strategic photo monitoring points at commencement of	Species mobility is currently moderately restricted by the poor canopy cover. All site condition

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	10	10	10	15	15	15 years	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	15	15	15	20	20				
SSR Score out of 4	0.86	**0.86**	**0.86**	**1.14**	**1.14**				

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Total Habitat Quality Scores	4.46	4.97	5.04	6.11	6.78				

Greater Glider Environmental Outcomes – AU5

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	5	5	5	5	5	Immediate	Recruitment of EDL dominant species will be maintained as >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 100% of the benchmark. If recruitment is below 90% then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 100% of the benchmark. If the tree species richness fall below 90% at then remedial actions to improve the prospect of achieving 90% in 20 years will be applied. These include remedial plantings.
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Shrub species richness is currently at 55.56% of the benchmark. If the shrub species richness has not improved to greater

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 45.45% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 44.12% of the benchmark. If the forb species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									applied. These include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height above 70% is not maintained at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	4	4	4	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy above 50% but below 200% is not achieved at 10years then remedial actions to improve the prospect of achieving between 50% and 200% the remedial actions will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Shrub canopy cover to be between 50% and 200% of the benchmark as a result of specific management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	If canopy between 50% and 200% is not maintained at then remedial actions to improve the prospect of achieving between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78.**	professionals at 5, 10, 15 and 20 years.	50% and 200% in 20 years will be applied. These include remedial plantings of advanced stock.
Native perennial grass cover	1	1	1	1	5	20 years	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover at greater than 90% is not achieved in 15 years then remedial actions will be applied to increase the prospect of achieving greater than 90% by year 20. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter falls below 50% then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and	Baseline Site Condition attributes are established. Habitat quality	It is anticipated that the number of large trees will be maintained between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	5	5	5	5	5	Immediate	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 77.81% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not remaining between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is	Weed cover is currently 67.50% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								recommended at Year 3 to track progress to the Year 5 milestone objective.	of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	5	5	5	10	10	10 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	37.75 **1.13**	40.25 **1.21**	42.75 **1.28**	73 **2.19**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently moderately restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Usage	5	10	10	15	15	15 years	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	10	15	15	20	20				
SSR Score out of 4	**0.57**	**0.86**	**0.86**	**1.14**	**1.14**				
Total Habitat Quality Scores	**3.90**	**4.69**	**4.76**	**6.12**	**6.78**				

Greater Glider Environmental Outcomes – AU6

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 38.67% of the benchmark. If recruitment does not achieve 75%or greater by 15 years then remedial actions to improve recruitment will be applied to increase the prospect of achieving >75% by 20 years. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If the tree species richness is not maintained as >90% then remedial actions will be applied. These include remedial plantings.
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 66.67% of the benchmark. If the shrub species richness has not improved to >75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 66.67% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 54.90% of the benchmark. If the forb species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not maintained between 15% and 200% then remedial actions will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 32.24% of the benchmark. If the shrub canopy cover has not improved to between 50% and 200% at 15 years then remedial actions to improve the prospect of achieving between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									50% and 200% in 20 years will be applied. These include remedial plantings.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 54.32 of the benchmark. If organic litter is not between 50% and 200% then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the	Baseline Site Condition attributes are established. Habitat quality transects to be	It is anticipated that the number of large trees will be maintained between 0% and 50%.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							benchmark as a result of management actions 11 to 6 outlined in **Table 78**.	completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Remedial actions are not anticipated.
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 15.29% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% in year 10 then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10,	Weed cover is currently 73.33% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	5	5	5	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score	62.75	65.25	67.75	73	95				
Overall Site Condition Score out of 3	**1.88**	**1.96**	**2.03**	**2.19**	**2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently moderately restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Usage	10	10	10	15	15	15 years	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	15	15	15	20	20				
SSR Score out of 4	0.86	**0.86**	**0.86**	**1.14**	**1.14**				
Total Habitat Quality Scores	**4.94**	**5.44**	**5.51**	**6.12**	**6.78**				

Greater Glider Environmental Outcomes – AU7

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	0	0	0	3	5	15 years	Recruitment of EDL dominant species >75% will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 0% of the benchmark. If recruitment does not achieve 75% by 15 years then remedial actions to improve recruitment will be applied in order to improve the prospect of achieving >75% by 20 years. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 25% of the benchmark. If the tree species richness has not improved to greater than 90% at 15 years then remedial actions to improve the prospect of achieving >90% in 20 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 33.33% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	0	0	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 9.09% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Forbs	0	0	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Forb species richness is currently at 17.24% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	0	0	3	5	5	15 years	A median tree height greater than 70% of the benchmark will be achieved as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree height is currently 0% of the benchmark. If tree height is not above 70% of the benchmark at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy cover	0	0	0	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is currently 0% of the benchmark. If tree canopy cover is not between 50% and 200% 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20 years	Shrub canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If shrub canopy cover between 50% and 200% is not achieved at 15 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include remedial plantings of advanced stock.
Native perennial grass cover	3	3	3	3	5	20 years	Native grass cover to achieve at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Native perennial grass cover is currently 70% of the benchmark. If the native perennial grass cover does not achieve greater than 90% in 15

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years..	years then remedial actions will be applied in order to improve the prospects of achieving >90 in 20 years. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 27.78% of the benchmark. If organic litter is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	0	0	0	0	0	Immediate	The number of large trees will be maintained at 0% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	It is anticipated that the number of large trees will be maintained at 0% Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Coarse woody debris is currently 10.63% of the benchmark. If monitoring indicates that coarse woody debris is not between 50% and 200% in year 10 then remedial actions will be applied in order to improve the prospect of it being achieved in year 15.. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track	Weed cover is currently 70% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								progress to the Year 5 milestone objective.	will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	1	1	1	5	10	20 years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently low. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score	14	16.5	23	58.25	92.5				
Overall Site Condition Score out of 3	**0.42**	**0.50**	**0.69**	**1.75**	**2.78**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	4	4	4	7	10	20 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently highly restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	38	46	46	49	52				
Overall Site Context Score (out of 3)	2.04	**2.46**	**2.46**	**2.63**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	0	0	5	10	15	Immediate	Species usage will be improved to breeding by specific management	Baseline attributes are established. Establish strategic photo monitoring points at commencement of	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in Table 78.	offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	5	5	10	15	20				
SSR Score out of 4	**0.29**	**2.29**	**0.57**	**0.86**	**1.14**				
Total Habitat Quality Scores	**2.74**	**3.25**	**3.73**	**5.23**	**6.70**				

Greater Glider Environmental Outcomes – AU8

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will be maintained >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 33.33% of the benchmark. If recruitment of 75% of the benchmark is not achieved by year 15 then remedial actions to improve recruitment will be applied in order to improve the prospect of achieving >75% in year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 40% of the benchmark. If the tree species richness has not improved to greater than 90% at 15 years then remedial actions to improve the prospect of achieving >90% in 20 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	0	0	0	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 11.11% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 30.30% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Forb species richness is currently at 25.49% of the benchmark. If the grass species richness has not improved to greater than 90% at 10years then remedial actions to improve the prospect of achieving >90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	3	3	3	5	5	15 years	A median tree height greater than 70% of the benchmark will be achieved as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not above 70% at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	2	2	2	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	If canopy cover does not achieve between 50% and 20% at 10 years then remedial actions to improve the prospect of achieving between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 92.22% of the benchmark. If the shrub canopy cover falls below 50% or becomes greater than 200%then remedial actions will be applied. These include remedial plantings.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Native perennial grass cover is currently 100.95% of the benchmark. If the native perennial grass cover is not maintained at greater than 90% in then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 19.05% of the benchmark. If organic litter is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	0	0	0	2	5	20 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 0.92% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									transitioning to between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 71.67% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	1	1	1	5	10	20 years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by	Quality and availability of food and foraging habitat is currently low. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								suitably qualified professionals at 5, 10, 15 and 20 years.	
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	22.75 **0.68**	25.25 **0.76**	27.75 **0.87**	61.25 **1.84**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Species mobility capacity	4	4	4	7	10	20 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently highly restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	38	46	46	49	52				
Overall Site Context Score (out of 3)	2.04	**2.46**	**2.46**	**2.63**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	0	0	5	10	15	Immediate	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
SSR Score (out of 70	5	5	10	15	20				
SSR Score out of 4	0.29	2.29	0.57	0.86	1.14				
Total Habitat Quality Scores	3.00	3.51	3.87	5.32	6.78				

Greater Glider Environmental Outcomes – AU9

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species of >75% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 50% of the benchmark. If recruitment is not at least 75% at 15years then remedial actions to improve recruitment will be applied in order to improve prospects of achieving .75% of the benchmark at year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	0	0	0	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 16.67% of the benchmark. If the tree species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	0	0	0	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 6.25% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 75% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Forbs	0	0	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Forb species richness is currently at 8.82% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	3	3	3	5	5	15 years	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height above 70% is not achieved at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	2	2	2	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	If canopy cover does not achieve between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	0	0	0	3	5	20 years	Shrub canopy cover between 50% and 200% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently 5% of the benchmark. If shrub canopy cover between 50% and 200% is not achieved at 10 years, then remedial plantings are to be applies. By Year 15 species plantings to be a minimum of 50% of the shrub canopy cover benchmark.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Organic litter	0	0	0	3	5	20 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 5.56% of the benchmark. If organic litter is not between 50% and 200% of the benchmark at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	0	0	0	2	5	20 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Coarse woody debris is currently 8.02% of the benchmark due to current and historical land uses. If monitoring indicates that

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10, 15 and 20years.	coarse woody debris is not transitioning to between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 92.50% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	1	1	1	5	10	20 years	Quality and availability of food and foraging habitat will be improved to high by specific management	Baseline attributes are established. Establish strategic photo monitoring points at commencement of	Quality and availability of food and foraging habitat is currently low. All site condition remedial actions

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	16.25 **0.49**	18.75 **0.56**	22.5 **0.68**	59.25 **1.78**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and	The removal of barbed wire threats will provide an immediate and large reduction in threat score.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							6 outlined in **Table 78.**	control of pest species and weeds.	
Species mobility capacity	4	4	4	7	10	20 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78.**	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently highly restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	38	46	46	49	52				
Overall Site Context Score (out of 3)	2.04	**2.46**	**2.46**	**2.63**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	0	0	5	10	15	Immediate	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	5	5	10	15	20				
SSR Score out of 4	**0.29**	**2.29**	**0.57**	**0.86**	**1.14**				
Total Habitat Quality Scores	**2.81**	**3.31**	**3.71**	**5.27**	**6.78**				

Greater Glider Environmental Outcomes – AU10

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will be >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 33% of the benchmark. If recruitment of at least 75% is not achieved by year 15 then remedial actions to improve recruitment will be applied to improve the prospect of achieving >75% of the benchmark at year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	5	5	15 years	Tree species .90% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 70% of the benchmark. If tree species richness does not reach 75% by year 10 then remedial actions to improve will be applied to improve prospects of achieving 90% by year 15. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 40% of the benchmark. If the shrub species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 33.33% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Forb species to be >90% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 28% of the benchmark. If the shrub species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15years will be applied. These include remedial plantings.
Tree canopy height	4	4	4	5	5	15 years	A median tree height greater than 70% of the benchmark will be achieved as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height >70% of the benchmark is not achieved at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy cover	3.5	3.5	3.5	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 603.75% of the benchmark. If the shrub canopy cover has not improved to between 50% and 200% at 15 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include remedial plantings.
Native perennial grass cover	3	3	3	3	5	20 years	Native grass cover to be at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Native perennial grass cover is currently 65.38% of the benchmark. If the native perennial grass cover is not greater than 90% in 10 years then remedial actions will

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									be applied to improve prospects of achieving >90% in 20years . These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter is not between 50% and 200% of the benchmark at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 35.71% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% at 10 years then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 67.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									refining weed control methods.
Quality and availability of food and foraging habitat	5	5	5	10	10	10 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score	**32.25**	**34.75**	37.25	72	95				
Overall Site Condition Score out of 3	**0.97**	**1.04**	**1.12**	**2.16**	**2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	4	4	4	7	10	20 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently highly restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	38	46	46	49	52				
Overall Site Context Score (out of 3)	2.04	**2.46**	**2.46**	**2.63**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	0	0	5	10	15	Immediate	Species usage will be improved to breeding by specific management	Baseline attributes are established. Establish strategic photo monitoring points at commencement of	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in Table 78.	offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	5	5	10	15	20				
SSR Score out of 4	**0.29**	**2.29**	**0.57**	**0.86**	**1.14**				
Total Habitat Quality Scores	**3.29**	**3.79**	**4.15**	**5.64**	**6.78**				

Yellow-bellied Glider Environmental Outcomes – AU1

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	5	5	5	5	5	Immediate	Recruitment of EDL dominant species will be maintained >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 88.67% of the benchmark. If recruitment falls to less than 75% then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species will be maintained by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at >100% of the benchmark. Recruitment of tree species is to be maintained. If tree species richness falls below 75% then remedial actions to improve will be applied. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	5	5	5	5	5	Immediate	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 94.44% of the benchmark. If the shrub species richness falls below 75% then remedial actions to improve will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	All of the expected grass species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Grass species richness is currently at 30.30% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 42.53% of the benchmark. If the forb species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% at 15 years, then the prospect of extending the management period may be investigated.
Tree canopy cover	4	4	4	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover does not reach 50% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Canopy cover to be maintained between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 75.50% of the benchmark. If the shrub canopy cover is not maintained then remedial actions to improve the prospect of achieving will be applied. These

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									include remedial plantings.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to be maintained at 90% of the benchmark or higher by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% in 15 years then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter has not achieved between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a	Baseline Site Condition attributes are established. Habitat quality transects to be completed by	It is anticipated that the number of large trees will be maintained between 0% and 50%.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							result of management actions 1 to 6 outlined in **Table 78**.	suitably qualified professionals at 5, 10, 15 and 20 years.	Remedial actions are not anticipated.
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris to be greater than 50% and less than 200% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 38.23% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not between 50 and 200% by year 10 then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	5	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track	Weed cover is currently 21.67% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								progress to the Year 5 milestone objective.	reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score	51	51	53.5	75	95				
Overall Site Condition Score out of 3	**1.53**	**1.53**	**1.61**	**2.25**	**2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently moderately restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	10	10	10	15	15	15 years	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	15	15	15	20	20				
SSR Score out of 4	0.86	**0.86**	**0.86**	**1.14**	**1.14**				
Total Habitat Quality Scores	**4.58**	**5.01**	**5.09**	**6.18**	**6.78**				

Yellow-bellied Glider Environmental Outcomes – AU2

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	5	5	5	5	5	Immediate	Recruitment of EDL dominant species will be maintained as >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 88.67% of the benchmark. If recruitment is not maintained as 75% or greater post weed removal in 15 years then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species will be maintained by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 100% of the benchmark. Recruitment of tree species is to be maintained. If tree species richness falls below 75% then remedial actions to improve will be applied. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	Immediate	All of the expected shrub species to be increase as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 66.67% of the benchmark. If the shrub species richness is not 75% of the benchmark by year 10 than remedial actions will be taken to improve the prospect of achieving 90% by year 15. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 54.55% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Forb species richness is currently at 88.24% of the benchmark. If the forb species richness has not improved to greater

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							outlined in **Table 78**..	professionals at 5, 10, 15 and 20 years.	than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	4	4	4	5	5	15 years	Tree canopy cover of between 50% and 200% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree canopy cover is currently 132.32% of canopy cover and 225% subcanopy cover of the benchmark. An average canopy and subcanopy score of between 50% and 200% of the benchmark will be achieved at 15 years. If it has not been achieved then the prospect of

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									extending the management period may be investigated.
Shrub canopy cover	3	3	3	3	5	20 years	Shrub canopy cover greater than 50% but below 200% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently 286.67% of the benchmark. If shrub canopy cover is not above 50% but below 200% of the benchmark at 15 years, then remedial actions including review of fire regimes will be investigated to improve the prospect of achieving between 50% and 200% of the benchmark by 20years.
Native perennial grass cover	3	3	3	3	5	20 years	Native perennial grass cover greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Native perennial grass-cover is currently 54.29% of the benchmark. 75% of the benchmark for native perennial grass cover will be achieved by year 15. If this is not achieved than remedial actions will

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									be reviewed in order to improve the prospect of achieving 90% of the benchmark by 20years. Remedial actions include review of fire regimes and remedial plantings.
Organic litter	3	3	3	5	5	15 years	Organic litter between 50% and 200% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Organic litter is currently 41.43% of the benchmark. Organic littler will be between 50% and 200% by year 10. If monitoring indicates that litter cover is not achieved between 50% and 200% then remedial actions will be applied to improve the prospect of achieving 90% in 20 years will be applied. These include a review of action that impact on organic litter such as fire regimes and importing native organic litter if necessary.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							management actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10 15, and 20 years.	
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Coarse woody debris is currently 33.91% of the benchmark. If monitoring indicates that coarse woody debris is not between 50% and 200% in year 10 then remedial actions will be applied to improve the prospect of achieving this benchmark in 15 years. Remedial actions include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	3	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is	Weed cover is currently 47.50% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								recommended at Year 3 to track progress to the Year 5 milestone objective.	of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium maintaining a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	46.75 **1.40**	47.75 **1.43**	50.25 **1.51**	73 **2.19**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently moderately restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	10	10	10	15	15	15 years	Species usage will be improved to breeding by specific	Baseline attributes are established. Establish strategic photo monitoring	Usage quality will improve to breeding. All site condition remedial

Attribute	Current Score	Year 5 Score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							management actions 1 to 6 outlined in Table 78.	points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	actions also apply to this criterium achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	15	15	15	20	20				
SSR Score out of 4	0.86	**0.86**	**0.86**	**1.14**	**1.14**				
Total Habitat Quality Scores	**4.46**	**4.91**	**4.99**	**6.12**	**6.78**				

Yellow-bellied Glider Environmental Outcomes – AU3

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 75% of the benchmark. If recruitment dos not achieve 90% by 15 years then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 125% of the benchmark. If the tree species richness falls below 90% then remedial actions to improve will be applied. These include remedial plantings.
Native plant species richness - Shrubs	5	5	5	5	5	Immediate	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 106% of the benchmark. If the shrub species richness falls below than 90% then remedial actions will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 58.33% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 20 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Native forb species richness between greater than 90% of the benchmark will be maintained as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently 58.82% of the benchmark. 90% of the benchmark will be achieved by year 15. If the forb species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	4	4	4	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree canopy cover is currently 149.84% and sub-canopy 286.30% of the benchmark. If average canopy cover is not improved to be between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the	Baseline Site Condition attributes are established.	If the shrub canopy cover is not maintained between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	50% and 200% at 15 years will be applied.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter is not maintained at greater than 50% at 15 years then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.		
Coarse woody debris	5	5	5	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris between 50% and 200% will be maintained. If during year 15 it is not between 50% and 200% of the benchmark then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 82.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	10	10	10	10	10	Immediate	Quality and availability of shelter will be maintained at high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The will HMMP outline monitoring procedures.	Quality and availability of shelter is currently high. Remedial actions including creation of hollows will apply if required for this criterium maintaining a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	86 **2.58**	88.5 **2.66**	91 **2.73**	94 **2.82**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently moderately restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	15	15	15	15	15	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	20	20	20	20	20				

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
SSR Score out of 4	1.14	1.14	1.14	1.14	1.14				
Total Habitat Quality Scores	5.92	6.42	6.50	6.75	6.78				

Yellow-bellied Glider Environmental Outcomes – AU4

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 66.67% of the benchmark. If recruitment dos not achieve 75% by 15 years then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 83.33% of the benchmark. If the tree species richness has not improved to greater than 90% at 15 years then remedial actions to improve the prospect of achieving 90% in 20 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 61.11% of the benchmark. If the shrub species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 27.27% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Forb species richness is currently at 41.38% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not ,maintained above 70% at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not maintained between 50% and 200% at 15 years then remedial actions will be applied. These include remedial

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Shrub canopy cover than 50% between 50% and 200% of the benchmark will be maintained as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If shrub canopy cover is not maintained between 50% and 200% at 15 years, then remedial plantings are to be applies. By Year 20 species plantings to be a minimum of 50% of the shrub canopy cover benchmark.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% in 10 years then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 42.22% of the benchmark. If organic litter is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	5	5	5	5	5	Immediate	Course woody debris greater than 50% and less than 200% of the benchmark will be maintained by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris between 50% and 200% of the benchmark will be maintained. If at year 15 it is not between 50% and 200% then remedial actions will be applied. These

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 63.33% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	47 **1.41**	49.5 **1.49**	52 **1.56**	72.25 **2.18**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management	Baseline attributes are established. Establish strategic photo monitoring points at commencement of	Species mobility is currently moderately restricted by the poor canopy cover. All site condition

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	10	10	10	15	15	15 years	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	15	15	15	20	20				
SSR Score out of 4	0.86	**0.86**	**0.86**	**1.14**	**1.14**				

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Total Habitat Quality Scores	4.46	4.97	5.04	6.11	6.78				

Yellow-bellied Glider Environmental Outcomes – AU5

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	5	5	5	5	5	Immediate	Recruitment of EDL dominant species will be maintained as >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 100% of the benchmark. If recruitment is below 90% then remedial actions to improve recruitment will be applied. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 100% of the benchmark. If the tree species richness fall below 90% at then remedial actions to improve the prospect of achieving 90% in 20 years will be applied. These include remedial plantings.
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Shrub species richness is currently at 55.56% of the benchmark. If the shrub species richness has not improved to greater

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 45.45% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 44.12% of the benchmark. If the forb species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									applied. These include remedial plantings.
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height above 70% is not maintained at 15 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	4	4	4	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy above 50% but below 200% is not achieved at 10years then remedial actions to improve the prospect of achieving between 50% and 200% the remedial actions will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Shrub canopy cover to be between 50% and 200% of the benchmark as a result of specific management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	If canopy between 50% and 200% is not maintained at then remedial actions to improve the prospect of achieving between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78.**	professionals at 5, 10, 15 and 20 years.	50% and 200% in 20 years will be applied. These include remedial plantings of advanced stock.
Native perennial grass cover	1	1	1	1	5	20 years	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover at greater than 90% is not achieved in 15 years then remedial actions will be applied to increase the prospect of achieving greater than 90% by year 20. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter falls below 50% then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and	Baseline Site Condition attributes are established. Habitat quality	It is anticipated that the number of large trees will be maintained between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	5	5	5	5	5	Immediate	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 77.81% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not remaining between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is	Weed cover is currently 67.50% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								recommended at Year 3 to track progress to the Year 5 milestone objective.	of Year 5 then then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	5	5	5	10	10	10 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	37.75 **1.13**	40.25 **1.21**	42.75 **1.28**	73 **2.19**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently moderately restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Usage	5	10	10	15	15	15 years	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	10	15	15	20	20				
SSR Score out of 4	**0.57**	**0.86**	**0.86**	**1.14**	**1.14**				
Total Habitat Quality Scores	**3.90**	**4.69**	**4.76**	**6.12**	**6.78**				

Yellow-bellied Glider Environmental Outcomes – AU6

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will achieve >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Recruitment is currently 38.67% of the benchmark. If recruitment does not achieve 75%or greater by 15 years then remedial actions to improve recruitment will be applied to increase the prospect of achieving >75% by 20 years. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	5	5	5	5	5	Immediate	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If the tree species richness is not maintained as >90% then remedial actions will be applied. These include remedial plantings.
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	All of the expected shrub species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub species richness is currently at 66.67% of the benchmark. If the shrub species richness has not improved to >75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 66.67% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	All of the expected forb species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 54.90% of the benchmark. If the forb species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy height	5	5	5	5	5	Immediate	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not maintained above 70% the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not maintained between 15% and 200% then remedial actions will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 32.24% of the benchmark. If the shrub canopy cover has not improved to between 50% and 200% at 15 years then remedial actions to improve the prospect of achieving between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									50% and 200% in 20 years will be applied. These include remedial plantings.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	5	5	5	5	5	Immediate	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 54.32 of the benchmark. If organic litter is not between 50% and 200% then remedial actions will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the	Baseline Site Condition attributes are established. Habitat quality transects to be	It is anticipated that the number of large trees will be maintained between 0% and 50%.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							benchmark as a result of management actions 11 to 6 outlined in **Table 78**.	completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Remedial actions are not anticipated.
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 15.29% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% in year 10 then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10,	Weed cover is currently 73.33% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	10	10	10	10	10	Immediate	Quality and availability of food and foraging habitat will be maintained at high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently high. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	5	5	5	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score	62.75	65.25	67.75	73	95				
Overall Site Condition Score out of 3	**1.88**	**1.96**	**2.03**	**2.19**	**2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	7	7	7	10	10	15 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently moderately restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	41	49	49	52	52				
Overall Site Context Score (out of 3)	2.20	**2.63**	**2.63**	**2.79**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Usage	10	10	10	15	15	15 years	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	15	15	15	20	20				
SSR Score out of 4	0.86	**0.86**	**0.86**	**1.14**	**1.14**				
Total Habitat Quality Scores	**4.94**	**5.44**	**5.51**	**6.12**	**6.78**				

Yellow-bellied Glider Environmental Outcomes – AU7

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	0	0	0	3	5	15 years	Recruitment of EDL dominant species >75% will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 0% of the benchmark. If recruitment does not achieve 75% by 15 years then remedial actions to improve recruitment will be applied in order to improve the prospect of achieving >75% by 20 years. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 25% of the benchmark. If the tree species richness has not improved to greater than 90% at 15 years then remedial actions to improve the prospect of achieving >90% in 20 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 33.33% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	0	0	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 9.09% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Forbs	0	0	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Forb species richness is currently at 17.24% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	0	0	3	5	5	15 years	A median tree height greater than 70% of the benchmark will be achieved as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree height is currently 0% of the benchmark. If tree height is not above 70% of the benchmark at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy cover	0	0	0	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is currently 0% of the benchmark. If tree canopy cover is not between 50% and 200% 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20 years	Shrub canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If shrub canopy cover between 50% and 200% is not achieved at 15 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include remedial plantings of advanced stock.
Native perennial grass cover	3	3	3	3	5	20 years	Native grass cover to achieve at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Native perennial grass cover is currently 70% of the benchmark. If the native perennial grass cover does not achieve greater than 90% in 15

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years..	years then remedial actions will be applied in order to improve the prospects of achieving >90 in 20 years. These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 11 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 27.78% of the benchmark. If organic litter is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	0	0	0	0	0	Immediate	The number of large trees will be maintained at 0% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	It is anticipated that the number of large trees will be maintained at 0% Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Coarse woody debris is currently 10.63% of the benchmark. If monitoring indicates that coarse woody debris is not between 50% and 200% in year 10 then remedial actions will be applied in order to improve the prospect of it being achieved in year 15.. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track	Weed cover is currently 70% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								progress to the Year 5 milestone objective.	will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	1	1	1	5	10	20 years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently low. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score	14	16.5	23	58.25	92.5				
Overall Site Condition Score out of 3	**0.42**	**0.50**	**0.69**	**1.75**	**2.78**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	4	4	4	7	10	20 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently highly restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	38	46	46	49	52				
Overall Site Context Score (out of 3)	2.04	**2.46**	**2.46**	**2.63**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	0	0	5	10	15	Immediate	Species usage will be improved to breeding by specific management	Baseline attributes are established. Establish strategic photo monitoring points at commencement of	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in Table 78.	offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	5	5	10	15	20				
SSR Score out of 4	**0.29**	**2.29**	**0.57**	**0.86**	**1.14**				
Total Habitat Quality Scores	**2.74**	**3.25**	**3.73**	**5.23**	**6.70**				

Yellow-bellied Glider Environmental Outcomes – AU8

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will be maintained >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 33.33% of the benchmark. If recruitment of 75% of the benchmark is not achieved by year 15 then remedial actions to improve recruitment will be applied in order to improve the prospect of achieving >75% in year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 40% of the benchmark. If the tree species richness has not improved to greater than 90% at 15 years then remedial actions to improve the prospect of achieving >90% in 20 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	0	0	0	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 11.11% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 30.30% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Forb species richness is currently at 25.49% of the benchmark. If the grass species richness has not improved to greater than 90% at 10years then remedial actions to improve the prospect of achieving >90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	3	3	3	5	5	15 years	A median tree height greater than 70% of the benchmark will be achieved as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height is not above 70% at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	2	2	2	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	If canopy cover does not achieve between 50% and 20% at 10 years then remedial actions to improve the prospect of achieving between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	5	5	5	5	5	Immediate	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 92.22% of the benchmark. If the shrub canopy cover falls below 50% or becomes greater than 200%then remedial actions will be applied. These include remedial plantings.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Native perennial grass cover is currently 100.95% of the benchmark. If the native perennial grass cover is not maintained at greater than 90% in then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 19.05% of the benchmark. If organic litter is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	0	0	0	2	5	20 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 0.92% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									transitioning to between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 71.67% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	1	1	1	5	10	20 years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by	Quality and availability of food and foraging habitat is currently low. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								suitably qualified professionals at 5, 10, 15 and 20 years.	
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	22.75 **0.68**	25.25 **0.76**	27.75 **0.87**	61.25 **1.84**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Species mobility capacity	4	4	4	7	10	20 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently highly restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	38	46	46	49	52				
Overall Site Context Score (out of 3)	2.04	**2.46**	**2.46**	**2.63**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	0	0	5	10	15	Immediate	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
SSR Score (out of 70	5	5	10	15	20				
SSR Score out of 4	0.29	2.29	0.57	0.86	1.14				
Total Habitat Quality Scores	3.00	3.51	3.87	5.32	6.78				

Yellow-bellied Glider Environmental Outcomes – AU9

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species of >75% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 50% of the benchmark. If recruitment is not at least 75% at 15years then remedial actions to improve recruitment will be applied in order to improve prospects of achieving .75% of the benchmark at year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	0	0	0	2.5	5	20 years	All of the expected tree species to be present as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 16.67% of the benchmark. If the tree species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	0	0	0	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 6.25% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 75% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Forbs	0	0	2.5	5	5	15 years	Forb species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Forb species richness is currently at 8.82% of the benchmark. If the grass species richness has not improved to greater than 90% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Tree canopy height	3	3	3	5	5	15 years	A median tree height greater than 70% of the benchmark will be maintained as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height above 70% is not achieved at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.
Tree canopy cover	2	2	2	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	If canopy cover does not achieve between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
								professionals at 5, 10, 15 and 20 years.	50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	0	0	0	3	5	20 years	Shrub canopy cover between 50% and 200% of the benchmark will be achieved as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently 5% of the benchmark. If shrub canopy cover between 50% and 200% is not achieved at 10 years, then remedial plantings are to be applies. By Year 15 species plantings to be a minimum of 50% of the shrub canopy cover benchmark.
Native perennial grass cover	5	5	5	5	5	Immediate	Native grass cover to maintained at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	If the native perennial grass cover is not maintained at greater than 90% then remedial actions will be applied. These include refining weed and fire control methods to ensure native grass cover is maintained.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Organic litter	0	0	0	3	5	20 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Organic litter is currently 5.56% of the benchmark. If organic litter is not between 50% and 200% of the benchmark at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.
Coarse woody debris	0	0	0	2	5	20 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified	Coarse woody debris is currently 8.02% of the benchmark due to current and historical land uses. If monitoring indicates that

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	professionals at 5, 10, 15 and 20years.	coarse woody debris is not transitioning to between 50% and 200% then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 92.50% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include refining weed control methods.
Quality and availability of food and foraging habitat	1	1	1	5	10	20 years	Quality and availability of food and foraging habitat will be improved to high by specific management	Baseline attributes are established. Establish strategic photo monitoring points at commencement of	Quality and availability of food and foraging habitat is currently low. All site condition remedial actions

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in **Table 78**.	offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	16.25 **0.49**	18.75 **0.56**	22.5 **0.68**	59.25 **1.78**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and	The removal of barbed wire threats will provide an immediate and large reduction in threat score.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							6 outlined in **Table 78.**	control of pest species and weeds.	
Species mobility capacity	4	4	4	7	10	20 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78.**	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently highly restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	38	46	46	49	52				
Overall Site Context Score (out of 3)	2.04	**2.46**	**2.46**	**2.63**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	0	0	5	10	15	Immediate	Species usage will be improved to breeding by specific management actions 1 to 6 outlined in Table 78.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium achieving a high rating.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	5	5	10	15	20				
SSR Score out of 4	**0.29**	**2.29**	**0.57**	**0.86**	**1.14**				
Total Habitat Quality Scores	**2.81**	**3.31**	**3.71**	**5.26**	**6.78**				

Yellow-bellied Glider Environmental Outcomes – AU10

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Recruitment of woody perennial species	3	3	3	3	5	20 years	Recruitment of EDL dominant species will be >75% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Establish photo monitoring points where remedial tree planting occurs at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years .	Recruitment is currently 33% of the benchmark. If recruitment of at least 75% is not achieved by year 15 then remedial actions to improve recruitment will be applied to improve the prospect of achieving >75% of the benchmark at year 20. These include refining weed and fire control methods and increasing remedial plantings.
Native plant species richness – Trees	2.5	2.5	2.5	5	5	15 years	Tree species .90% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Tree species richness is currently at 70% of the benchmark. If tree species richness does not reach 75% by year 10 then remedial actions to improve will be applied to improve prospects of achieving 90% by year 15. These include remedial plantings of advanced stock.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Shrubs	2.5	2.5	2.5	5	5	15 years	Shrub species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Shrub species richness is currently at 40% of the benchmark. If the shrub species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.
Native plant species richness - Grasses	2.5	2.5	2.5	5	5	15 years	Native grasses species richness greater than 90% of the benchmark will be achieved as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10 15, and 20 years.	Grass species richness is currently at 33.33% of the benchmark. If the grass species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15 years will be applied. These include remedial plantings.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Native plant species richness - Forbs	2.5	2.5	2.5	5	5	15 years	Forb species to be >90% as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Forb species richness is currently at 28% of the benchmark. If the shrub species richness has not improved to greater than 75% at 10 years then remedial actions to improve the prospect of achieving 90% in 15years will be applied. These include remedial plantings.
Tree canopy height	4	4	4	5	5	15 years	A median tree height greater than 70% of the benchmark will be achieved as a result of 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If tree height >70% of the benchmark is not achieved at 10 years, then the prospect of extending the management period may be investigated. By Year 15 species plantings to be a minimum of 70% of the tree canopy height benchmark.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Tree canopy cover	3.5	3.5	3.5	5	5	15 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If canopy cover is not between 50% and 200% at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include remedial plantings of advanced stock.
Shrub canopy cover	3	3	3	3	5	20 years	Canopy cover to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78.**	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Shrub canopy cover is currently at 603.75% of the benchmark. If the shrub canopy cover has not improved to between 50% and 200% at 15 years then remedial actions to improve the prospect of achieving between 50% and 200% in 20 years will be applied. These include remedial plantings.
Native perennial grass cover	3	3	3	3	5	20 years	Native grass cover to be at least 90% of the benchmark by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years..	Native perennial grass cover is currently 65.38% of the benchmark. If the native perennial grass cover is not greater than 90% in 10 years then remedial actions will

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									be applied to improve prospects of achieving >90% in 20years . These include refining weed and fire control methods to ensure native grass cover is maintained.
Organic litter	3	3	3	5	5	15 years	Organic litter to be between 50% and 200% of the benchmark as a result of specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	If organic litter is not between 50% and 200% of the benchmark at 10 years then remedial actions to improve the prospect of achieving between 50% and 200% in 15 years will be applied. These include refining weed and fire control methods to ensure organic litter is maintained.
Large trees	5	5	5	5	5	Immediate	The number of large trees will be maintained between 0% and 50% of the benchmark as a result of management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	It is anticipated that the number of large trees will be maintained between 0% and 50%. Remedial actions are not anticipated.

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Coarse woody debris	2	2	2	5	5	15 years	Course woody debris greater than 50% and less than 200% of the benchmark will be achieved by specific management actions 1 to 6 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20years.	Coarse woody debris is currently 35.71% of the benchmark due to current and historical land uses. If monitoring indicates that coarse woody debris is not transitioning to between 50% and 200% at 10 years then remedial actions will be applied. These include a review of actions that impact on coarse woody debris such as fire regimes and importing native tree debris if necessary.
Weed cover	0	5	10	10	10	10 Years	Weed coverage will reduce to less than 5% over the course of 10 years by specific management actions 3, 4 & 5 outlined in **Table 78**.	Baseline Site Condition attributes are established. Habitat quality transects to be completed by suitably qualified professionals at 5, 10, 15 and 20 years. An additional survey is recommended at Year 3 to track progress to the Year 5 milestone objective.	Weed cover is currently 67.5% of the benchmark. Weed coverage will need to be below 25% by year 5 and 5% by year 10. If improvement below 25% has not been achieved by the end of Year 5 then remedial actions to reduce weed cover will be applied. These include

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
									refining weed control methods.
Quality and availability of food and foraging habitat	5	5	5	10	10	10 Years	Quality and availability of food and foraging habitat will be improved to high by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Quality and availability of food and foraging habitat is currently moderate. All site condition remedial actions also apply to this criterium achieving a high rating.
Quality and availability of shelter	1	1	1	5	10	20 years	Quality and availability of shelter will be improved to high by specific management action 7 outlined in **Table 78**.	Baseline attributes are established. The HMMP will outline monitoring procedures.	Quality and availability of shelter is currently low. Remedial actions, including creating hollows, apply to this criterium achieving a high rating.
Site Condition Score **Overall Site Condition Score out of 3**	**32.25** **0.97**	**34.75** **1.04**	37.25 **1.12**	72 **2.16**	95 **2.85**				
Size of patch	10	10	10	10	10	NA	NA	NA	NA
Connectedness	2	2	2	2	2	NA	NA	NA	NA
Context	4	4	4	4	4	NA	NA	NA	NA
Ecological Corridors	6	6	6	6	6	NA	NA	NA	NA

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
Role of site location to species overall population in the state	5	5	5	5	5	NA	NA	NA	NA
Threats to the species	7	15	15	15	15	5 years	Threats to species including barbed wire fencing will be removed to reduce threats to low levels by specific management action 6 outlined in **Table 78.**	Baseline attributes are established. This criterium is reliant upon the removal of barbed wire threats and supported by the suppression and control of pest species and weeds.	The removal of barbed wire threats will provide an immediate and large reduction in threat score.
Species mobility capacity	4	4	4	7	10	20 years	Species mobility capacity will be improved to minor restriction (<25%) by specific management actions 1 to 6 outlined in **Table 78**.	Baseline attributes are established. Establish strategic photo monitoring points at commencement of offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	Species mobility is currently highly restricted by the poor canopy cover. All site condition remedial actions apply to this criterium achieving a high rating.
Site Context Score	38	46	46	49	52				
Overall Site Context Score (out of 3)	2.04	**2.46**	**2.46**	**2.63**	**2.79**				
Presence	0	0	0	0	0	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
Usage	0	0	5	10	15	Immediate	Species usage will be improved to breeding by specific management	Baseline attributes are established. Establish strategic photo monitoring points at commencement of	Usage quality will improve to breeding. All site condition remedial actions also apply to this criterium

Attribute	Current Score	Year 5 score	Year 10 score	Year 15 score	Year 20 score	Time Until Measured Benefit	Justifications / Management Actions	Monitoring	KPIs and Adaptive Management
							actions 1 to 6 outlined in Table 78.	offset. Habitat quality transects and photo monitoring to be completed by suitably qualified professionals at 5, 10, 15 and 20 years.	achieving a high rating.
Approximate Density	0	0	0	0	0	Immediate	NA – Not reliant on change.	NA – Not reliant on change.	NA – Not reliant on change.
Role of the population	5	5	5	5	5	Immediate	NA - Not anticipated to change	NA - Not anticipated to change	NA - Not anticipated to change
SSR Score (out of 70	5	5	10	15	20				
SSR Score out of 4	**0.29**	**2.29**	**0.57**	**0.86**	**1.14**				
Total Habitat Quality Scores	**3.29**	**3.79**	**4.15**	**5.64**	**6.78**				

Appendix H

OAG Feature Reference Tables

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.

Matter of National Environmental Significance	
Name	Swift Parrot
EPBC Act status	Critically Endangered
Annual probability of extinction Based on IUCN category definitions	**6.8%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**Units**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	Foraging Trees	187		Count	Tree Plot
Condition of habitat Change in habitat condition, but no change in extent	No					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
					Future area without offset (adjusted hectares)					0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	No				**Time over which loss is averted (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
					Future area without offset (adjusted hectares)					0.0	**Future area with offset (adjusted hectares)**	0.0								
					Time until ecological benefit		**Start quality (scale of 0-10)**	**0**	**Future quality without offset (scale of 0-10)**	**0**	**Future quality with offset (scale of 0-10)**	**0**								
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present value**	**% of impact offset**	**Minimum (90%) direct offset requirement met?**	**Cost ($ total)**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	187	Count		20		0		0		930		930	75%	697.50	187.12	100.06%	Yes		
Condition of habitat Change in habitat condition, but no change in extent	No																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
Number of individuals	0				$0.00		$0.00
Number of features	187	187.12	100.06%	**Yes**	$0.00	N/A	$0.00
Condition of habitat	0				$0.00		$0.00
Area of habitat	0				$0.00		$0.00
Area of community	0				$0.00		$0.00
					$0.00	**$0.00**	**$0.00**

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.

Matter of National Environmental Significance	
Name	Regent Honeyeater
EPBC Act status	Critically Endangered
Annual probability of extinction Based on IUCN category definitions	**6.8%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**Units**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	Foraging Trees	33		Count	Tree Plot
Condition of habitat Change in habitat condition, but no change in extent	No					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	No				**Time over which loss is averted (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					Time until ecological benefit		**Start quality (scale of 0-10)**	**0**	**Future quality without offset (scale of 0-10)**	**0**	**Future quality with offset (scale of 0-10)**	**0**								
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present value**	**% of impact offset**	**Minimum (90%) direct offset requirement met?**	**Cost ($ total)**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	33	Count		20		0		0		165		165	75%	123.75	33.20	100.60%	Yes		
Condition of habitat Change in habitat condition, but no change in extent	No																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
Number of individuals	0				$0.00		$0.00
Number of features	33	33.20	100.60%	**Yes**	$0.00	N/A	$0.00
Condition of habitat	0				$0.00		$0.00
Area of habitat	0				$0.00		$0.00
Area of community	0				$0.00		$0.00
					$0.00	**$0.00**	**$0.00**

Appendix I

OAG Tables

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.

Matter of National Environmental Significance	
Name	SEFF
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	1.5	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	0.75	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	0.75	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	10.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	1.45	192.84%	Yes	
									Future area without offset (adjusted hectares)	10.8	**Future area with offset (adjusted hectares)**	10.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**6**	**Future quality without offset (scale of 0-10)**	**6**	**Future quality with offset (scale of 0-10)**	**8**	2.00	85%	1.70	1.34				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	0.75	1.45	192.84%	**Yes**	$0.00	N/A	$0.00
Area of community	0				$0.00		$0.00
					$0.00	**$0.00**	**$0.00**

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.

Matter of National Environmental Significance	
Name	SEFF
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	1.5	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	0.75	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	0.75	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	10.4	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	1.23	163.85%	Yes	
									Future area without offset (adjusted hectares)	10.4	**Future area with offset (adjusted hectares)**	10.4								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**6**	**Future quality without offset (scale of 0-10)**	**6**	**Future quality with offset (scale of 0-10)**	**8**	2.00	75%	1.50	1.18				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	0.75	1.23	163.85%	**Yes**	$0.00	N/A	$0.00
Area of community	0				$0.00		$0.00
					$0.00	**$0.00**	**$0.00**

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.

Matter of National Environmental Significance	
Name	SEFF
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	1.5	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	0.75	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	0.75	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	2.9	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	0.69	91.38%	Yes	
									Future area without offset (adjusted hectares)	2.9	**Future area with offset (adjusted hectares)**	2.9								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**4**	**Future quality without offset (scale of 0-10)**	**4**	**Future quality with offset (scale of 0-10)**	**8**	4.00	75%	3.00	2.36				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	0.75	0.69	91.38%	**Yes**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	SEFF
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	1.5	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	0.75	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	0.75	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	11.6	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	2.06	274.14%	Yes	
									Future area without offset (adjusted hectares)	11.6	**Future area with offset (adjusted hectares)**	11.6								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**5**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**8**	3.00	75%	2.25	1.77				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	0.75	2.06	274.14%	**Yes**	$0.00	N/A	$0.00
Area of community	0				$0.00		$0.00
					$0.00	**$0.00**	**$0.00**

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.

Matter of National Environmental Significance	
Name	Koala
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	23.3	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	13.98	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	13.98	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	57.1	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	3.82	27.35%	No	
									Future area without offset (adjusted hectares)	57.1	**Future area with offset (adjusted hectares)**	57.1								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**7**	**Future quality without offset (scale of 0-10)**	**7**	**Future quality with offset (scale of 0-10)**	**8**	1.00	85%	0.85	0.67				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	13.98	3.82	27.35%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

Offsets Assessment Guide

For use in determining offsets under the *Environment Protection and Biodiversity Conservation Act 1999*
2 October 2012

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Matter of National Environmental Significance	
Name	Koala
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	23.3	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	13.98	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	13.98	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	40.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	5.46	39.08%	No	
									Future area without offset (adjusted hectares)	40.8	**Future area with offset (adjusted hectares)**	40.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**6**	**Future quality without offset (scale of 0-10)**	**6**	**Future quality with offset (scale of 0-10)**	**8**	2.00	85%	1.70	1.34				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	13.98	5.46	39.08%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

Offsets Assessment Guide

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2 October 2012

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Matter of National Environmental Significance	
Name	Koala
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	23.3	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	13.98	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	13.98	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	10.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	0.72	5.17%	No	
									Future area without offset (adjusted hectares)	10.8	**Future area with offset (adjusted hectares)**	10.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**7**	**Future quality without offset (scale of 0-10)**	**7**	**Future quality with offset (scale of 0-10)**	**8**	1.00	85%	0.85	0.67				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	13.98	0.72	5.17%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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Matter of National Environmental Significance	
Name	Koala
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	23.3	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	13.98	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	13.98	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	58.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	10.42	74.55%	No		
									Future area without offset (adjusted hectares)	58.8	**Future area with offset (adjusted hectares)**	58.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**5**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**8**	3.00	75%	2.25	1.77				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	13.98	10.42	74.55%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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Matter of National Environmental Significance	
Name	Koala
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	23.3	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	13.98	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	13.98	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	27.1	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	1.60	11.45%	No	
									Future area without offset (adjusted hectares)	27.1	**Future area with offset (adjusted hectares)**	27.1								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**7**	**Future quality without offset (scale of 0-10)**	**7**	**Future quality with offset (scale of 0-10)**	**8**	1.00	75%	0.75	0.59				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	13.98	1.60	11.45%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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Matter of National Environmental Significance	
Name	Koala
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	23.3	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	13.98	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	13.98	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	10.4	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	1.23	8.79%	No	
									Future area without offset (adjusted hectares)	10.4	**Future area with offset (adjusted hectares)**	10.4								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**6**	**Future quality without offset (scale of 0-10)**	**6**	**Future quality with offset (scale of 0-10)**	**8**	2.00	75%	1.50	1.18				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	13.98	1.23	8.79%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

Offsets Assessment Guide

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Matter of National Environmental Significance	
Name	Koala
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	23.3	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	13.98	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	13.98	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	25.2	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	5.96	42.60%	No	
									Future area without offset (adjusted hectares)	25.2	**Future area with offset (adjusted hectares)**	25.2								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**4**	**Future quality without offset (scale of 0-10)**	**4**	**Future quality with offset (scale of 0-10)**	**8**	4.00	75%	3.00	2.36				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	13.98	5.96	42.60%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Koala
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	23.3	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	13.98	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	13.98	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	20.9	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	3.70	26.50%	No	
									Future area without offset (adjusted hectares)	20.9	**Future area with offset (adjusted hectares)**	20.9								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**5**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**8**	3.00	75%	2.25	1.77				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	13.98	3.70	26.50%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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Matter of National Environmental Significance	
Name	Koala
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	23.3	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	13.98	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	13.98	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	2.9	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%								
									Future area without offset (adjusted hectares)	2.9	**Future area with offset (adjusted hectares)**	2.9	0.00	95%	0.00	0.00	0.69	4.90%	No	
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**4**	**Future quality without offset (scale of 0-10)**	**4**	**Future quality with offset (scale of 0-10)**	**8**	4.00	75%	3.00	2.36				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	13.98	0.69	4.90%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

Offsets Assessment Guide

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2 October 2012

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Matter of National Environmental Significance	
Name	Koala
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	23.3	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	13.98	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	13.98	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	11.6	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	2.06	14.71%	No	
									Future area without offset (adjusted hectares)	11.6	**Future area with offset (adjusted hectares)**	11.6								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**5**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**8**	3.00	75%	2.25	1.77				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	13.98	2.06	14.71%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

Offsets Assessment Guide

For use in determining offsets under the *Environment Protection and Biodiversity Conservation Act 1999*
2 October 2012

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Matter of National Environmental Significance	
Name	GHFF
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	18.9	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	11.34	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	11.34	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	57.1	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	0.00	0.00%	No	
									Future area without offset (adjusted hectares)	57.1	**Future area with offset (adjusted hectares)**	57.1								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**6**	**Future quality without offset (scale of 0-10)**	**6**	**Future quality with offset (scale of 0-10)**	**6**	0.00	85%	0.00	0.00				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	11.34	0.00	0.00%	**No**	$0.00	N/A	$0.00
Area of community	0				$0.00		$0.00
					$0.00	**$0.00**	**$0.00**

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2 October 2012

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Matter of National Environmental Significance	
Name	GHFF
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	18.9	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	11.34	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	11.34	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	40.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	3.33	29.38%	No	
									Future area without offset (adjusted hectares)	40.8	**Future area with offset (adjusted hectares)**	40.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**5**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**6**	1.00	85%	0.85	0.82				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	11.34	3.33	29.38%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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Matter of National Environmental Significance	
Name	GHFF
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	18.9	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	11.34	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	11.34	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	10.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	0.88	7.78%	No	
									Future area without offset (adjusted hectares)	10.8	**Future area with offset (adjusted hectares)**	10.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**6**	**Future quality without offset (scale of 0-10)**	**6**	**Future quality with offset (scale of 0-10)**	**7**	1.00	85%	0.85	0.82				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	11.34	0.88	7.78%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	GHFF
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	18.9	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	11.34	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	11.34	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	58.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	12.71	112.10%	Yes	
									Future area without offset (adjusted hectares)	58.8	**Future area with offset (adjusted hectares)**	58.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**4**	**Future quality without offset (scale of 0-10)**	**4**	**Future quality with offset (scale of 0-10)**	**7**	3.00	75%	2.25	2.16				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	11.34	12.71	112.10%	**Yes**	$0.00	N/A	$0.00
Area of community	0				$0.00		$0.00
					$0.00	**$0.00**	**$0.00**

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2 October 2012

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Matter of National Environmental Significance	
Name	GHFF
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	18.9	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	11.34	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	11.34	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	27.1	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	3.91	34.44%	No	
									Future area without offset (adjusted hectares)	27.1	**Future area with offset (adjusted hectares)**	27.1								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**5**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**7**	2.00	75%	1.50	1.44				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	11.34	3.91	34.44%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

Offsets Assessment Guide

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2 October 2012

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Matter of National Environmental Significance	
Name	GHFF
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	18.9	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	11.34	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	11.34	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	10.4	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	2.25	19.83%	No	
									Future area without offset (adjusted hectares)	10.4	**Future area with offset (adjusted hectares)**	10.4								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**4**	**Future quality without offset (scale of 0-10)**	**4**	**Future quality with offset (scale of 0-10)**	**7**	3.00	75%	2.25	2.16				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	11.34	2.25	19.83%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

Offsets Assessment Guide

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2 October 2012

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Matter of National Environmental Significance	
Name	GHFF
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	18.9	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	11.34	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	11.34	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	25.2	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	7.26	64.06%	No	
									Future area without offset (adjusted hectares)	25.2	**Future area with offset (adjusted hectares)**	25.2								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**7**	4.00	75%	3.00	2.88				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	11.34	7.26	64.06%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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Matter of National Environmental Significance	
Name	GHFF
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	18.9	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	11.34	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	11.34	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	20.9	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	4.52	39.84%	No	
									Future area without offset (adjusted hectares)	20.9	**Future area with offset (adjusted hectares)**	20.9								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**4**	**Future quality without offset (scale of 0-10)**	**4**	**Future quality with offset (scale of 0-10)**	**7**	3.00	75%	2.25	2.16				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	11.34	4.52	39.84%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

Offsets Assessment Guide

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Matter of National Environmental Significance	
Name	GHFF
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	18.9	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	11.34	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	11.34	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	2.9	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%								
									Future area without offset (adjusted hectares)	2.9	**Future area with offset (adjusted hectares)**	2.9	0.00	95%	0.00	0.00	0.63	5.53%	No	
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**6**	3.00	75%	2.25	2.16				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	11.34	0.63	5.53%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	GHFF
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	18.9	Hectares	
			Quality	**6**	Scale 0-10	
			Total quantum of impact	11.34	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	11.34	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	11.6	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	3.34	29.49%	No		
									Future area without offset (adjusted hectares)	11.6	**Future area with offset (adjusted hectares)**	11.6								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**7**	4.00	75%	3.00	2.88				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	11.34	3.34	29.49%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	57.1	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	7.65	20.31%	No	
									Future area without offset (adjusted hectares)	57.1	**Future area with offset (adjusted hectares)**	57.1								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**5**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**7**	2.00	85%	1.70	1.34				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	7.65	20.31%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	40.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	8.20	21.77%	No	
									Future area without offset (adjusted hectares)	40.8	**Future area with offset (adjusted hectares)**	40.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	4	**Future quality without offset (scale of 0-10)**	4	**Future quality with offset (scale of 0-10)**	7	3.00	85%	2.55	2.01				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	8.20	21.77%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	10.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	0.72	1.92%	No	
									Future area without offset (adjusted hectares)	10.8	**Future area with offset (adjusted hectares)**	10.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**6**	**Future quality without offset (scale of 0-10)**	**6**	**Future quality with offset (scale of 0-10)**	**7**	1.00	85%	0.85	0.67				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	0.72	1.92%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	58.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	10.42	27.68%	No	
									Future area without offset (adjusted hectares)	58.8	**Future area with offset (adjusted hectares)**	58.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	4	**Future quality without offset (scale of 0-10)**	4	**Future quality with offset (scale of 0-10)**	7	3.00	75%	2.25	1.77				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	10.42	27.68%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	27.1	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	4.80	12.76%	No	
									Future area without offset (adjusted hectares)	27.1	**Future area with offset (adjusted hectares)**	27.1								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**4**	**Future quality without offset (scale of 0-10)**	**4**	**Future quality with offset (scale of 0-10)**	**7**	3.00	75%	2.25	1.77				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	4.80	12.76%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	10.4	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	1.23	3.26%	No	
									Future area without offset (adjusted hectares)	10.4	**Future area with offset (adjusted hectares)**	10.4								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**5**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**7**	2.00	75%	1.50	1.18				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	1.23	3.26%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	25.2	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	5.96	15.82%	No	
									Future area without offset (adjusted hectares)	25.2	**Future area with offset (adjusted hectares)**	25.2								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**7**	4.00	75%	3.00	2.36				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	5.96	15.82%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	20.9	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	4.94	13.12%	No	
									Future area without offset (adjusted hectares)	20.9	**Future area with offset (adjusted hectares)**	20.9								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**7**	4.00	75%	3.00	2.36				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	4.94	13.12%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	2.9	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	0.69	1.82%	No	
									Future area without offset (adjusted hectares)	2.9	**Future area with offset (adjusted hectares)**	2.9								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**7**	4.00	75%	3.00	2.36				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	0.69	1.82%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	11.6	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	2.74	7.28%	No	
									Future area without offset (adjusted hectares)	11.6	**Future area with offset (adjusted hectares)**	11.6								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**7**	4.00	75%	3.00	2.36				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	2.74	7.28%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Greater Glider
EPBC Act status	Endangered
Annual probability of extinction Based on IUCN category definitions	**1.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**		Hectares	
			Quality	**0**	Scale 0-10	
			Total quantum of impact	0.00	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**Units**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	Hollows	245		Count	Field Survey
Condition of habitat Change in habitat condition, but no change in extent	No					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes		Adjusted hectares		**Time over which loss is averted (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**		0.00		0.00	0.00	#DIV/0!	#DIV/0!		
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					Time until ecological benefit		**Start quality (scale of 0-10)**	**0**	**Future quality without offset (scale of 0-10)**	**0**	**Future quality with offset (scale of 0-10)**	**0**	0.00		0.00	0.00				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present value**	**% of impact offset**	**Minimum (90%) direct offset requirement met?**	**Cost ($ total)**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	245	Count		20		79		79		531		452	75%	339.00	267.05	109.00%	Yes		
Condition of habitat Change in habitat condition, but no change in extent	No																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
Number of individuals	0				$0.00		$0.00
Number of features	245	267.05	109.00%	**Yes**	$0.00	N/A	$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	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	YBG
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	57.1	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	9.33	24.77%	No	
									Future area without offset (adjusted hectares)	57.1	**Future area with offset (adjusted hectares)**	57.1								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**5**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**7**	2.00	85%	1.70	1.63				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	9.33	24.77%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	YBG
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	40.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	10.00	26.55%	No	
									Future area without offset (adjusted hectares)	40.8	**Future area with offset (adjusted hectares)**	40.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	4	**Future quality without offset (scale of 0-10)**	4	**Future quality with offset (scale of 0-10)**	7	3.00	85%	2.55	2.45				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	10.00	26.55%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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Matter of National Environmental Significance	
Name	YBG
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	10.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	0.88	2.34%	No	
									Future area without offset (adjusted hectares)	10.8	**Future area with offset (adjusted hectares)**	10.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**6**	**Future quality without offset (scale of 0-10)**	**6**	**Future quality with offset (scale of 0-10)**	**7**	1.00	85%	0.85	0.82				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	0.88	2.34%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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Matter of National Environmental Significance	
Name	YBG
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	58.8	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	12.71	33.76%	No	
									Future area without offset (adjusted hectares)	58.8	**Future area with offset (adjusted hectares)**	58.8								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	4	**Future quality without offset (scale of 0-10)**	4	**Future quality with offset (scale of 0-10)**	7	3.00	75%	2.25	2.16				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	12.71	33.76%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

Offsets Assessment Guide

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2 October 2012

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Matter of National Environmental Significance	
Name	YBG
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	27.1	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%								
									Future area without offset (adjusted hectares)	27.1	**Future area with offset (adjusted hectares)**	27.1	0.00	95%	0.00	0.00	5.86	15.56%	No	
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**4**	**Future quality without offset (scale of 0-10)**	**4**	**Future quality with offset (scale of 0-10)**	**7**	3.00	75%	2.25	2.16				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	5.86	15.56%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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Name	YBG
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	10.4	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	1.50	3.98%	No	
									Future area without offset (adjusted hectares)	10.4	**Future area with offset (adjusted hectares)**	10.4								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**5**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**7**	2.00	75%	1.50	1.44				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	1.50	3.98%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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Matter of National Environmental Significance	
Name	YBG
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	25.2	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	7.26	19.29%	No	
									Future area without offset (adjusted hectares)	25.2	**Future area with offset (adjusted hectares)**	25.2								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**7**	4.00	75%	3.00	2.88				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	7.26	19.29%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	YBG
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	20.9	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	6.02	16.00%	No	
									Future area without offset (adjusted hectares)	20.9	**Future area with offset (adjusted hectares)**	20.9								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**7**	4.00	75%	3.00	2.88				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	6.02	16.00%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	YBG
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	2.9	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	0.84	2.22%	No	
									Future area without offset (adjusted hectares)	2.9	**Future area with offset (adjusted hectares)**	2.9								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**7**	4.00	75%	3.00	2.88				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	0.84	2.22%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	YBG
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**	75.3	Hectares	
			Quality	**5**	Scale 0-10	
			Total quantum of impact	37.65	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**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					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes	37.65	Adjusted hectares		**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	11.6	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	95%	0.00	0.00	3.34	8.88%	No	
									Future area without offset (adjusted hectares)	11.6	**Future area with offset (adjusted hectares)**	11.6								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**3**	**Future quality without offset (scale of 0-10)**	**3**	**Future quality with offset (scale of 0-10)**	**7**	4.00	75%	3.00	2.88				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present 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																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
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	37.65	3.34	8.88%	**No**	$0.00	#DIV/0!	#DIV/0!
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Yellow-bellied Glider
EPBC Act status	Vulnerable
Annual probability of extinction Based on IUCN category definitions	**0.2%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	Yes		**Area**		Hectares	
			Quality	**0**	Scale 0-10	
			Total quantum of impact	0.00	Adjusted hectares	
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**Units**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	Hollows	245		Count	Field Survey
Condition of habitat Change in habitat condition, but no change in extent	No					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	Yes		Adjusted hectares		**Time over which loss is averted (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**		0.00		0.00	0.00	#DIV/0!	#DIV/0!		
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					Time until ecological benefit		**Start quality (scale of 0-10)**	**0**	**Future quality without offset (scale of 0-10)**	**0**	**Future quality with offset (scale of 0-10)**	**0**	0.00		0.00	0.00				
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present value**	**% of impact offset**	**Minimum (90%) direct offset requirement met?**	**Cost ($ total)**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	245	Count		20		79		79		531		452	75%	339.00	325.72	132.95%	Yes		
Condition of habitat Change in habitat condition, but no change in extent	No																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
Number of individuals	0				$0.00		$0.00
Number of features	245	325.72	132.95%	**Yes**	$0.00	N/A	$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	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

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.

Matter of National Environmental Significance	
Name	Swift Parrot
EPBC Act status	Critically Endangered
Annual probability of extinction Based on IUCN category definitions	**6.8%**

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

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**Units**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	Foraging Trees	187		Count	Tree Plot
Condition of habitat Change in habitat condition, but no change in extent	No					
Threatened 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					

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
					Future area without offset (adjusted hectares)					0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	No				**Time over which loss is averted (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
					Future area without offset (adjusted hectares)					0.0	**Future area with offset (adjusted hectares)**	0.0								
					Time until ecological benefit		**Start quality (scale of 0-10)**	**0**	**Future quality without offset (scale of 0-10)**	**0**	**Future quality with offset (scale of 0-10)**	**0**								
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present value**	**% of impact offset**	**Minimum (90%) direct offset requirement met?**	**Cost ($ total)**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	187	Count		20		357		357		23584		23227	75%	17420.25	4673.36	2499.12%	Yes		
Condition of habitat Change in habitat condition, but no change in extent	No																			
Threatened 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

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
Number of individuals	0				$0.00		$0.00
Number of features	187	4673.36	2499.12%	**Yes**	$0.00	N/A	$0.00
Condition of habitat	0				$0.00		$0.00
Area of habitat	0				$0.00		$0.00
Area of community	0				$0.00		$0.00
					$0.00	**$0.00**	**$0.00**

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.

Matter of National Environmental Significance	
Name	Regent Honeyeater
EPBC Act status	Critically Endangered
Annual probability of extinction Based on IUCN category definitions	**6.8%**

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

Impact calculator

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Threatened species habitat						
Area of habitat	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**Units**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	Foraging Trees	33		Count	Tree Plot
Condition of habitat Change in habitat condition, but no change in extent	No					
Threatened 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					

Offset calculator

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	No				**Risk-related time horizon (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					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)**									
Threatened species habitat																				
Area of habitat	No				**Time over which loss is averted (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					Time until ecological benefit		**Start quality (scale of 0-10)**	**0**	**Future quality without offset (scale of 0-10)**	**0**	**Future quality with offset (scale of 0-10)**	**0**								
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present value**	**% of impact offset**	**Minimum (90%) direct offset requirement met?**	**Cost ($ total)**	**Information source**
Number of features e.g. Nest hollows, habitat trees	Yes	33	Count		20		289		289		17130		16841	75%	12630.75	3388.47	10268.10%	Yes		
Condition of habitat Change in habitat condition, but no change in extent	No																			
Threatened 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

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
Number of individuals	0				$0.00		$0.00
Number of features	33	3388.47	10268.10%	**Yes**	$0.00	N/A	$0.00
Condition of habitat	0				$0.00		$0.00
Area of habitat	0				$0.00		$0.00
Area of community	0				$0.00		$0.00
					$0.00	**$0.00**	**$0.00**

Appendix J

Risk Assessment

Risk assessment for Offset Area

A qualitative risk assessment which considers the risks of achieving the objectives and outcomes for the Offset Area is presented in the table below. The risk assessment is completed in accordance with the EPBC Act Environmental Management Plan Guidelines (2014) and characterises risk as low, medium, high or severe, as derived from the likelihood (highly likely, likely, possible, unlikely, rare) and consequence (minor, moderate, high, major and critical) risk matrix.

The risk analysis assesses the risk of failure to achieve the OMP management objectives. It is necessary to re-evaluate and modify the risk analysis and contingency measures throughout the period of EPBC Act approval, particularly if any unforeseen risks emerge or any negative outcomes identified are greater than expected.

During the first five (5) years of monitoring and Annual Compliance Reporting, **KFF2 and/or The Proponent** will review management commitments in this Offset Management Framework, and if the review results in the need to revise the framework it will be revised and submitted for approval. It is noted that events are only addressed once in the risk assessment under the most relevant management objective, however, some events are likely to impact on multiple management objectives.

Risk framework

		Consequence				
Likelihood		Minor	Moderate	High	Major	Critical
	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

Likelihood and consequence

▪ 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.

Risk assessment and management

Management objective/desired outcome	Event or circumstance	Relevant management actions/measures	Residual risk			Trigger detection and monitoring activity/ies	Feasible/effective corrective actions
			L	C	RL		
To legally secure approved offset properties for conservation.	Failure to legally secure approved Offset Area. Legislative reform prejudices proposed tenure arrangements for offset properties.	Management action 1: • Legally secure the Offset Area via a suitable method including a voluntary declaration under the *Vegetation Management Act 1999* and an agreed permanent securing solution.	R	Mod	Low	Clearing of the impact area cannot occur without legally securing the Offset Area.	N/A
Pest management	Failure to reduce the threat of introduced predators.	Management Action 2: • Conduct baseline surveys and determine relative abundance index. • Implement predator control program. • Conduct follow-up monitoring and implement further control.	U	Mod	Low	Monitoring of the presence of introduced predators through the use of remote motion-activated cameras; Survey the site to record the presence / absence of signs of introduced predator (sightings, killings and/or scats and tracks).	• Should the initial and ongoing introduced predator control measures not result in a reduction of introduced predator numbers (compared to baseline survey), introduced predator program to be expanded/adapted to improve outcomes. • Any incidence of injury/mortality resulting from introduced predator attack will initiate supplementary monitoring and control measures. In the event that an offset species is found injured, transport immediately to a local vet, or suitably qualified and experienced wildlife carer.

Management objective/desired outcome	Event or circumstance	Relevant management actions/measures	Residual risk			Trigger detection and monitoring activity/ies	Feasible/effective corrective actions
			L	C	RL		
Weeds management	Failure to control Weeds.	Management Action 3: • Develop and implement a weed strategy, with a particular focus on weeds listed with particularly ability to impact on movement and structural vegetation composition (predominantly *Lantana camara*), and under the *Biosecurity Act 2014*, to reduce weed cover to target thresholds. • Undertake weed management in accordance with the OMP.	U	Mod	Low	Annual (photo monitoring and mapping of weed infestations) and 5-year Targeted transects and MHQA) surveys of non-native plant cover to ensure reduction across Offset Area. Surveys in-line with weed management strategy. Repeated surveys of baseline data including 5 yearly habitat monitoring data as part of the framework.	If weed survey indicates weed cover is not reduced since previous survey, weed control program to be expanded/ adapted to improve outcomes.
High intensity fire	A high intensity uncontrolled fire occurs within the Offset Area/s which causes loss of habitat.	Management Action 4: Actions as directed by the local authority which may include prescribed burning or other techniques undertaken in consultation with the local authority and in reference to the Bushfire Management Plan and controlled grazing to manage fuel loads.	P	Mod	Med	Annual monitoring requirements to review access tracks, fire breaks, fuel loads and outcomes of controlled burns or other management techniques.	If a wildfire occurs in the Offset Area, the following actions will be undertaken: • Implement fire control • Repair any fire breaks and access tracks. • Stay informed through the Rural Fire Service. • Assess damage caused by the wild fire and monitor for natural regeneration. • Monitoring to occur 3-6 months post event or after the next wet weather

Management objective/desired outcome	Event or circumstance	Relevant management actions/measures	Residual risk			Trigger detection and monitoring activity/ies	Feasible/effective corrective actions
			L	C	RL		event (whichever is sooner). • Where natural regeneration is failing to thrive, assist natural regeneration through direct seeding and planting
Achieve performance targets and completion criteria for habitat	Landowner-approval holder agreements fail to adequately address management commitments in the offset plan.	Management Action 1-5: • The Offset Area has been legally secured for conservation purposes. The development of this framework outlines specific management actions to achieve performance criteria.	U	Mod	Low	Scheduled monitoring/surveys and Annual Compliance Reports	• Review Offset Management Framework • Implement adaptive management and corrective actions
	The Offset Area fails to naturally regenerate.	Management Action 3: • Remove incompatible land uses. • WONS management (refer Management Action 3). • Sufficient rest period.	U	Mod	Low	After a sufficient rest period the repeat MHQA will indicate progress towards performance criteria.	• infill planting/ revegetation to be implemented after sufficient rest period.

Management objective/desired outcome	Event or circumstance	Relevant management actions/measures	Residual risk			Trigger detection and monitoring activity/ies	Feasible/effective corrective actions
			L	C	RL		
	Failure to increase habitat for offset species.	Management Action 1: • legally secure Offset Area and remove incompatible land uses. Management Action 3: • Reduce the extent of weed as per criteria; and • Implement infill planting if required.	U	Mod	Low	Annual surveys (photo monitoring & audit of revegetation works) of revegetation area to ensure plant survival. Repeated surveys of baseline data including 5 yearly MHQA habitat monitoring data and annual observational data as part of the OMP.	If MHQA transects indicate habitat less than performance indicators, implement infill planting in weed control areas. Should plant stock fail supplementary planting, direct seeding, weed control, fertiliser, amelioration or other management actions necessary to stimulate tree growth.
	If infill planting is required and there is high plant stock failure.	Management Action 3: • Adhere to planting method and watering schedule.	U	Mod	Low	Plant stock audits (first 3 years). Planting and monitoring event schedules.	If there is a high rate of plant stock failure adaptive management and corrective actions will be implemented and may include, additional supplementary planting, direct seeding, weed control, fertiliser, water spike, mulching, tree guards, etc.

Management objective/desired outcome	Event or circumstance	Relevant management actions/measures	Residual risk			Trigger detection and monitoring activity/ies	Feasible/effective corrective actions
			L	C	RL		
Hollow and nest box installation	Hollow and nest box failure	Management Acton 7: • Install hollows and nest boxes to ensure at least 2 hollows per hectare	U	Mod	Low	Hollow Monitoring and Management Plan. Monitoring of installed hollows shows failure	Install replacement hollows and nest boxes in adjoining suitable limbs or trees.