Annual Compliance Report

2 November 2022 to 1 November 2023 (Year 1) EPBC 2021/9005
254 Barrams Road, South Ripley, Queensland

Prepared for Barrams Land Partners Pty Ltd ATF Barrams Land Partners Unit Trust
24 January 2024

Job No. 8960

Document Control

Document: Annual Compliance Report – 2 November 2022 to 1 November 2023 (Year 1), prepared by Saunders Havill Group for Barrams Land Partners Pty Ltd ATF Barrams Land Partners Unit Trust, dated 24 January 2024.

Document Issue

Issue	Date	Prepared By	Checked By
A	24.01.2024	KR	AW

Prepared by

ABN 24 144 972 949

www.saundershavill.com

Table of Contents

Figures

Plans

Tables

Acronyms and References

ACR	Annual Compliance Report
DAM	Declared Area Map
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Commonwealth)
DOR	Department of Resources (Queensland)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
EPSCL	Environmental Pre-start Checklist
GHFF	Grey-headed flying-fox
ha	hectares
ICC	Ipswich City Council
KFM	Keystone Fauna Management
km	kilometres
m	metres
MNES	Matters of National Environmental Significance
PMAV	Property Map of Assessable Vegetation
SHG	Saunders Havill Group
SMP	Stormwater Management Plan
VDEC	Voluntary Declaration (under the *Vegetation Management Act 1999*)
VMA	*Vegetation Management Act 1999* (Queensland)
WHIMP	Wildlife Habitat Impact Mitigation Plan
WPMP	Wildlife Protection Management Plan

Reference documents

OMP	Rosevale Offset Management Plan (EPBC 2021/9005) Version 3.1, dated 28 July 2022

1. Project Overview

The Environmental Management Division of Saunders Havill Group was engaged by Barrams Land Partners Pty Ltd ATF Barrams Land Partners Unit Trust to prepare the following Annual Compliance Report (ACR) for the development on 254 Barrams Road, South Ripley, Queensland. This report provides an assessment of project compliance with the approval granted under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (ref EPBC 2021/9005 on 2 November 2022 (refer **Appendix A**).

The project area, described as Lot 108 on M3174 is 24.69 hectares (ha) in size and is located approximately 10.5 kilometres (km) south-east of Ipswich CBD within the suburb of South Ripley, and Ipswich City Council (ICC) district (refer to site context map located at **Figure 1**). The project area is bound by the newly formed Lucas Drive to the south-east, Flint Drive to the south-west, Sandstone Boulevard to the east and bushland/open space to the north and west. Within the broader surrounding landscape of the site is further ongoing development of residential areas (refer **Figure 2**).

1.1. EPBC approval details

APD Projects Pty Ltd, the Proponent of the Project was issued with an approval under the EPBC Act by the Department of Climate Change, Energy, the Environment and Water (DCCEEW or 'the Department') on 2 November 2022, subject to conditions. Refer to **Appendix A** for a copy of the EPBC Act approval documentation.

Key details relating to EPBC 2021/9005 are provided in **Table 1**.

Table 1: Approval Details

Commonwealth reference	EPBC 2021/9005
Approval holder	APD Projects Pty Ltd (ABN: 54 706 717 691)
ACN	652 008 887
Approval date	2 November 2022
Expiry date of approval	31 December 2050
Approved action	To construct a residential subdivision at Lot 108 on M3174, 254 Barrams Road, South Ripley, Queensland.
Controlling provision	Approved – listed threatened species and communities (sections 18 & 18A)
Project commencement	30 January 2023
Reporting period	Year 1 – 2 November 2022 to 1 November 2023
Address	254 Barrams Road, South Ripley, Queensland
Local government area	Ipswich City Council (ICC)

1.2. Reporting Period

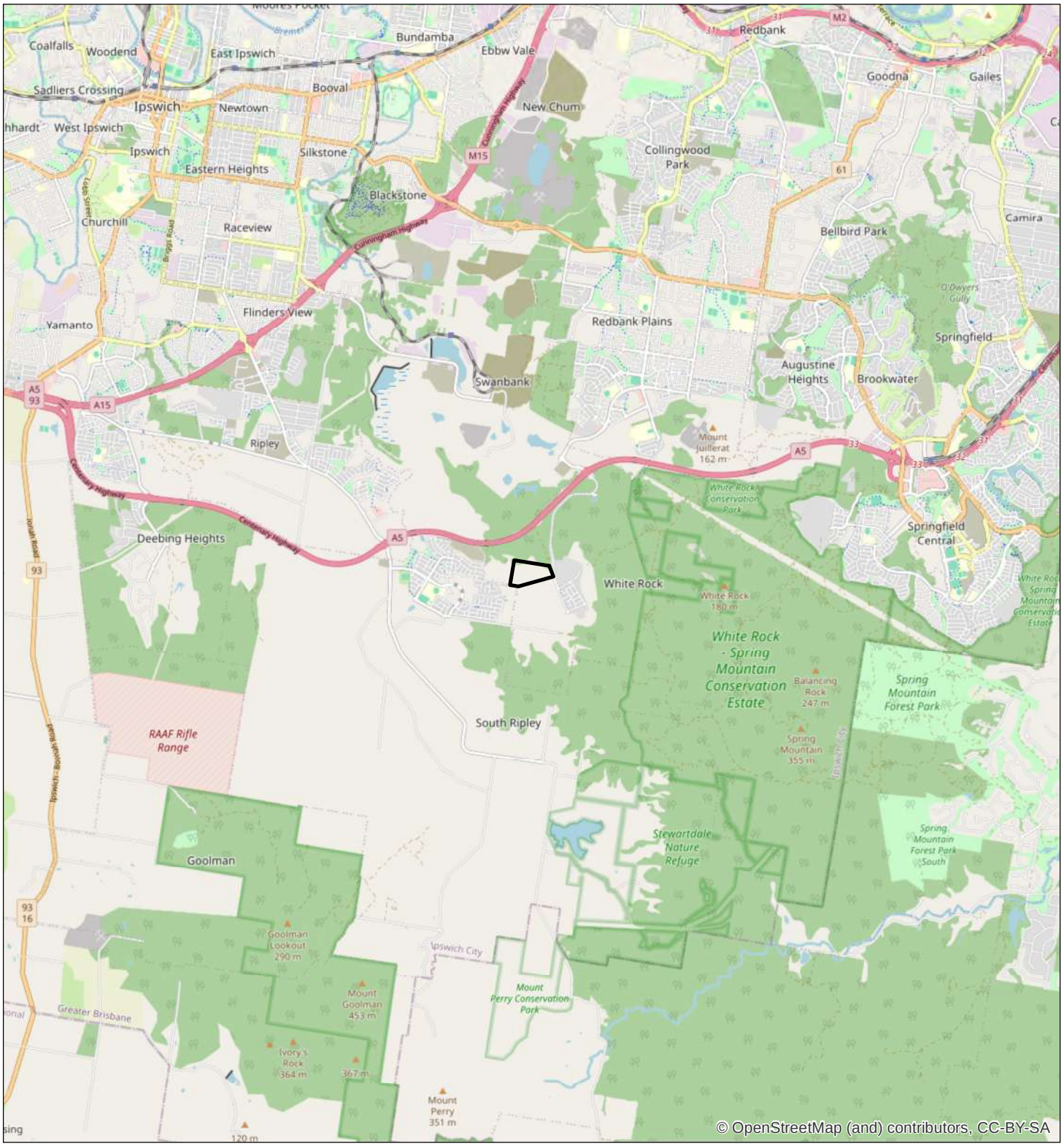
As per Condition 27 of the EPBC Act approval conditions, the approval holder must prepare a compliance report for each 12 month period following the date of the approval (2 November 2022) (refer **Appendix A**). This ACR details the status and compliance of the Project for the 12-month reporting period between the 2 November 2022 (date of approval) to 1 November 2023.

In accordance with Condition 30 of the EPBC Act approval conditions, the ACR must be published on the approval holder's website and notification provided to the Department within 60 business days of the 12-month anniversary of the date of approval (2 November 2022). The required date of upload is 30 January 2024 (refer **Appendix A**).

1.3. Overview of Key Activities

The following key activities occurred between 2 November 2022 and 1 November 2023 (Year 1 of Project):

- Legal securement of Rosevale Offset site via Voluntary Declaration (VDEC) under the Queensland *Vegetation Management Act 1999* (refer **Appendix B** for documentation) and implementation of the Rosevale Offset Management Plan (OMP) including baseline surveys of weed coverage and pest species by SHG ecologists in from April 2023 – 2 November 2023.
- Installation of temporary fauna movement fencing/tree protection demarcation fencing prior to the commencement of clearing.
- Commencement of the action via vegetation clearing and completion of vegetation clearing activities within the impact area in accordance with pre-clearance management protocols and procedures. This included fauna spotter catcher pre-clearance surveys and reporting, inspection and certification of tree protection fencing by a SHG ecologist and environmental pre-start survey with the project contractor.
- Installation of temporary fauna exclusion fencing prior to the commencement of civil works.
- Commencement of civil construction works within the project area including earthworks, and construction of causeway.
- Rehabilitation and stability works associated with Material Change of Use (MCU) approval (ref 6226/2018/PDA) completed within waterway areas of the referral area.



Legend

Referral Area

Figure 1

Site Context

Barrams Land Partners Pty Ltd

File ref. 8960 E Figure 1 Site Context A
Date 22/01/2024
Project 254 Barrams Road, South Ripley

0 1 2 3 4 km

N

Scale (A4): 1:100,000 [GDA 1994 MGA Z56]

saunders havill group

Layer Source: © State of Queensland 2024

Legend

Referral Area

Qld DCDB

Figure 2

Site Aerial

Barrams Land Partners Pty Ltd

File ref. 8960 E Figure 2 Site Aerial A
Date 22/01/2024
Project 254 Barrams Road, South Ripley

0 40 80 120 160 m

N

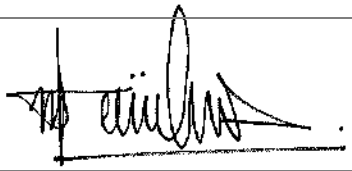
Scale (A4): 1:4,500 [GDA 1994 MGA Z56]

saunders havill group

Layer Source: © State of Queensland 2024

1.4. Declaration of accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. 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	Murray Saunders
Position	Director
Organisation	Saunders Havill Group ABN 24 144 972 949
Date	24 January 2024

1.5. Key Consultants and Roles

Table 2 below is a list of the key appointed contractors and their roles in the Project.

Table 2: Key Consultants and Roles

Role	Company / Appointed Contractor
Development Manager / Proponent	Barrams Land Partners Pty Ltd
Project Engineer	Arcadis
Principal Contractor	CCA Winslow
Environmental Coordinator	Saunders Havill Group
Fauna Spotter Catcher / Ecologist	Keystone Fauna Management
Offset Provider	Montauban Environmental Offsets

2. Impact area management

2.1. Commencement of the action

Vegetation clearing on the impact site marked the commencement of the action on the 30 January 2023. As per Condition 20 of the EPBC Act approval conditions, the approval holder must notify the department electronically of the date of the commencement of the action, within 5 business days.

Notification of the commencement of the action was sent to the Department on the 31 January 2023 via a letter provided by e-mail correspondence (refer **Appendix C**).

2.2. Vegetation clearing and impact review

The action commenced on 30 January 2023 with the commencement of vegetation clearing progressing over the impact site. The required clearing areas within the approved 16.23 ha clearing area described as regrowth eucalypt woodland and open paddock with scattered tree vegetation was cleared. Refer to **Plan 1** for a review of vegetation clearing impacts. It is noted that clearing also occurred outside of the 16.23 ha development area, however, is associated with clearing for a trunk sewer that occurred prior to the commencement of the action and waterway stability activities associated with MCU approval 6226/2018/PDA (refer Condition 1c).

A pre-clearing protocol was implemented to ensure clearing was completed in accordance with the approval. The process to ensure that clearing is completed safely and in accordance with the EPBC Act Approval conditions is a multi-step protocol which requires coordination with the relevant parties.

Approvals relating to impacts on ecological matters were collated from Commonwealth, State and Local governments for the project and included several overarching environmental management plans. To streamline pre-start documentation and environmental management authorisations, an Environmental Pre-Start Checklist (EPSCL) was developed for the Project. This checklist was integral to ensuring clearing proceeded within the demarcated limits, suitable fencing was installed across the work area and the necessary checks for threatened fauna were completed prior to the clearing of any vegetation.

The diagram in **Figure 3** illustrates the key steps in this process. After completing the checklist and all required parties sign-off, vegetation clearance activities proceeded under the supervision of the fauna spotter catcher. A pre-start checklist utilised during Phase 1 is provided at **Appendix D.**

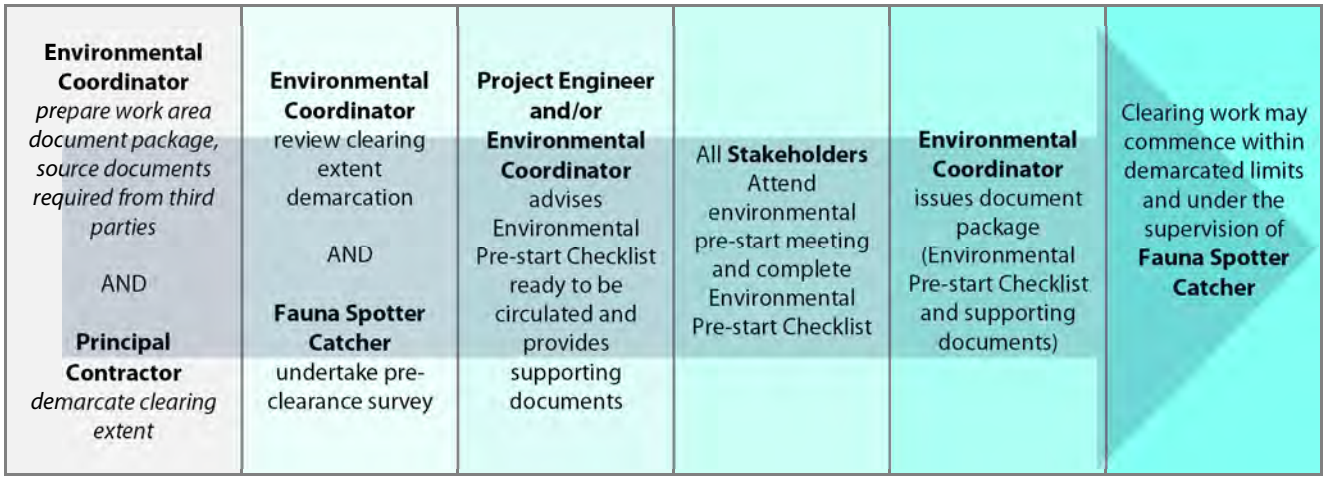


Figure 3: Key steps prior to commencing impact work

Key activities completed to ensure compliance with the relevant conditions of the EPBC Act approval include:

- Installation and maintenance of tree protection and fauna fencing types in accordance with the Vegetation Clearing and Fauna Management Plan (VCFMP) including a mix of orange bunting and barrier mesh fencing (refer **Photo Set 1**).
- Ground-truthing tree protection fencing by SHG ecologist prior to clearing.
- Engagement of qualified fauna spotter catcher (refer **Section 2.4**).
- Fauna spotter catcher completed Wildlife Protection Management Plan (WPMP) and Wildlife Habitat and Impact Mitigation Plan (WHIMP) (refer **Appendix E**).
- Presence of project fauna spotter catcher during all clearing activities.
- Fauna spotter catcher to prepare pre-clearance survey and post-clearance survey reports of clearing area (refer **Appendix F**).

Photo Set 1: Temporary fauna friendly tree protection fencing.

2.3. Fauna spotter catcher reporting

2.3.1 Pre-clearance fauna spotter catcher reporting

Prior to the commencement of vegetation clearing, a qualified fauna spotter catcher undertook on-site fauna surveys and prepared both the WPMP and WHIMP (refer **Appendix E**). The WPMP contains details of the pre-clearing fauna survey methods and the results of these surveys and includes details on the observed fauna, fauna signs, and habitat features found on-site, and proposed fauna relocation points. Management recommendations along with requirements under Part 3 of the *Queensland Nature Conservation (Koala) Conservation Plan 2017* which specifies sequential clearing procedures, sets a daily vegetation clearing limit of 3 ha of vegetation per day, and details the procedures that need to be followed if a koala is present within the clearing area. The 3 ha daily vegetation clearing limit is monitored on-site by ground personnel utilising GPS tracking. The site was cleared sequentially towards retained vegetation in two stages, being understorey scrubbing followed by removal of habitat/canopy trees 24 hours later. This is completed in conjunction with directional clearing to facilitate self-relocation of fauna on site. Koala monitoring on site is conducted daily once the clearing extent for the day is finalised.

2.3.2 Post-services fauna spotter catcher reporting

A post-clearing services report was prepared by a qualified fauna spotter catcher detailing observed fauna and any implemented mitigation measures or procedures. Refer to **Appendix F** for the fauna spotter catcher post-clearing services report for clearing completed within the Year 1 compliance period.

Prior to clearing activities, a ground truthing survey was conducted by a qualified fauna spotter catcher to identify risks to native fauna on-site and to ensure all habitat features identified on-site were cleared in appropriate manner. All clearing was conducted in a sequential clearing process, with the first stage entailing the removal of non-habitat trees and the second stage involving the removal of habitat trees, after the minimum of 24 hours after the first stage has elapsed.

During clearing works, observed fauna were mostly limited to common fauna species, these included *Petaurus norfolcensis* (Squirrel Glider), *Trichosurus vulpecula* (Common Brushtail Possum), Native Beehive and *Gehyra dubia* (Australian house gecko). All individuals found were either relocated or left to vacate the area before works continued. No Koalas were observed by the fauna spotter catcher during the clearing works, as a result no harm occurred to a Koala as a result of clearing.

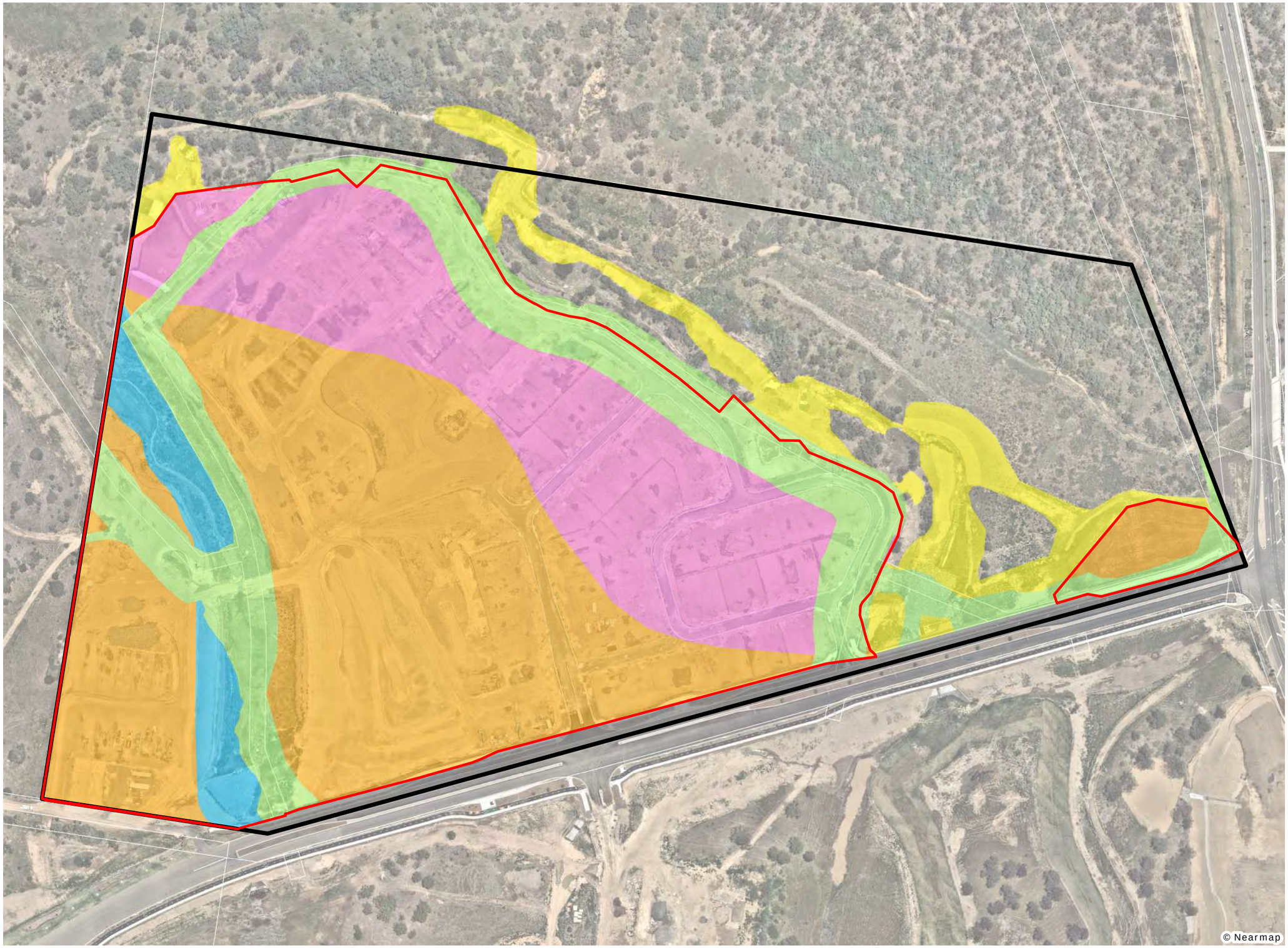
2.4. Review of impacts

Vegetation clearing in association with this approval commenced in January 2022 and progressed intermittently over the balance of the reporting period.

In total all 16.23 ha of MNES vegetation within the development area was cleared during the Year 1 reporting period (refer **Plan 1**) and is considered separate to additional clearing impacts which have occurred within the waterways associated with MCU 6226/2018/PDA.

An inspection of the impact area was completed by an ecologist from SHG in December 2023 to document works that have occurred within the project area during the reporting period and confirm activities against the approval conditions.

01.ACR Year 1 Clearing Review



Notes:
This plan was prepared as a desktop assessment tool. The information on this plan is not suitable for any other purpose. Property dimensions, areas, numbers of lots and contours and other physical features shown have been compiled from existing information and may not have been verified by field survey. These 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 Group 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 the Saunders Havill Group. Unless a development approval states otherwise, this is not an approved plan.

Layer Sources
© State of Queensland (Department of Resources) 2024.
Updated data available at
http://qldspatial.information.qld.gov.au/catalogue/

* This note is an integral part of this plan/data. 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

- Referral Area
- Qld DCDB
- Development Area
- Trunk Sewer Road Acquisition [0.55 ha]

Clearing [Total]

- Functionally Lost Waterway [0.80 ha]
- Nov 2022 to Nov 2023 Clearing - Open Paddock with Scattered Trees [7.90 ha]
- Nov 2022 to Nov 2023 Clearing - Regrowth Eucalypt Woodland [4.35 ha]
- Waterway Stability Works to be Rehabilitated 6226/2018/PDA (Not Part of this EPBC Approval As Per Approval Condition 1c) [1.88 ha]
- Pre November 2022 Trunk Sewer Clearing Not Part of this EPBC Approval [3.86 ha]

Issue	Date	Description	Drawn	Checked
A	23/01/2024	Preliminary	LS	KM

0 25 50 75 m

Transverse Mercator | GDA 1994 | Zone 56 | 1:2,500 @ A3

saunders havill group

Barrams Land Partners Pty Ltd

254 Barrams Road, South Ripley

Address / RPD: Lot 34 on RP115959

23/01/2024 | 8960 E 01 ACR A

3. Offset area management

A 17 ha land-based offset is required under Condition 4 of the EPBC approval (ref EPBC 2021/9005) to compensate for the residual impacts on 16.23 ha of Koala habitat. Montauban Environmental Consultants identified a 17 ha portion of lot 115 on SP167206 located at Tarome Road, Tarome within the Scenic Rim Local Government Area. The land secured is located within the Rosevale Offset Property provides over 800 ha of land holdings for a number of EPBC biodiversity offsets with broad aggregation of conservation outcomes.

To deliver the land-based offset, the Proponent partnered with Montauban Environmental as the third-party environmental offset provider to prepare and implement the approved Rosevale Offset Management Plan Version 3.1, dated 28 July 2022 (OMP).

3.1. Offset area legally secured

A requirement of Condition 4 of the EPBC Act approval (ref EPBC 2021/9005) is the legal securement of the offset area and the provision of written evidence to the Department within 20 business days of the securement under Condition 6. The offset area was legally secured on 23 November 2022 via the Voluntary Declaration process administered under the Queensland VMA. The chief Executive of the Department of Resources (DOR) declared the offset area in a Declared Area Map (DAM 2022/003052) as an area of high nature conservation value in accordance with section 19F of the VMA. The Voluntary Declaration package administered by DOR is provided at **Appendix B**.

3.2. Offset area activities

A range of management activities prescribed under the OMP were implemented within the offset area during Year 1. Management activities are completed with the purpose of reducing threats to MNES and improving and creating habitat. A summary of management activities completed across the offset area during the reporting period are detailed in the Offset Area Annual Report (OAAR) prepared by Montauban Environmental Consultants (refer **Appendix G**) and summarised below:

- Completion of baseline surveys (feral animal management surveys) by SHG ecologists and consultation with Scenic Rim Regional Council.
- Revision of site based management plan to include Pest Management Implementation Strategy (provided in the OAAR).
- Completion of baseline surveys (weed extent surveys) by SHG ecologists.
- Finalisation of MNES habitat restoration locations, sequence and timing for revegetation program.

The OAAR completed by the offset provider for Year 1 is provided at **Appendix G** detailing the full scope and timing of management measures completed.

3.3. Baseline Surveys

Baseline surveys of the offset area conducted by SHG ecologists commenced on 20 April 2023 and were completed on 2 November 2023 with the collection of motion sensor cameras. Surveys over this monitoring period included weed mapping using GIS instruments, motion sensor camera monitoring targeting pest species and establishment of photo monitoring locations. Details regarding the methodologies and results of baseline surveys are included in the OAAR (refer **Appendix G**). Baseline survey results will be included in a revised version of the OMP as required under Condition 9 of the approval which will be sent to the Department by 2 February 2024 for approval (three months from the completion of baseline surveys).

3.3.1 Stock exclusion

Under Condition 7 of the EPBC Act approval (ref REPBC 2021/9005) cattle are required to be excluded from the offset area for the protection of Koala Habitat. Evidence of the exclusion of cattle from the Rosevale Offset Area has been included in the OAAR provided by offset providers Montauban Environmental Consultants (refer **Appendix G**).

3.3.2 Weed management

Under Condition 8 of the EPBC Act approval (ref EPBC 2021/9005), baseline surveys are required to be completed to determine the extent of weed coverage and the seasonal abundance of feral animals. Under Condition 9, the methodology and baseline results are to be included in a revised version of the OMP and submitted to the Department for approval within three months of the completion of baseline surveys and in any case no later than fifteen months from the date of the approval. Details regarding the methodologies and results of baseline surveys are summarised in the OAAR (refer **Appendix G**) and will be included in the revised OMP.

3.3.3 Seasonal pest monitoring

Under the OMP, vertebrate pest species are to be reduced and continually monitored using baseline data within the offset area. To better understand pest abundance within the offset area, seasonal pest monitoring has been completed across the broader Rosevale Offset Property as part of a broader survey effort. Details regarding the methodologies and results of baseline surveys are included in the OAAR (refer **Appendix G**) and will be included in the revised OMP.

3.3.4 Offset management actions

A summary review of the project's compliance with offset management action prescribed under the OMP are provided in **Table 3**. Detailed compliance with offset management actions are presented in the OAAR at **Appendix G**.

Table 3: Offset Area Management Actions summary and review (Year 1).

Management Action	Action Timing and Completion Criteria	Relevant Actions Completed in Reporting Period
1. Feral Animal Control (primarily targeting wild dogs)	Year 1 – complete detailed baseline/seasonal feral animal management survey(s) Year 1 – consult Scenic Rim Regional Council and/or the Regional Pest Management Representative Year 1 – develop a Pest Management Implementation Strategy	Baseline pest monitoring surveys were completed during the Year 1 reporting period as part of broader offset property survey effort by SHG ecologists. Details regarding the methodologies and results of baseline surveys are included in the OAAR (refer **Appendix G**) and will be included in the revised OMP. Scenic Rim Region Council contacted to discuss feral pest management plans (16 November 2023). Site visit expected January 2024 (Year 2) as confirmed by Department of Agriculture and Fisheries wild dog coordinator (refer **Appendix G** OAAR for email correspondence). The site based management plan is being revised to include Pest Management Implementation Strategy (provided in the OAAR).
2. Weeds of National Significance Control	Year 1 – complete detailed baseline/weed extent surveys utilising an antenna based GPS system	Baseline weed mapping assessment was completed during Year 1 reporting period as part of the broader Rosevale Offset Property survey effort by SHG ecologists. The results are provided in the OAAR prepared by Montauban Environmental Consultants (refer **Appendix G**).

Management Action	Action Timing and Completion Criteria	Relevant Actions Completed in Reporting Period
3. Livestock Control	Other – Annual inspection of the fencing integrity and stock breaches	Boundary fencing inspections occurred on a regular basis by farm employees (refer **Appendix G**).
4. Access and Trespass Control	Year 1 – inspection and rectification of all perimeter fencing	Montauban Environmental conducted offset perimeter fencing inspections and did not identify any fencing which required immediate replacement during the Year 1 reporting period (refer **Appendix G**).
	Year 1 – notification of offset areas, purpose and outcomes to all adjoining land holders	Notification of offset area, purpose and outcomes were provided in the form of written correspondence to adjoining land holders was conducted by Montauban Environmental Consultants on 14 November 2023 (refer **Appendix G**).
	Other – access gates and signage to be installed where ROA 1 fencing crosses tracks required to be maintained for access	Signage was installed on access gates where ROA 1 fencing crosses the tracks required to be maintained for access by Montauban Environmental Consultants (refer **Appendix G**).
5. MNES Habitat Restoration	Year 1 – finalise locations, sequence and timing for revegetation program	As per the OMP Montauban Consultants have advised that initial works will focus on weed management within remnant and regrowth areas (refer **Appendix G**).
	Year 1 – cultivate and prepare ROA 1 (17.0 ha) are in preparation for year 2 planting	Montauban Environmental Consultants have advised that heavy machinery is to be utilised in January 2023 (Year 2) to remove dead plantation trees, turn the soil and prepare for planting (refer **Appendix G**).

Management Action	Action Timing and Completion Criteria	Relevant Actions Completed in Reporting Period
	Year 1 – create ROA 1 water source for revegetation establishment (purpose located dam or broadscale irrigation) Year 1 – establish photo monitoring points and protocols for ROA 1	The water source for revegetation establishment is a dam located within the offset area. Photos of this water source are provided in the OAAR (refer **Appendix G**). Following the SHG site visit, several photo monitoring locations have been established within the offset property. The location of the photo points are provided in the OAAR (refer **Appendix G**) and will be provided in the revised OMP.

4. EPBC Act approval conditions compliance table

The EPBC Act approval conditions for the Project are provided in **Table 4** with a description of relevant supporting evidence to support a designation of 'Compliant', 'Non-compliant' or 'Not applicable' against each condition. A copy of the EPBC Act approval and conditions is provided in **Appendix A**.

Table 4: EPBC Act approval conditions compliance table

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
PART A – Conditions specific to the action			
1	The approval holder must not clear: a. outside of the development area b. more than 16.23 hectares of Koala habitat c. within the waterway corridor except for approved rehabilitation and stabilisation works to meet Conditions of approval 6226/2018/PDA under the Economic Development Act 2012 Qld	Compliant	All of the required16.23 ha MNES vegetation clearing associated with this EPBC Act approval was cleared within the development area during the Year 1 reporting period (2 November 2022 to 1 November 2023). a. No clearing was conducted outside of the development area (referral area). b. 16.23 ha of Koala critical habitat was cleared during the Year 1 reporting period within the identified areas. c. Clearing was completed within the waterway areas associated with 6226/2018/PDA (refer **Plan 1**).
2	For the ongoing protection of the Koala within the development area and to facilitate Koala movement and dispersal into the adjacent landscape, the approval holder must: a. ensure safe movement solutions are constructed in roads that intersect or are adjacent to retained corridors of Koala habitat, and	Not Applicable	At the time of reporting, construction of internal roads has not yet been completed. Safe Koala movement solutions in accordance with Queensland's fauna sensitive road design guidelines will be constructed and implemented during construction.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	b. ensure that the safe movement solutions are implemented in accordance with Queensland's fauna sensitive road design guidelines.		
3	To minimise risk of injury or death to the Koala within the development area, the approval holder must: a. ensure that a suitably qualified fauna spotter catcher who is given sufficient authority to delay and/or cease any clearing and/or construction is present during all clearing and construction, to ensure Koalas have safely vacated the area of works before the Koala habitat is cleared; b. if any Koala is spotted within the development area during clearing and construction, all clearing and construction must cease until the Koala has moved on its own, or is translocated by the fauna spotter catcher; c. clear only in accordance with the Nature Conservation (Koala) Conservation Plan 2017 (Qld), so as to allow Koalas to safely move out of clearing area and into surrounding areas of Koala habitat, and implement all provisions for sequential clearing; d. install temporary Koala exclusion fencing around any area of construction work, immediately after clearing and prior to the commencement of construction in that area, so as to prevent Koalas entering any area where construction is taking place;	Compliant	Prior to the commencement of vegetation clearing, Keystone Fauna Management undertook on-site fauna surveys, and prepared a WPMP and WHIMP. These reports are provided in **Appendix E**. The WPMP contains details of the preclearing fauna survey methods and the results of these surveys. The WPMP also includes details on the observed fauna, fauna signs, and habitat features found on-site, and proposed fauna relocation points. Management Recommendations by Keystone Fauna Management are provided in Section 3 of the WHIMP and can be referred to on-site by the supervising ecologist, fauna spotter catcher, and the site contractors. a. In accordance with the draft Queensland *Code of Practice for the welfare of wild animals affected by land-clearing and other habitat impacts and wildlife spotter/catchers* (the code), Keystone Fauna Management were engaged by principal contractor CCA Winslow to provide a qualified ecologist and fauna spotter catcher to manage the welfare of fauna prior to, and during, all vegetation clearing works on the site. b. No Koalas were spotted on-site by fauna spotter catcher during the clearing activities associated with the Year 1 reporting period (refer **Appendix F**). c. In addition to the measures outlined by Keystone Fauna Management in the WHIMP, the vegetation clearing is also required to comply with Part 3 of the Queensland *Nature Conservation (Koala) Conservation Plan 2017*, which specifies sequential clearing procedures, sets a daily vegetation clearing limit of 3 ha of vegetation per day, and details the procedures that need to be followed if a koala is present within the

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	e. ensure that the temporary Koala exclusion fencing around any construction area remains in place until all construction activities within the related fenced area are completed; f. prohibit workers bringing dogs into the development area during clearing and construction, and g. install signage around and within the waterway corridor to inform the public that dogs are not permitted within the waterway corridor.		clearing area. The 3 ha daily vegetation clearing limit is monitored on-site by ground personnel utilising GPS tracking. Clearing activities were structured to assist the northerly movement of displaced wildlife and therefore away from development and toward retained vegetation. In conjunction with directional clearing, sequential movement of clearing was also conducted. A Koala specific management plan and microhabitat specific management were produced and followed while clearing activities were undertaken on-site. Koala monitoring on-site was conducted daily once the clearing extent for the day is finalized. This involved the qualified fauna spotter catcher conducting a visual inspection for Koala. d. Koala exclusion fencing in the form of wire mesh with a floppy top was installed post-clearing (refer **Photo set 2**).

Photo set 2: Temporary Fauna Exclusion Fencing

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
			e. Koala exclusion fencing will remain in place until construction work is completed. f. Dogs are not permitted to be taken onto the impact site. g. Dogs are not permitted to be taken onto the impact site and therefore within the waterway corridor. Once construction has been completed, signage will be installed.
4	To compensate for the clearing of up to 16.23 hectares of Koala habitat, the approval holder must legally secure at least 17 hectares of land within the Rosevale Offset Area prior to undertaking any clearing at the development area.	Compliant	To compensate for the clearing of 16.23 ha of Koala habitat, 17 ha of land was legally secured under the Queensland *Vegetation Management Act* 1999 on 23 November 2023 (refer **Appendix B** for documentation). The declared area covers a portion of lot 115 on SP167206 located at Tarome Road, Tarome within the jurisdiction of Scenic Rim Regional Council. Clearing of the development area commenced on the 30 January 2023.
5	The approval holder must not undertake any clearing within the development area prior to commencing the implementation of the Rosevale Offset Management Plan. The approval holder must continue to implement the Rosevale Offset Management Plan for the life of this approval. The approval holder must ensure that all management actions are completed prior to the end of Year 19.	Compliant	Montauban Environmental Offsets consultants prepared the OMP for the declared area on the 28 July 2022 prior to the commencement of development activities on 30 January 2023. The OAAR prepared by Montauban Environmental Consultants highlights the actions taken during Year 1 of the Rosevale Offset Management Plan (refer **Appendix G**). The Year 19 milestone has not occurred, but the condition is noted.
6	The approval holder must, within 20 business days of legally securing the Rosevale Offset Area, provide the department with:	Compliant	To compensate for the clearing of up to 16.23 ha of Koala habitat, 17 ha of declared state land as an area of high nature conservation value was secured through the offset provider Montauban Pty Ltd (refer **Appendix B**).

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	a. written evidence demonstrating that the Rosevale Offset Area has been legally secured, and b. shapefiles and offset attributes of the Rosevale Offset Area.		a. Written evidence of legal securement is provided in **Appendix B.** b. Shapefiles and offset attributes of the Rosevale Offset Area were provided.
7	For the protection of Koala Habitat, the approval holder must: a. demonstrate by the end of Year 1, that all livestock have been permanently excluded from the Rosevale Offset Area, b. demonstrate by the end of Year 1, that any fencing that has been installed on the perimeter or within the Rosevale Offset Area is fauna friendly stock exclusion fencing, and c. ensure that fauna friendly stock exclusion fencing, once installed, remains effective and excludes all livestock from the Rosevale Offset Area for the remainder of the life of the approval, unless an adjacent property is being managed as an Commonwealth approved offset.	Compliant	Montauban Environmental Consultants prepared an OAAR on the state of the secured Rosevale Offset site for the Year 1 compliance period (refer **Appendix G**). a. Evidence of livestock removal from the Rosevale Offset site is presented in the OAAR (refer **Appendix G**). b. Evidence of the fencing installed along the boundary of the associated lot within the Rosevale Offset site has been provided as part of the Montauban Environmental OAAR (refer **Appendix G**). c. During the Year 1 inspection of boundary fencing by Montauban Environmental, no damage had been identified.
8	During Year 1, a suitably qualified field ecologist must complete baseline surveys of the Rosevale Offset Area in accordance with a scientifically valid, robust and repeatable methodology, to determine: a. the extent of weed cover, and b. the seasonal abundance of feral animals.	Compliant	During the Year 1 reporting period, SHG ecologists conducted baseline surveys of the Rosevale Offset Area. a. The extent of weed cover was survey was conducted on 20, 24, 27 April and 5 May 2023. Details of the methodology and results from this survey are presented in the OAAR (refer **Appendix G**). b. The seasonal abundance of feral animals survey was conducted in May to November 2023. Details of the methodology and results from this survey are presented in the OAAR (refer **Appendix G**).

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
9	Within three months of completion of the baseline surveys required under condition 8, and in any case no later than 15 months after the date of the approval, the approval holder must submit to the department for the Minister's approval a version of the Rosevale Offset Management Plan, revised to include at a minimum: a. the methods, dates and results of the baseline surveys required under condition 8, b. details of how the outcomes specified under condition 8 will be achieved, c. a program of monitoring, and reporting progress against, performance and completion criteria in respect of achieving the ecological outcomes specified in the Rosevale Offset Management Plan, and d. Measures to provide fire management regimes appropriate for the Koala.	Compliant	Baseline surveys of the secured Rosevale Offset Area were completed on the 2 November 2023 with the collection of motion sensor cameras. Following the completion of surveys, the revised Rosevale Offset Management Plan will be submitted to the department for the Minister's approval within three months of completion of baseline surveys (2 February 2024).
10	If the revised Rosevale Offset Area Management Plan required under condition 8 has not been approved by the Minister in writing within 12 months of the date on which it was submitted to the department, the approval holder must cease all clearing and/or construction within the development area within 24 hours of the Ministers notification. Clearing and/or construction may only recommence if the revised Rosevale Offset Management Plan is approved by the Minister in writing, or as otherwise agreed to in writing by the Minister. If the Minister approves the revised Rosevale Offset Management Plan, the approval holder must implement the approved revised Rosevale Offset Management Plan for the remainder of the life of the approval.	Not Applicable	The revised Offset Area Management Plan will be submitted to the Department within three months of the completion of baseline surveys (2 February 2024).

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
Monitoring			
11	Within three months prior to the end of each of Year 5, Year 10 and Year 15, the approval holder must have an independent suitably qualified field ecologist undertake an assessment as to whether or not conditions 5, 7, and 81 have been, or are likely to be, achieved in the Rosevale Offset Area. The findings of each assessment must be published on the website within six months of the end of Year 5, Year 10 and Year 15, and remain published on the website for the remainder of the duration of this approval, and each be provided to the department within five business days of first being published.	Not Applicable	The Year 5 milestone has not yet occurred; however, the condition is noted.
12	If, at any time during the period of effect of the approval, the Minister is not satisfied that any of the requirements or outcomes required under conditions 5, 7, and 8, have been or are likely to be achieved or maintained, the Minister may require the approval holder to submit a revised version of the Rosevale Offset Management Plan to the department for approval by the Minister, specifying new requirements to implement corrective actions and/or to monitor, manage, avoid, mitigate, offset, record and/or report on, impacts to the Koala.	Not Applicable	A request for a revised version of the Rosevale Offset Management Plan was not made by the Minister during the Year 1 reporting period.
13	The Minister may specify a timeframe in which the approval holder must submit the revised Rosevale Offset Management Plan to the department, and may specify that the revised Rosevale Offset Management Plan must be prepared or reviewed by an independent suitably qualified field ecologist.	Not Applicable	A request for a revised version of the Rosevale Offset Management Plan was not made by the Minister during the Year 1 reporting period.
14	If the Minister notifies the approval holder that the Department has not received a revised Rosevale Offset Management Plan within the timeframe specified by the Minister or that the submitted revised Rosevale Offset Management Plan is not likely to achieve the	Not Applicable	A request for a revised version of the Rosevale Offset Management Plan was not made by the Minister during the Year 1 reporting period.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	outcomes required under conditions 5, 7, and 8 then, no sooner than two months after making such notification, the Minister may approve a version of the Rosevale Offset management Plan revised by the Department. In this event, the approval holder must implement the approved revised Rosevale Offset Management Plan as approved by the Minister		
Submission and publication of plans			
15	The approval holder must submit all plans required by these conditions electronically to the department.	Compliant	All submissions to the Department have and will be electronically submitted.
16	Unless otherwise agreed to in writing by the Minister, the approval holder must publish each plan on the website within 15 business days of the date: a. of this approval, if the version of the plan to be implemented is specified in these conditions; or b. the plan is approved by the Minister in writing, if the plan requires the approval of the Minister; or 6 c. the plan is submitted to the department in accordance with a requirement of these conditions, if the plan does not require the approval of the Minister; or d. the plan is approved by a state government official as required under a state government condition which must be complied with in accordance with these EPBC Act conditions.	Compliant	The revised Offset Management Plan as required by Condition 9 is to be sent to the Department for approval no later than 2 February 2024.
17	The approval holder must keep all published plans required by these conditions on the website until the expiry date of this approval.	Compliant	All required publicly available plans are located on the approval holder's website:

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
			Building Information - Montview (montviewripleyvalley.com.au)
18	The approval holder is required to exclude or redact sensitive ecological data from plans published on the website or otherwise provided to a member of the public.	Not applicable	No sensitive ecological data is included in publicly available plans.
19	If sensitive ecological data is excluded or redacted from a plan in accordance with condition 14, the approval holder must notify the department in writing what exclusions and redactions have been made in the version published on the website.	Not applicable	No sensitive ecological data is included in publicly available plans.
PART B – Administrative conditions			
20	The approval holder must notify the department electronically of the date of commencement of the Action, within 5 business days of commencement of the Action.	Compliant	The action commenced on 30 January 2023 and the department was notified within 5 business days (31 January 2023) (refer **Appendix C**).
21	If the commencement of the Action does not occur within 5 years from the date of this approval, then the approval holder must not commence the Action without the prior written approval of the Minister.	Not Applicable	Commencement of the action occurred on the 30 January 2023; therefore, this condition is no longer applicable.
22	The approval holder must maintain accurate and complete compliance records for the life of the approval.	Compliant	The approval holder and environmental coordinator maintain joint records for the approval to date.
23	If the department makes a request in writing, the approval holder must provide electronic copies of compliance records to the department within the timeframe specified in the request.	Not Applicable	No requests were received from the department during the Year 1 reporting period.
24	The approval holder must: a. submit plans electronically to the department	Not Applicable	No requests were received from the department during the Year 1 reporting period.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	b. unless otherwise agreed to in writing by the Minister, publish each plan on the website within 15 business days of the date: i. of this approval, if the version of the plan to be implemented is specified in these conditions; or ii. the plan is approved by the Minister if these conditions require that the plan be approved by the Minister c. exclude or redact sensitive ecological data from plans published on the website or provided to a member of the public d. keep plans published on the website until the end of this approval		
25	The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under the 7 conditions of this approval are prepared in accordance with the department's *Guidelines for biological survey and mapped data (2018)* and *Guide to providing maps and boundary data for EPBC Act projects (2021*), or any subsequent official version or as otherwise specified by the Minister in writing	Compliant	Monitoring data, survey, maps and other special metadata required under the 7 conditions of this approval are prepared in accordance with the Department's *Guidelines for biological survey and mapped data (2018)* and *Guide to providing maps and boundary data for EPBC Act projects (2021).*
26	The approval holder must submit all monitoring data (including sensitive ecological data), surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) electronically to the department or in accordance with the requirements of the plan.	Compliant	All monitoring data (including sensitive ecological data), surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) have been submitted electronically to the Department.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
27	The approval holder must prepare a compliance report for each 12-month period following the date of this approval, or as otherwise agreed to in writing by the Minister.	Compliant	The first 12 month period following the date of approval has been summarised and presented within the Year 1 ACR.
28	Each compliance report must be consistent with the department's Annual Compliance Report Guidelines (2014), or any subsequent official version.	Compliant	The Year 1 ACR is consistent with the Department's Annual Compliance Report Guidelines.
29	Each compliance report must include: a. Accurate and complete details of compliance and any non-compliance with the conditions and the plans, and any incidents. b. One or more shapefile showing all clearing of any protected matters, and/or their habitat, undertaken within the 12-month period at the end of which that compliance report is prepared. c. A schedule of all plans in existence in relation to these conditions and accurate and complete details of how each plan is being implemented.	Compliant	The Year 1 ACR includes: a. Accurate and complete details of compliance activities, no non-compliance incidents occurred during the Year 1 reporting period. b. Mapping using GIS rectified shapefiles of the clearing extent are included with this Year 1 ACR following the clearing of Koala habitat (refer **Plan 1**). c. The OAAR located at **Appendix G** contains accurate details of the implementation of the OMP.
30	The approval holder must: a. Publish each compliance report on the website within 60 business days following the end of the 12-month period for which that compliance report is required. b. Notify the department electronically, within 5 business days of the date of publication that a compliance report has been published on the website.		Following the Year 1 compliance reporting period; a. Following the end of the initial 12-month reporting period (2 November 2022-1 November 2023) the Year 1 ACR will be published on the proponent'swebsite within 60 business days of submission being 30 January 2024 at the following weblink. Building Information - Montview (montviewripleyvalley.com.au)

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	c. Provide the weblink for the compliance report in the notification to the department. d. Keep all published compliance reports required by these conditions on the website until the expiry date of this approval. e. Exclude or redact sensitive ecological data from compliance reports published on the website or otherwise provided to a member of the public. f. If sensitive ecological data is excluded or redacted from the published version, submit the full compliance report to the department within 5 business days of its publication on the website and notify the department in writing what exclusions and redactions have been made in the version published on the website.		b. Electronical notification to the department of publication of compliance report will be sent within 5 days of the date of publication. c. The weblink for the compliance report will be provided as part of the notification to the department. d. The approval holder will maintain a copy of all published compliance reports until the date of expiry. e. This condition is noted. f. This condition is noted.
31	The approval holder must notify the department electronically, within 2 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan.	Not Applicable	During the Year 1 compliance reporting period, there were no incidents and/or non-compliances reported.
32	The approval holder must specify in the notification: a. Any condition or commitment made in a plan which has been or may have been breached. b. A description of the incident and/or potential non-compliance and/or actual non-compliance.	Not Applicable	During the Year 1 compliance reporting period, there were no incidents and/or non-compliances reported.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	c. The location (including co-ordinates), date, and time of the incident and/or potential non-compliance and/or actual non-compliance.		
33	The approval holder must provide to the department in writing, within 12 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance, the details of that incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan. The approval holder must specify: a. Any corrective action or investigation which the approval holder has already taken b. The potential impacts of the incident and/or non-compliance and/or non-compliance c. The method and timing of any corrective action that will be undertaken by the approval holder.	Not Applicable	During the Year 1 compliance reporting period, there were no incidents and/or non-compliances reported.
34	The approval holder must ensure that an independent audit of compliance with the conditions is conducted for every five-year period following the commencement of the Action for the life of the approval, unless otherwise specified in writing by the Minister.	Not Applicable	Commencement of the action occurred on the 30 January 2023; therefore, an independent audit will be required in 2028.
35	For each independent audit, the approval holder must: a. Provide the name and qualifications of the nominated independent auditor, the draft audit criteria, and proposed timeframe for submitting the audit report to the department prior to commencing the independent audit.	Not Applicable	Commencement of the action occurred on the 30 January 2023; therefore, this condition is not applicable until 2028.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	b. Only commence the independent audit once the nominated independent auditor, audit criteria and timeframe for submitting the audit report have been approved in writing by the department. c. Submit the audit report to the department for approval within the timeframe specified and approved in writing by the department. d. Publish each audit report on the website within 15 business days of the date of the department's approval of the audit report. e. Keep every audit report published on the website until this approval expires.		
36	Each audit report must report for the five-year period preceding that audit report.	Not Applicable	Commencement of the action occurred on the 30 January 2023; therefore, this condition is not applicable until 2028.
37	Each audit report must be completed to the satisfaction of the Minister and be consistent with the department's Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines (2019), or any subsequent official version.	Not Applicable	Commencement of the action occurred on the 30 January 2023; therefore, this condition is not applicable until 2028.
38	The approval holder must notify the department electronically 60 business days prior to the expiry date of this approval, that the approval is due to expire.	Not Applicable	The approval is not due to expire until 31 December 2050.
39	Within 20 business days after the completion of the Action, and, in any event, before this approval expires, the approval holder must notify the department electronically of the date of completion of the Action and provide completion data.	Not Applicable	The action has not been completed.

5. Appendices

Appendix A

EPBC Act approval

Appendix B

Voluntary Declaration Package

Appendix C

Action Commencement Letter

Appendix D

Pre-start Package Checklist – Phase 1

Appendix E

Wildlife Protection Management Plan (WPMP) and Wildlife Habitat and Impact Mitigation Plan (WHIMP)

Appendix F

Keystone Fauna Management – Pre- and Post-clearance Reports

Appendix G

Montauban Environmental Offset Area Annual Report – Year 1

Appendix A

EPBC Act approval

Australian Government
Department of Climate Change, Energy, the Environment and Water

Notification of Final approval

Barrams Road Residential Development, Qld (EPBC 2021/9005)

This decision is made under section 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act). Note that section 134(1A) of the EPBC Act applies to this approval. That provision provides, in general terms, that if the approval holder authorises another person to undertake any part of the Action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such conditions.

Proposed Action

Person to whom the approval is granted (approval holder)	APD Projects Pty Ltd
ABN of approval holder	54 706 717 691
Action	To construct a residential subdivision at Lot 108 on M3174, 254 Barrams Road, South Ripley, Queensland (See EPBC Act referral 2021/9005).

Final Approval Decision

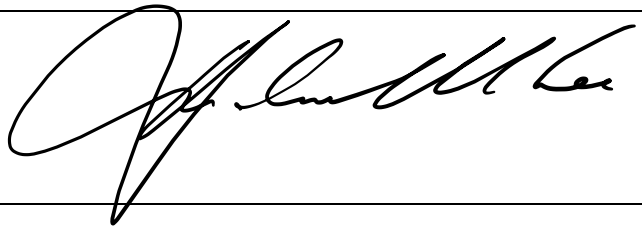
Final Decision

My decision on whether or not to approve the taking of the Action for the purposes of the controlling provision for the Action is as follows.

Controlling Provision	Decision
Listed threatened species and communities (section 18 and section 18A)	Approve

Period for which the approval has effect	This approval has effect until 31 December 2050
Conditions of approval	The approval is subject to conditions under the EPBC Act as set out in **Annexure A**.

Person authorised to make decision

Name and Position	Andrew McNee Branch Head Environment Assessments Queensland and Sea Dumping Branch
Signature	
Date of decision	2 November 2022

ANNEXURE A

Note: Words appearing in **bold** have the meaning assigned to them at PART C – DEFINITIONS.

PART A – CONDITIONS SPECIFIC TO THE ACTION

DEVELOPMENT AREA

1. The approval holder must not **clear:**

   a. outside of the **development area**

   b. more than 16.23 hectares of **Koala habitat**

   c. within the **waterway corridor** except for approved rehabilitation and stabilisation works to meet Conditions of approval 6226/2018/PDA under the Economic Development Act 2012 Qld.

2. For the ongoing protection of the **Koala** within the **development area** and to facilitate **Koala** movement and dispersal into the adjacent landscape, the approval holder must:

   a. ensure **safe movement solutions** are constructed in roads that intersect or are adjacent to retained corridors of **Koala habitat**, and

   b. ensure that the **safe movement solutions** are implemented in accordance with **Queensland's fauna sensitive road design guidelines**.

3. To minimise risk of injury or death to the **Koala** within the **development area**, the approval holder must:

   a. ensure that a suitably qualified **fauna spotter catcher** who is given sufficient authority to delay and/or cease any **clearing** and/or **construction** is present during all **clearing** and **construction**, to ensure **Koalas** have safely vacated the area of works before the **Koala habitat** is cleared;

   b. if any **Koala** is spotted within the development area during **clearing** and **construction**, all **clearing** and **construction** must cease until the **Koala** has moved on its own, or is translocated by the **fauna spotter catcher**;

   c. **clear** only in accordance with the *Nature Conservation (Koala) Conservation Plan 2017* (Qld), so as to allow **Koalas** to safely move out of clearing area and into surrounding areas of **Koala habitat**, and implement all provisions for **sequential clearing**;

   d. install temporary **Koala exclusion fencing** around any area of **construction** work, immediately after **clearing** and prior to the commencement of **construction** in that area, so as to prevent **Koalas** entering any area where **construction** is taking place;

   e. ensure that the temporary **Koala exclusion fencing** around any **construction** area remains in place until all **construction** activities within the related fenced area are completed;

   f. prohibit workers bringing dogs into the **development area** during **clearing** and **construction**, and

   g. install signage around and within the **waterway corridor** to inform the public that dogs are not permitted within the **waterway corridor**.

OFFSET AREA

4. To compensate for the clearing of up to 16.23 hectares of **Koala habitat**, the approval holder must **legally secure** at least 17 hectares of land within the **Rosevale Offset Area** prior to undertaking any **clearing** at the **development area**.

5. The approval holder must not undertake any **clearing** within the **development area** prior to commencing the implementation of the **Rosevale Offset Management Plan**. The approval holder must continue to implement the **Rosevale Offset Management Plan** for the life of this approval. The approval holder must ensure that all **management actions** are completed prior to the end of **Year 19**.

6. The approval holder must, within 20 **business days** of **legally securing** the **Rosevale Offset Area**, provide the **department** with:

    a. written evidence demonstrating that the **Rosevale Offset Area** has been **legally secured**, and

    b. **shapefiles** and **offset attributes** of the **Rosevale Offset Area**.

Stock Exclusion

7. For the protection of **Koala Habitat**, the approval holder must:

    a. demonstrate by the end of **Year 1**, that all livestock have been permanently excluded from the **Rosevale Offset Area**,

    b. demonstrate by the end of **Year 1**, that any fencing that has been installed on the perimeter or within the **Rosevale Offset Area** is **fauna friendly stock exclusion fencing**, and

    c. ensure that **fauna friendly stock exclusion fencing,** once installed, remains effective and excludes all livestock from the **Rosevale Offset Area** for the remainder of the life of the approval, unless an adjacent property is being managed as an Commonwealth approved offset.

Pest and Weed Management

8. During **Year 1**, a **suitably qualified field ecologist** must complete baseline surveys of the **Rosevale Offset Area** in accordance with a scientifically valid, robust and repeatable methodology, to determine:

    a. the **extent of weed cover**, and

    b. the **seasonal** abundance of **feral animals**.

9. Within three months of completion of the baseline surveys required under condition 8, and in any case no later than 15 months after the date of this approval, the approval holder must submit to the **department** for the **Minister**'s approval a version of the **Rosevale Offset Management Plan**, revised to include at a minimum:

    a. the methods, dates and results of the baseline surveys required under condition 8,

    b. details of how the outcomes specified under condition 8 will be achieved,

    c. a program of monitoring, and reporting progress against, performance and completion criteria in respect of achieving the ecological outcomes specified in the **Rosevale Offset Management Plan**, and

    d. Measures to provide fire management regimes appropriate for the **Koala**.

10. If the revised Rosevale Offset Area Management Plan required under condition 8 has not been approved by the **Minister** in writing within 12 months of the date on which it was submitted to the **department**, the approval holder must cease all **clearing** and/or **construction** within the **development area** within 24 hours of the **Ministers** notification**. Clearing** and/or **construction** may only recommence if the revised Rosevale Offset Management Plan is approved by the **Minister** in writing, or as otherwise agreed to in writing by the **Minister**. If the **Minister** approves the revised Rosevale Offset Management Plan, the approval holder must implement the approved revised Rosevale Offset Management Plan for the remainder of the life of the approval.

MONITORING

11. Within three months prior to the end of each of **Year 5**, **Year 10** and **Year 15,** the approval holder must have an **independent suitably qualified field ecologist** undertake an assessment as to whether or not conditions 5, 7, and 81 have been, or are likely to be, achieved in the **Rosevale Offset Area**. The findings of each assessment must be published on the **website** within six months of the end of **Year 5**, **Year 10** and **Year 15**, and remain published on the **website** for the remainder of the duration of this approval, and each be provided to the **department** within five **business days** of first being published.

12. If, at any time during the period of effect of the approval, the **Minister** is not satisfied that any of the requirements or outcomes required under conditions 5, 7, and 8, have been or are likely to be achieved or maintained, the **Minister** may require the approval holder to submit a revised version of the **Rosevale Offset Management Plan** to the **department** for approval by the **Minister**, specifying new requirements to implement corrective actions and/or to monitor, manage, avoid, mitigate, offset, record and/or report on, impacts to the **Koala**.

13. The **Minister** may specify a timeframe in which the approval holder must submit the revised Rosevale Offset Management Plan to the **department,** and may specify that the revised Rosevale Offset Management Plan must be prepared or reviewed by an **independent suitably qualified field ecologist**.

14. If the **Minister** notifies the approval holder that the **Department** has not received a revised Rosevale Offset Management Plan within the timeframe specified by the Minister or that the submitted revised Rosevale Offset Management Plan is not likely to achieve the outcomes required under conditions 5, 7, and 8 then, no sooner than two months after making such notification, the Minister may approve a version of the Rosevale Offset management Plan revised by the Department. In this event, the approval holder must implement the approved revised Rosevale Offset Management Plan as approved by the **Minister**.

SUBMISSION AND PUBLICATION OF PLANS

15. The approval holder must submit all **plans** required by these conditions electronically to the **department**.

16. Unless otherwise agreed to in writing by the **Minister**, the approval holder must publish each **plan** on the **website** within 15 **business days** of the date:

    a. of this approval, if the version of the **plan** to be implemented is specified in these conditions; or

    b. the **plan** is approved by the **Minister** in writing, if the **plan** requires the approval of the **Minister**; or

c. the **plan** is submitted to the **department** in accordance with a requirement of these conditions, if the **plan** does not require the approval of the **Minister**; or

d. the **plan** is approved by a state government official as required under a state government condition which must be complied with in accordance with these EPBC Act conditions.

17. The approval holder must keep all published **plans** required by these conditions on the **website** until the expiry date of this approval.

18. The approval holder is required to exclude or redact **sensitive ecological data** from **plans** published on the **website** or otherwise provided to a member of the public.

19. If **sensitive ecological data** is excluded or redacted from a **plan** in accordance with condition 14, the approval holder must notify the **department** in writing what exclusions and redactions have been made in the version published on the **website**.

PART B – ADMINISTRATIVE CONDITIONS

NOTIFICATION OF DATE OF COMMENCEMENT OF THE ACTION

20. The approval holder must notify the **department** electronically of the date of **commencement of the Action**, within 5 **business days** of **commencement of the Action**.

21. If the **commencement of the Action** does not occur within 5 years from the date of this approval, then the approval holder must not **commence the Action** without the prior written approval of the **Minister**.

COMPLIANCE RECORDS

22. The approval holder must maintain accurate and complete **compliance records** for the life of the approval.

23. If the **department** makes a request in writing, the approval holder must provide electronic copies of **compliance records** to the **department** within the timeframe specified in the request.

Note: **Compliance records** may be subject to audit by the **department**, or by an **independent** auditor in accordance with section 458 of the **EPBC Act**, and/or be used to verify compliance with the conditions. Summaries of the results of an audit may be published on the **department**'s website or through the general media.

24. The approval holder must:

a. submit plans electronically to the **department**

b. unless otherwise agreed to in writing by the **Minister**, publish each **plan** on the website within 15 business days of the date:

i. of this approval, if the version of the **plan** to be implemented is specified in these conditions; or

ii. the **plan** is approved by the **Minister** if these conditions require that the **plan** be approved by the **Minister**

c. exclude or redact **sensitive ecological data** from **plans** published on the **website** or provided to a member of the public

d. keep **plans** published on the **website** until the end of this approval

25. The approval holder must ensure that any **monitoring data** (including **sensitive ecological data**), surveys, maps, and other spatial and metadata required under the

conditions of this approval are prepared in accordance with the **department's** *Guidelines for biological survey and mapped data* (2018) and *Guide to providing maps and boundary data for EPBC Act projects* (2021, or any subsequent official version or as otherwise specified by the **Minister** in writing

26. The approval holder must submit all **monitoring data** (including **sensitive ecological data**), surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) electronically to the **department** or in accordance with the requirements of the **plan**.

ANNUAL COMPLIANCE REPORTING

27. The approval holder must prepare a **compliance report** for each 12-month period following the date of this approval, or as otherwise agreed to in writing by the **Minister**.

28. Each **compliance report** must be consistent with the **department's** *Annual Compliance Report Guidelines* (2014), or any subsequent official version.

29. Each **compliance report** must include:

    a. Accurate and complete details of compliance and any non-compliance with the conditions and the **plans**, and any **incidents**.

    b. One or more **shapefile** showing all **clearing** of any **protected matters**, and/or their habitat, undertaken within the 12-month period at the end of which that **compliance report** is prepared.

    c. A schedule of all **plans** in existence in relation to these conditions and accurate and complete details of how each plan is being implemented.

30. The approval holder must:

    a. Publish each **compliance report** on the **website** within 60 **business days** following the end of the 12-month period for which that **compliance report** is required.

    b. Notify the **department** electronically, within 5 **business days** of the date of publication that a **compliance report** has been published on the **website.**

    c. Provide the weblink for the **compliance report** in the notification to the department.

    d. Keep all published **compliance reports** required by these conditions on the **website** until the expiry date of this approval.

    e. Exclude or redact **sensitive ecological data** from **compliance reports** published on the **website** or otherwise provided to a member of the public.

    f. If **sensitive ecological data** is excluded or redacted from the published version, submit the full **compliance report** to the **department** within 5 **business days** of its publication on the **website** and notify the **department** in writing what exclusions and redactions have been made in the version published on the website.

Note: **Compliance reports** may be published on the **department's** website.

REPORTING NON-COMPLIANCE

31. The approval holder must notify the **department** electronically, within 2 **business days** of becoming aware of any **incident** and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a **plan**.

32. The approval holder must specify in the notification:

    a. Any condition or commitment made in a **plan** which has been or may have been breached.

b. A description of the **incident** and/or potential non-compliance and/or actual non-compliance.

c. The location (including co-ordinates), date, and time of the **incident** and/or potential non-compliance and/or actual non-compliance.

Note: If the exact information cannot be provided, the approval holder must provide the best information available.

33. The approval holder must provide to the **department** in writing, within 12 **business days** of becoming aware of any **incident** and/or potential non-compliance and/or actual non-compliance, the details of that **incident** and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a **plan**. The approval holder must specify:

    a. Any corrective action or investigation which the approval holder has already taken

    b. The potential impacts of the **incident** and/or non-compliance and/or non-compliance

    c. The method and timing of any corrective action that will be undertaken by the approval holder.

INDEPENDENT AUDIT

34. The approval holder must ensure that an **independent audit** of compliance with the conditions is conducted for every five-year period following the **commencement of the Action** for the life of the approval, unless otherwise specified in writing by the **Minister**.

35. For each **independent audit**, the approval holder must:

    a. Provide the name and qualifications of the nominated **independent** auditor, the draft audit criteria, and proposed timeframe for submitting the **audit report** to the **department** prior to commencing the **independent audit**.

    b. Only commence the **independent audit** once the nominated **independent** auditor, audit criteria and timeframe for submitting the **audit report** have been approved in writing by the **department**.

    c. Submit the **audit report** to the **department** for approval within the timeframe specified and approved in writing by the **department.**

    d. Publish each **audit report** on the **website** within 15 **business days** of the date of the **department's** approval of the **audit report**.

    e. Keep every **audit report** published on the **website** until this approval expires.

36. Each **audit report** must report for the five-year period preceding that audit report.

37. Each **audit report** must be completed to the satisfaction of the **Minister** and be consistent with the **department's** *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines* (2019), or any subsequent official version.

COMPLETION OF THE ACTION

38. The approval holder must notify the **department** electronically 60 **business days** prior to the expiry date of this approval, that the approval is due to expire.

39. Within 20 **business days** after the **completion of the Action**, and, in any event, before this approval expires, the approval holder must notify the **department** electronically of the date of **completion of the Action** and provide **completion data**.

PART C - DEFINITIONS

In these conditions any bolded use of a word or term refers to the below definition of that word or term:

Audit report means a written report of compliance and fulfilment of the conditions attached to this approval, objectively evaluated against the audit criteria approved by the **department**.

Business day means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the Action.

Clear, **cleared** or **clearing** means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting, or burning of native trees and/or shrubs.

Commence the Action or **Commencement of the Action** means the date on which the first instance of any activity associated with the Action (including **clearing** and **construction**) is undertaken. **Commencement of the Action** does not include minor physical disturbance necessary to:

a. Undertake pre-clearance surveys or monitoring programs.

b. Install signage and /or temporary fencing to prevent unapproved use of the **development area**.

c. Protect environmental and property assets from fire, **weeds** and pests, including use of existing surface access tracks and installation of temporary fencing.

d. Install temporary site facilities for persons undertaking pre-commencement activities so long as these are located where they have no impact on any **protected matter**.

Completion data means an environmental report and spatial data clearly detailing how the conditions of this approval have been met. The **department**'s chosen format for spatial data is a **shapefile**.

Completion of the Action means the date on which all activities associated with this approval have permanently ceased and/or been completed.

Compliance records means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder's possession, or that are within the approval holder's power to obtain lawfully.

Compliance report means a written report of compliance with, and fulfilment of, the conditions attached to the approval.

Construction means any earthworks and civil construction necessary to establish residential allotments and associated infrastructure; the alteration, maintenance, repair or demolition of any building or structure existing on-site on the date of this approval; preliminary site preparation work which involves breaking of the ground (including pile driving); the laying of pipes and other prefabricated materials in the ground, and any associated excavation work; but excluding the installation of temporary fences and signage.

Department means the Australian Government agency responsible for administering the **EPBC Act**.

Development area means the location of the Action, the 24.94 ha area represented by the zones enclosed by the black line labelled 'Referral Area' in Attachment A, not including the zone enclosed by dark green lines and stippled with dark green dots labelled 'Conservation Zone' in Attachment A.

EPBC Act means the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Extent of weed cover means the proportion (expressed as a percentage) of the total land area in which any square metre contains a non-native plant species known to restrict the movement of **Koala** and/or degrade the quality of **Koala habitat**, or reduce its ability to regenerate.

Fauna friendly stock exclusion fencing means fencing designed to prevent access by grazing animals to offset areas while providing for the free movement of **Koalas.**

Fauna spotter catcher means a person holding an appropriate license issued under the *Nature Conservation Act 1992* (Qld) to detect, capture, care for, assess, and release wildlife disturbed by vegetation **clearance** activities who have at least three years experience undertaking this work with **Koalas**.

Feral animal/s means non-native feral animals known to predate or injure the **Koala**, including but not limited to wild dogs and foxes, as well as animals that may contribute to the degradation of **Koala habitat**.

Incident means any event which has the potential to, or does, impact on any **protected matter**. Any death or injury of a **Koala** as a result of the Action is an **incident**.

Independent means a person or firm who does not have any individual, financial*, employment* or family affiliation or any conflicting interests with the project, the approval holder or the approval holder's staff, representatives or associated persons.

*Other than for the purpose of undertaking the role for which an independent person is required

Independent audit means an audit conducted by an **independent** and **suitably qualified person** as detailed in the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines* (2019), or any subsequent official version.

Koala/s means the **EPBC Act** listed threatened species *Phascolarctos cinereus* (combined populations of Queensland, New South Wales and the Australian Capital Territory).

Koala exclusion fencing means fencing which prevents the movement of **Koalas** from one area to another. Suitable examples are found in the *Koala Sensitive Design Guideline: A guide to koala sensitive designed measures for planning and development activities*, Version 2.0, State of Queensland, 2020.

Koala habitat means any area that provides habitat suitable for the **Koala**. The entire referral area is **Koala habitat.**

Legally secure/secured/securing means to provide ongoing conservation protection, on the title of the land, under an enduring protection mechanism, such as a voluntary declaration under the *Vegetation Management Act 1999* (Qld) or as a nature refuge under the *Nature Conservation Act 1992* (Qld), or another enduring protection mechanism agreed to in writing by the **Minister**.

Management actions means those actions to be undertaken at the **Rosevale Offset Area**, as described in the **Rosevale Offset Area Management Plan**, required to establish new Koala habitat and restore the **Regional Ecosystem** including:

a. ecological work to restore the **Regional Ecosystem** at the **Rosevale Offset Area**
b. activities associated with planting vegetation to become new **Koala habitat**
c. activities associated with seed collection and propagation of planting stock but not those actions required to project and maintain the offset
d. works to reduce extent of weed cover and feral animal surveys.

Minister means the Australian Government Minister administering the **EPBC Act**, including any delegate thereof.

Monitoring data means the data required to be recorded under the conditions of this approval.

Nature Conservation (Koala) Conservation Plan 2017 means the *Nature Conservation (Koala) Conservation Plan 2017*, State of Queensland, 2022.

Offset attributes means an '.xls' file capturing relevant attributes of the **Rosevale Offset Site**, including

i. **EPBC Act** reference number
ii. Physical address of **Rosevale Offset Site**
iii. Coordinates of the boundary points in decimal degrees
iv. **Protected matters** that the offset compensates for
v. Any additional **EPBC Act** listed threatened species and communities that are benefiting from the offset
vi. Size of the **Rosevale Offset Site** in hectares.

Plan/s means any of the documents required to be prepared, approved by the **Minister**, implemented by the approval holder and published on the **website** in accordance with these conditions (includes action management plans and/or strategies).

Protected matter means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

Queensland's fauna sensitive road design guidelines means *Fauna Sensitive Road Design - Volume 2: Preferred Practices*, State of Queensland, 2010, or a subsequent published official revision.

Regional Ecosystem means the vegetation classified by the Queensland Government under the *Vegetation Management Act, 1999* (Qld), known as RE12.8.17.

Rosevale Offset Management Plan means the *Rosevale offset Management Plan 2022,* prepared by Montauban Environmental Offsets and forms Attachment A5 of the Preliminary Documentation dated July 2022 prepared by Saunders Havill Group, or subsequent revised version approved by the **Minister** in writing.

Rosevale Offset Area means the 17 hectare zone encompassed by the red line labelled 'Offset Area', represented in Attachment B.The **Rosevale Offset Area** is located on Lot 115/SP167206, on Tarome Road, Tarome, Queensland.

Safe movement solutions means measures to minimise the risk of injury or deaths of **Koalas** from vehicle strike, specifically including **Koala exclusion fencing**, fauna underpasses or overpasses, and/or bridges as described in **Queensland's fauna sensitive road design guidelines.**

Seasonal means the abundance measured separately for each season (summer, autumn, winter and spring).

Sensitive ecological data means data as defined in the Australian Government Department of the Environment *Sensitive Ecological Data – Access and Management Policy V1.0* (2016), or any subsequent official version.

Sequential clearing means implementing the provisions specified in *Sequential clearing in Koala district A or B* under the **Nature Conservation (Koala) Conservation Plan 2017** under the *Nature Conservation Act 1992* (Qld). These include provisions for the area which may be **cleared** in any one stage, periods of non-**clearing** between stages, maintaining habitat links and restrictions on **clearing** trees containing **Koalas**.

Shapefile(s) means location and attribute information about the Action provided in an Esri shapefile format. Shapefiles must contain '.shp', '.shx', '.dbf' files and a '.prj' file that specifies the projection/geographic coordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes**.**

Suitably qualified field ecologist (for the purpose of undertaking environmental surveys) means a person who has relevant professional qualifications and at least 3 years of work experience designing and implementing surveys for **Koala** and can give an authoritative assessment and advice on the presence of **Koala** using relevant protocols, standards, methods and/or literature.

Suitably qualified person means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

Waterway corridor means the eastern 8.16 ha area represented by the zones covered by bright green dots labelled 'Waterways' in Attachment A.

Website means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

Weed/s means any weed species identified within the Weeds of National Significance and weed species listed under the *Biosecurity Act 2014* (Qld).

Year 1 means the period within 12 months from the date of this approval.

Year 5 means the period within five years from the date of this approval.

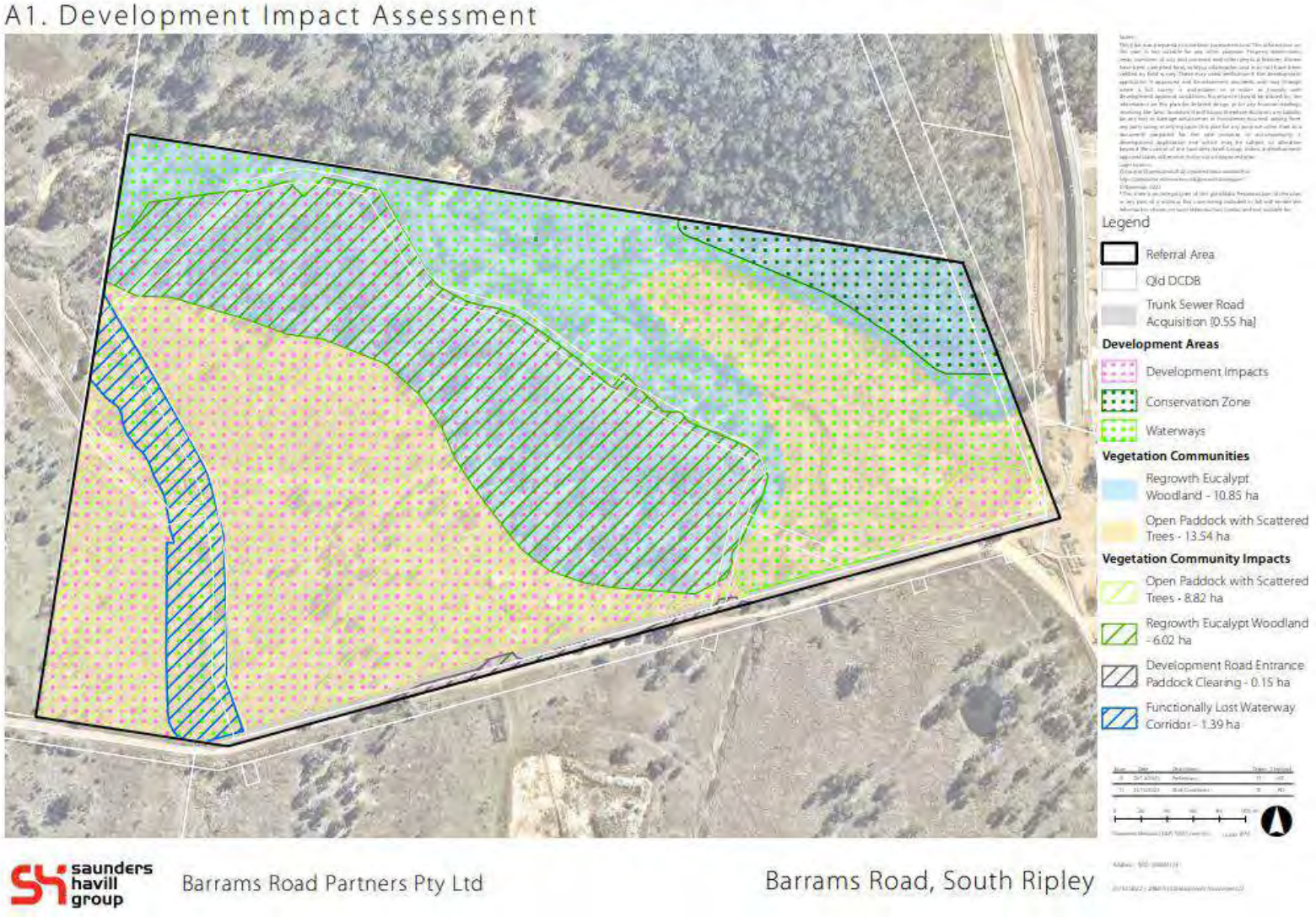
Year 10 means the period within ten years from the date of this approval.

Year 15 means the period within fifteen years from the date of this approval.

Year 19 means the period within nineteen years from the date of this approval.

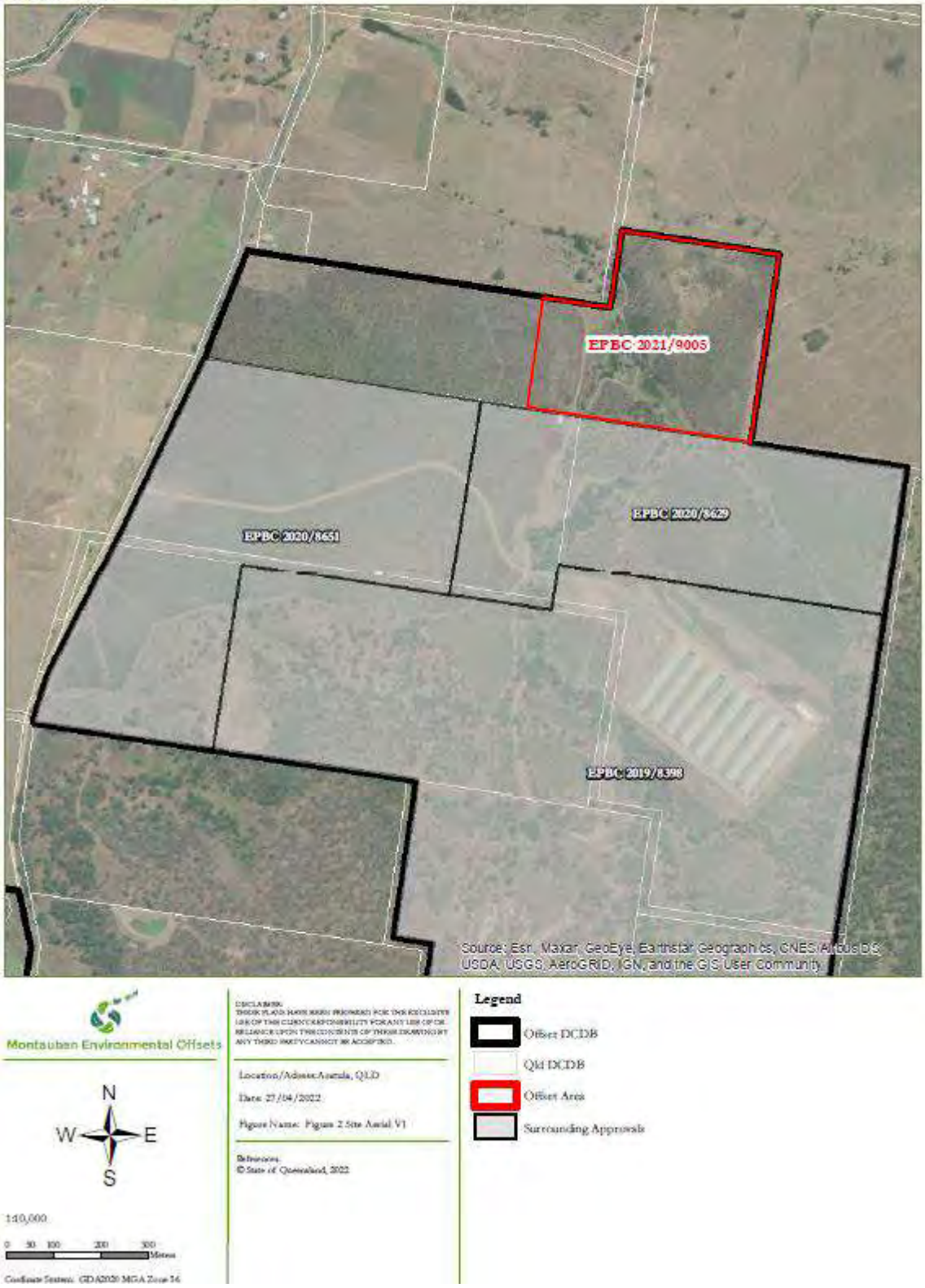
ATTACHMENTS

Attachment A – Development area



Attachment B – Rosevale Offset Area

Figure 2 Site Aerial



Appendix B

Voluntary Declaration Package

Keeley Richardson

From: Laura Thorley
Sent: Thursday, 24 November 2022 4:04 PM
To: EPBC Monitoring
Cc: 'PostApproval@awe.gov.au'; Andrew Davies
Subject: EPBC 2021-9005 Barrams Road Residential Development
Attachments: 1. Offset attributes.xlsx; 2. Supporting Evidence.zip; 3. Shapefiles.zip

Categories: Archived

Good Afternoon,

In accordance with Condition 4 of the approval conditions for EPBC 2021/9005 Barrams Road Residential Development, the Rosevale Offset Site was legally secured via voluntary declaration on 23 November 2022.

The following evidence has been provided in accordance with condition 6:

1. Offset attributes – excel file
2. Supporting evidence from the Queensland Department of Resources - zip
3. Shapefiles - zip

Should you have any questions, please don t hesitate to contact me.

Thanks,

Laura Thorley Senior Environmental Scientist **Saunders Havill Group**
direct line (07) 3251 9432 mobile 0435 841 252 email laurathorley@saundershavill.com
phone 1300 123 SHG web www.saundershavill.com head office 9 Thompson St Bowen Hills Q 4006

Author: Genevieve Verrall
File/Ref number: 2022/003052
Unit: Vegetation Management Unit

Queensland Government

Department of **Resources**

23 November 2022

Mr Sillett

PO Box 4170

Norman Park QLD 4170

Via email only: carl.sillett@bydand.com.au

Dear Mr Sillett

RE: Declaration of lot 115 SP167206 - Scenic Rim Regional Council (the property) as an area of high nature conservation value

This is to advise you that a declaration has been made, consistent with your agreement on the above lot by the Department of Resources on 23 November 2022. A copy of each of the following certified documents is attached for your records:

- Declared Area Notice (2022/003052)
- Declared Area Map DAM 2022/003052 (including compressed shapefiles)
- Property map of assessable vegetation PMAV 2022/003053
- Rosevale Property - Declared area management plan, DAMP 01, October 2022, prepared by Montauban Environmental Offsets

Please note that in accordance with the declaration, management of the declared area, monitoring the condition of the declared area and reporting on the condition of the declared area will be required. Please refer to the declaration documents for the specifics regarding such requirements.

If a registered owner requires additional copies of the certified documents, these can be purchased at Department of Resources Customer Service Centres.

This declaration will be noted on the title of the lot subject to the declared area-binding management, monitoring and reporting responsibilities upon current and future owners.

If you wish to discuss these matters further, please contact Genevieve Verrall on telephone number 5352 4230 quoting reference number 2022/003052.

Yours sincerely

Michael Gordon

Telephone: 135 VEG or 135 834
Email: vegetation@resources.qld.gov.au
Website: www.resources.qld.gov.au

ABN 59 020 847 551

Declaration notice – approval

Vegetation Management Act 1999 Sections 19E to 19G

Queensland Government

Department of **Resources**

1. Details of request

1.1. Proponent's name: Montauban Pty Ltd

1.2. Date request received: 31 October 2022

1.3. Request: declare stated land as an area of high nature conservation value

1.4. Property description: Lot 115 on SP167206 - Scenic Rim Regional Council

1.5. Land tenure: Freehold

1.6. Decision reference: 2022/003052

2. Declaration information

2.1. Declaration made:

The Chief Executive of the Department of Resources declares the area identified on Declared Area Map DAM 2022/003052 as an area of high nature conservation value in accordance with section 19F of the *Vegetation Management Act 1999*.

The chief executive considers the declared area to meet the following criteria under section 19G of the *Vegetation Management Act 1999*—

The declared area is an area of high nature conservation value under section 19G(1)(b), as the area is: *another area that contributes to the conservation of the environment.*

The documents outlined in 2.2 form part of this declaration.

2.2. Declaration documents:

The following documents are part of this declaration, and must be read in conjunction with this notice:

- Declared area map (DAM 2022/003052)
- Rosevale Property - Declared area management plan, DAMP 01, October 2022, prepared by Montauban Environmental Offsets

2.3. Property Map of Assessable Vegetation

In accordance with s20B of the *Vegetation Management Act 1999*, Property Map of Assessable Vegetation PMAV 2022/003053 has been prepared for the declared area.

2.4. Date of declaration: 23 November 2022

3. Delegated officer's signature

Michael Gordon

Senior Natural Resource Management Officer (VM1)

Declared Area Map

Sheet 1 of 1

DAM 2022/003052

LOT on PLAN
115SP167206

Queensland Government

0 100 200 300 400
meters

Scale: 1:5000
(original size A3)

N

LEGEND

- Derived Reference Points
- Subject Lot
- Declared Area (A1)

This plan must be read in conjunction with Declaration Notice 2022/003052

Notes:

Property boundary provided by Department of Resources.
The property boundaries shown on this map an are approximate only. They are not an accurate representation of the legal boundaries.

Map Information:
Horizontal Datum: GDA 2020
Projection: Universal Transverse Mercator - Zone 56

Digital Imagery: SEQ_Regional_2019_20cm_SISP
Imagery Date: August to November 2019
Imagery Type: Digital Orthophoto Image

While every care is taken to ensure the accuracy of this product, the Department of Resource makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability, including without limitation, liability in negligence for all expenses, losses, damages (including indirect or consequential damage) and costs which might incur as a result of the product being inaccurate or incomplete in any way and for any reason. Data must not be used for direct marketing or be used in breach of the privacy laws.

Map Prepared by: LMO

Map Preparation Date: 08/11/2022

This is a colour map and must be reproduced in colour.

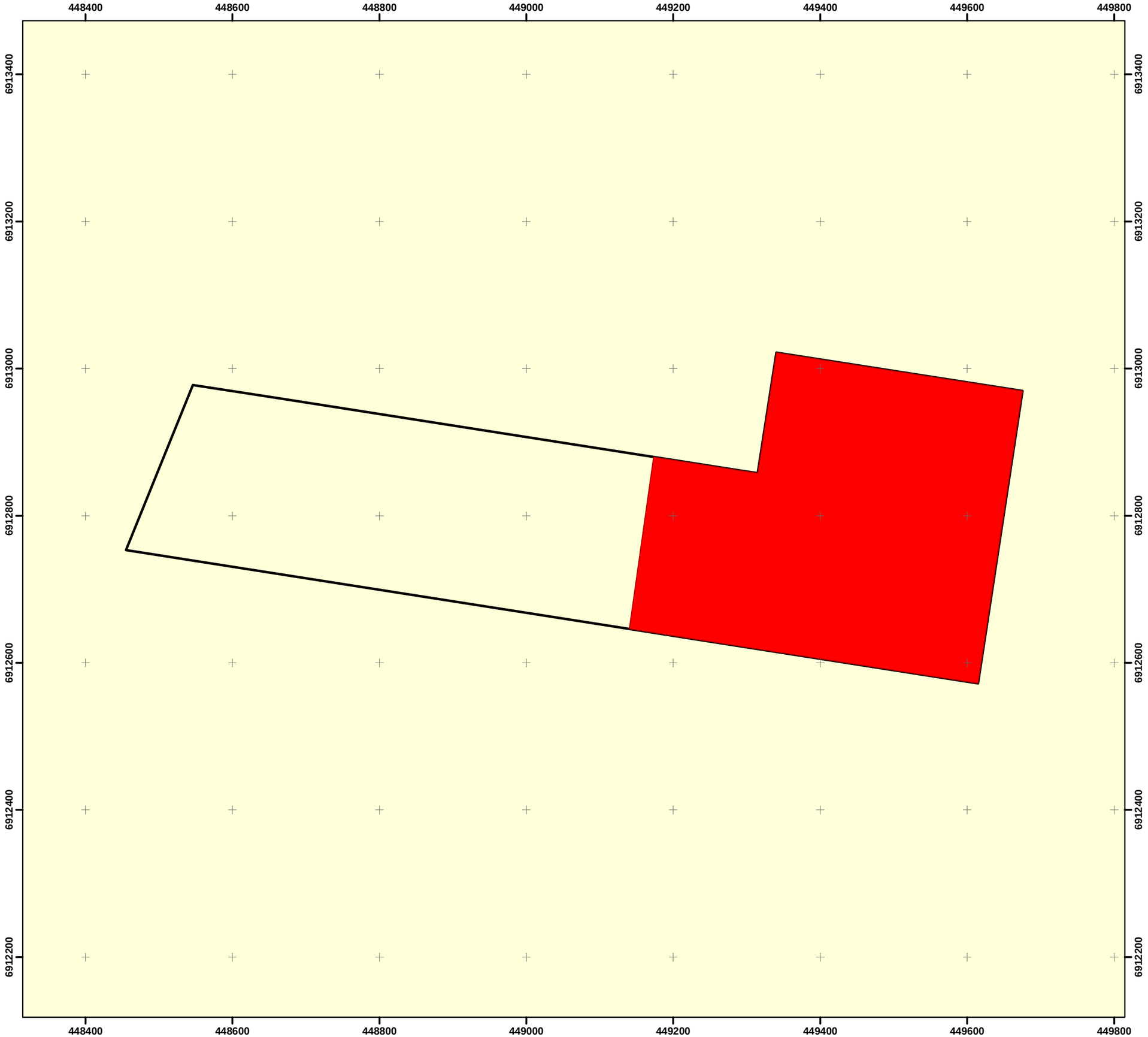
448400 448600 448800 449000 449200 449400 449600 449800

6913400 6913200 6913000 6912800 6912600 6912400 6912200

1 2 A1

Derived Reference Points
These reference points are provided by the Department of Resources and may be used to assist in locating areas delineated on this plan.
Horizontal Datum is GDA 2020
Coordinates are in Map Grid of Australia (MGA) - Zone 56

Area	Point	Easting	Northing
A1	1	449173	6912878
A1	2	449139	6912645



Property Map of Assessable Vegetation

Sheet 1 of 1

PMAV 2022/003053

LOT on PLAN
115SP167206

Queensland Government

0 100 200 300 400
meters

Scale: 1:5000
(original size A3)

N

LEGEND

- Subject Lot(s)
- Area to which the PMAV does not apply

Vegetation Category Area

- Category A area

Notes:

Property boundaries provided by Department of Resources.
The property boundaries on this map are a spatial representation of the property boundaries.
They are not the legal property boundaries and are subject to change as more accurate information becomes available.
The PMAV does not move with changes to the property boundaries.

Map Information:
Horizontal Datum: GDA 2020
Projection: Universal Transverse Mercator - Zone 56

This is a colour map and must be reproduced in colour

This PMAV is made under section 20B of the *Vegetation Management Act 1999* VMA as sections 20B(1)(a) and 20B(1)(b) of the VMA apply to the area. This PMAV replaces PMAV 2011/007353 for the subject area under section 20D of the VMA.

Signed for the Chief Executive of the Department of Resources by:

Name: Michael Gordon

Title: Senior Natural Resource Management Officer

Signature:

Date: 23 November 2022

Map Prepared by: LMO
Department of Resources,
PO Box 15216
CITY EAST QLD 4002

Map Preparation Date:08/11/2022

INFORMATION NOTICE

Information Notice issued pursuant to section 20B (2) of the *Vegetation Management Act 1999* (VMA)
Property Map of Assessable Vegetation (PMAV) issued under section 20B (1) of the VMA

1. **PMAV reference:** 2022/003053
2. **Decision:** to make a PMAV under section 20B(1) of the VMA over part of land described as lot 115 on SP167206.

   This decision can be internally reviewed if requested by an owner. The details on how to do this are contained in **Appendix 1**.
3. **Reasons for decision:**

   On 23 November 2022 an area of land on lot 115 on SP167206 was declared (decision reference: 2022/003052) as an area of high nature conservation value in accordance with s19F of the VMA.

   In accordance with sections 20B(1)(a) and (b) of VMA, the decision has been made to make a PMAV over the declared area which is an offset area.
4. **Additional information:**

   Sections 20AL (a) (i) and (ii) of the VMA state that a category A area is an area that is a declared area or an offset area. The declared area, which is an offset area, on lot 115 on SP167206, is shown as a category A area on PMAV 2022/003053.

   Existing PMAV 2011/007353 will be partially replaced for lot 115 on SP167206.

   Subsequent updates of the regulated vegetation management map will also show the declared area as a category A area.
5. **Date:** 23 November 2022
6. **Delegate signature:**

   Michael Gordon

   Senior Natural Resource Management Officer (VM1)

Appendix 1: Rights of Review of the Decision

If you do not agree with the decision to make this PMAV, you may make an application for an internal review of the decision under Part 4 of the *Vegetation Management Act 1999*.

Internal Review information can be sent to: vegetation@resources.qld.gov.au

Please see the following extract from the *Vegetation Management Act 1999* for:

- your rights of review;
- the time period in which you have to apply for review; and
- how the rights of review are exercised under this Act.

Extract from the Vegetation Management Act 1999 –

Part 4 Reviews and legal proceedings

Division 1 Internal reviews by chief executive

62 Internal review process before external review
Every review of an original decision must be, in the first instance, by way of an application for an internal review of the decision.

63 How to apply for internal review
(1) A person who is given, or is entitled to be given, an information notice about a decision made under this Act may apply for an internal review of the decision.

(2) An application for internal review of a decision must be—
(a) in the approved form; and
(b) made to the chief executive; and
(c) supported by enough information to enable the chief executive to decide the application.

(3) The application **must be made within 20 business days** after—
(a) the day the person is given the information notice about the decision; or
(b) if paragraph (a) does not apply—the day the person otherwise becomes aware of the decision.

(4) The chief executive may extend the time for applying for the internal review.

(5) The application does not stay the decision.

63A Review decision
(1) The chief executive must, within 30 business days after receiving the application—
(a) review the decision (the ***original decision***); and
(b) make a decision (the ***review decision***) to—
(i) confirm the original decision; or
(ii) amend the original decision; or
(iii) substitute another decision for the original decision; and
(c) give the applicant notice (the ***review notice***) of the review decision.

(2) If the review decision is not the decision sought by the applicant, the review notice must comply with the QCAT Act, section 157(2).

(3) However, subsection (2) does not apply if the review decision relates to an original decision under—
a) section 20O(1)(b) or (2)b or (c), 20R(2) or the provisions as applied under section 20ZC(6); or

b) section 20O(3)(b), 20S(1)(a) or 20ZB(1)(b) or (c).

Division 1A External reviews by QCAT

63B Who may apply for external review
(1) A person who is dissatisfied with a review decision may apply, as provided under the QCAT Act, to QCAT for a review of the review decision.

(2) However, subsection (1) does not apply if the review decision relates to an original decision mentioned in section 63A(3).

Rosevale Property

Declared Area

Rosevale Property – Declared Area Management Plan

DAMP 01 – October 2022

EPBC 2021-9005

The purpose of this Voluntary Declaration (V-DEC) is to conserve an area of high nature conservation value under section 19F(1)(a) of the *Vegetation Management Act 1999* (VMA). The area of high nature conservation is to support the delivery of an environmental offset under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for the proposed approved Residential Development at Barrams Road, Ripley (EPBC2015/7609). This project is located within the Queensland Government's Greater Ripley Priority Development Area (PDA).

As part of the draft EPBC approval conditions (EPBC 2021/9005), the proponent was required to legally secure the endorsed offset prior to commencement of the action. A copy of the Offset Area Management Plan assessed by the Department and referenced in the draft approval conditions is attached to this correspondence (**Attachment A** – OMP Referenced in the Draft Approval Conditions). The purpose of the Offset Management Plans is to provide quantifiable and measurable management actions, timing and key performance indicators to ensure the offset area achieves the necessary conservation gains for the impacted matters of national environmental significance (MNES) at the impact site.

The V-DEC application has been structured to streamline the assessment process and ensure the OMP endorsed by the Commonwealth Government within the Draft Approval for EPBC 2021-9005 is referenced throughout and consistently applied across the Draft EPBC Act approval and VMA V-DEC approval.

PROPERTY OWNER DETAILS

The owners of the Rosevale Offset Property is Montauban Pty Ltd. As per **Attachment B**, the land owners have completed the consent section within the VDEC application form. Although the land owners retain a large number of land holdings within this area this VDEC and therefore the consent relates the areas shown on the provided Declared Area Plan over allotment 115 on SP 167206.

PARTIES WITH REGISTERED INTERESTS

Registered interests have been included within this application as per the VDEC application form.

DESCRIPTION OF DECLARED AREA

The ADP Offset Area which will be declared under section 19F(1)(a) of the VMA is shown in **Attachment C** of this V-DEC. The declared area and offset total 17 ha in size and located within the suburb of Rosevale and within the jurisdiction of the Scenic Rim Regional Council.

PURPOSE OF THE DECLARATION

The purpose of this Voluntary Declaration (V-DEC) is to conserve an area of high nature conservation value under section 19F(1)(a) of the *Vegetation Management Act 1999* (VMA). The area of high nature conservation is to support the delivery of an environmental offset under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for the proposed residential development located at Barrams Road, Ripley Valley (EPBC 2021/9005).

MANAGEMENT INTENT

Under section 19G of the VMA, the offset area is considered to provide another area that contributes to the conservation of the environment (S19(1)(b)(vi) of the VMA).

The proposed offset area intends to restore threatened species that will after 20 years provide an area of native vegetation which connects significant riparian and regrowth vegetation. This is the first of 4 offset projects proposed on the landholding, which when complete will provide over 700ha of existing and reinstate conservation land directly connecting significant riparian and creek corridors with large existing tracts of remnant bushland.

The conservation tenure of the offset area will be a V-DEC under the VMA and the Category A designation will be in perpetuity. Once legally secured, the improvement and ongoing management of the Rosevale Offset will commence implementation in accordance with the approved OMP (refer to **Attachment A**).

MANAGEMENT OUTCOME AND MANAGEMENT ACTIONS

The management outcome for the declared area as part of this V-DEC is as per the approved OMP (refer to **Management Actions Tables** of **Attachment A)**

- Assessment unit 1 (cleared areas): four (4) point habitat quality score increase for Koala over the 20-year management period; and

These management outcomes will be achieved through the implementation of the following management actions:

- Action 1: Feral Pest Management;
- Action 2: Weeds of National Significance;
- Action 3: Live Stock Management;
- Action 4: Access Management and Trespass Control
- Action 5: MNES Habitat Restoration

Refer to the OMP included in **Attachment A** for further details on the management action outcome, description, location, timing, responsibility, measurement and monitoring and adaptive management.

CURRENT THREATS AND POTENTIAL RISKS TO ACHIEVING THE MANAGEMENT OUTCOMES

A limited number of risks associated with climate change, pest control, large scale rehabilitation and grazing land uses have been evaluated for the declared area. The following risk factors have been considered:

- Risk 1 - Bushfire
- Risk 2 - Drought
- Risk 3 – Shifting Habitat Range
- Risk 4 – Plant Stock Failure
- Risk 5 – Feral Animal Control
- Risk 6 – Weeds Of Nation Significance
- Risk 8 – Live Stock Access / Trespass

Refer to the OMP referenced in the Draft Approval Conditions (**Attachment A**) for further detail discussion on the above-mentioned risks and the risk management strategies proposed to be implemented to mitigate the risk factor.

TERM

This V-DEC may be ended under section 19L of the VMA by the chief executive if:

- The management outcomes of the management plan have been achieved. Management plan means the propsoed OMP listed in the draft approval conditions. (EPBC 2021-9005);
- If it is not in the interest of the State, having regard to public interest; or
- Another environmental offset is provided in accordance with the EPBC Act or Offsets Act for an activity impacting the original offset area covered by this V-DEC.

OFFSET PROVIDER SIGNATURE

Carl Sillett

Company Secretary – Montauban Environmental Offsets

Attachment A

OMP Referenced in Draft Approval conditions for EPBC2021-9005

ROSEVALE OFFSET MANAGEMENT PLAN

(EPBC2021/9005)

RESIDENTIAL DEVELOPMENT – BARRAMS ROAD, RIPLEY

28 JULY 2022

[VERSION 3.1 - OMP]

Montauban Environmental Offsets

VERSION NUMBER AND DATE	PERSON RESPONSIBLE
VERSION 1.1 – OCTOBER 2021	CS & MG
VERSION 2.1 – MAY 2022 (OMP COVERSION)	GT / CS
VERSION 3.1 – JULY 2022 (OMP AMENDMENTS)	GT / CS

TABLE OF CONTENTS

INTRODUCTION

This document is the Offset Management Plan (OMP) for Montauban Environmental Offsets (MEO) Rosevale Offset Area 1 (ROA 1), located at Tarome Road, Tarome in South East Queensland. This version of the OMP has been specifically prepared to respond to the Commonwealth Government's Department of Agriculture, Water and the Environment (DAWE) comments as schedule in the Preliminary Documentation package prepared for EPBC 2021/9005, located at Barrams Road, Ripley Valley Priority Development Area (Dept comments received January 27, 2022). The offset to be provided at ROA 1 is for impacts on habitat defined as critical for the koala species. As part of the Preliminary Documentation lodgement MEO provided an Offset Strategy for consideration and approval of the DAWE. During conversations regarding this strategy and comments provided on a number of submissions this previous Offset Strategy has been upgraded to an OMP for approval and greater certainty in proponent's approval conditions. This OMP is generally prepared in accordance with the Department of Agriculture, Water and the Environment (DAWE) *EPBC Act – Environmental Offset Policy* (October 2012).

The Department should be aware that the Rosevale offset property is a wholly owned 800+ ha land holding for which a number of EPBC biodiversity offsets are proposed in a broad aggregation of conservation outcomes. MEO propose to utilise nearly all 800 ha of the land for MNES offsets of which EPBC 2021/9005 will included 17 ha. The offset area utilised for EPBC2021/9005 is herein referred to as Rosevale Offset Area 1 (ROA 1). This small offset will combine with a number of other much larger proposals and benefit from the much larger raft of environmental protections and conservation initiatives proposed at the Rosevale site.

This Offset Management Plan (OMP) dated May 2022 outlines the existing site values for the 17 ha ROA 1. This OMP is provide both in response to commentary on the proposal by DAWE and for separate approval and thus while it includes some analysis of assessment items the OMP should be read in-conjunction with the Preliminary Documentation prepared by the Saunders Havill Group on behalf of ADP Projects Pty Ltd.

PURPOSE OF THE MANAGEMENT PLAN

The Rosevale Offset Area 1 (ROA 1) has been selected and designed to compensate for 100% of the Barrams Road, Ripley Project's significant impact on Koala. The offset proposal is a direct land-based solution which consists entirely of establishment of new habitat.

The Purpose of this Offset Management Plan (OMP) is to:

- Provide details and timing on the legally binding mechanism to secure the ROA 1 values at the Offset property;
- Provide baseline values for a range of key habitat quality indicators in the offset ROA 1 for repetitive use in measuring and monitoring habitat improvement commitments;
- Outline the specific management actions and tasks to be undertaken in the offset area for managing threats, pests and improving Koala habitat values;

- Outline restrictions and operational controls on existing agricultural and grazing land uses;
- Establish robust and scientifically driven metrics, monitoring and reporting procedures to ensure the offset delivery achieves the predicted conservation gain for the species;
- Assign responsibilities for tasks, actions, operational controls, measuring, reporting, corrective actions and funding for all works at the Rosevale offset property;
- Identify, account for and manage risks associated with all or part of the offset outcomes not succeeding (Adaptive Management).

OFFSET MANAGEMENT PLAN LIMITATIONS

This document is an Offset Management Plan (OMP). The OMP aligns with relevant principles and sections of the Environmental Management Plan Guideline (2014), however is designed for on-ground implementation and not specific value assessment against the EPBC Offset Assessment Guide. The assessment of values for Risk of Loss and Quality are included and justified within the technical information provided in the Preliminary Documentation prepared by Saunders Havill Group (2022). A summary of the EPBC Offset Assessment Guide is provided further into this OMP. Quality value changes in this assessment are derived from specific actions listed in this OMP and thus where applicable assessment metrics have been listed in the measurement targets of Management Action Tables included in the relevant sections.

RESPONSIBLE PARTIES FOR OFFSET MANAGEMENT PLAN

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 the following entities retain key responsibilities for implementation of this OMP:

ADP Projects (Project Proponent)

ADP Projects Pty Ltd are the owner and operational developer of the Collingwood Park Project. Responsibilities include:

- Obtain and comply with all conditions of the EPBC approval for the project.
- Enter into a commercial agreement with Montauban Environmental Offsets for the delivering of EPBC compliant offsets.
- Fund all management actions / tasks as listed in the approved OMP at the Rosevale offset property.
- Report on the EPBC approval in Annual Compliance Reports or as triggered within conditions.

Montauban Environmental Offsets Pty Ltd (Offset Provider)

Montauban Environmental Offsets Pty Ltd (MEO) is a purpose-built environmental offset company. Responsibilities include:

- All on-ground implementation of the OMP.
- Monitoring and reporting on OMP actions, tasks and outcomes.
- Appointment of relevant experts or experienced contractors to undertaken specified tasks within the ROA 1.

- Corrective actions for any non-compliance activities.
- Stakeholder relationships – Adjoining grazing operations and Scenic Rim Regional Council.
- Review, Amendment and Adaptive Management changes of the approved OMP over the life of the offset.

Saunders Havill Group (Environmental Consultant)

Saunders Havill Group provide the tertiary trained and experienced field ecologists in support of approval and ongoing compliance for the Rosevale offset property and Offset Management Zone(s). Responsibilities include:

- Collection, interrogation and analysis of robust scientifically justified survey data for use as the baseline values at the offset property.
- Repeating surveys as per the currency in this Offset Management Plan or as per conditions of approval for measuring improvement outcomes.
- Preparation and lodgment of the Legally Binding Mechanism (VDEC) with the Queensland Government.
- Audit offset reports against approval conditions as part of the Barrams Road Project Annual Compliance Reports

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*. 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 (please print) CARL SULETI

Organisation (please print) Montauban Environmental Offsets

Date ____/____/____

491 Providing false or misleading information to authorised officer etc.

(1) A person is guilty of an offence if the person:

(a) provides information or a document to another person (the ***recipient***); and

(b) knows the recipient is:

(i) an authorised officer; or

(ii) the Minister; or

(iii) an employee or officer in the Department; or

(iv) a commissioner;

performing a duty or carrying out a function under this Act or the regulations; and

(c) knows the information or document is false or misleading in a material particular.

(2) The offence is punishable on conviction by imprisonment for a term not more than 1 year, a fine not more than 60 penalty units, or both.

Note: Subsection 4B(3) of the *Crimes Act 1914* lets a court fine a body corporate up to 5 times the maximum amount the court could fine a person under this subsection

LEGALLY BINDING MECHANISM

The ROA 1 and its values (as finalised through the EPBC Act Approval) will be legally secured through a Voluntary Declaration (V-DEC) declared under the Queensland Government's *Vegetation Management Act 1999* (VMA). A V-DEC protects land and values and is binding on future owners. The Queensland Government describes the benefits of the VDEC as "*One of the strengths of a declaration is that it provides greater protection to areas of land containing environmentally valuable native vegetation*".

The declaration and management plan will be noted on the land title, which informs prospective buyers of current declarations and management plans and where copies are available. This information is important to the property market as future owners will be bound by the plan and declaration (Queensland Government, 2017).

The legally securing of the land will be made through declaring the areas as having High Nature Conservation Values. Based on the VMA criteria the Offset Area will be declared as achieving items (d) and (f) below:

To be considered for declaration as an area of high nature conservation value, the area must be one or more of the following:

a) a wildlife refugium—an area where a species or a group of species has retreated due to a threatening process (e.g. climatic change);

b) a centre of endemism—an area containing concentrations of species that are largely restricted to the area;

c) an area containing a vegetation clump or corridor that contributes to the maintenance of biodiversity;

d) an area that makes a significant contribution to the conservation of biodiversity;

e) an area that contributes to the conservation value of a wetland, lake or spring; or

f) another area that contributes to the conservation of the environment.

The V-DEC will be lodged and legally secured by evidence of encumbrance on Registered Land Title prior to the commencement of any clearing works on the Impact Site. As noted, this protects the vegetation by way of purpose-built regulation on the title so all future land owners are aware of the restrictions prior to purchase.

CONSERVATION BENEFITS OF THE ROSEVALE OFFSET PROPERTY

Although located within reasonable proximity of a number of MNES impact areas occurring in South East Queensland the broad conservation benefits of the MEO Rosevale offset property are realised through its achievement of multi-jurisdictional biodiversity outcomes. The major offset property is located within the same bioregional and sub-bioregional as three of the largest Priority Development Areas in South East Queensland, known as Greater Ripley, Greater Flagstone and Yarrabilba Priority Development Areas (PDAs). To implement long planned infrastructure outcomes and housing targets these PDAs will continue to see reductions in MNES habitat through both direct and indirect impacts. The Rosevale Offset Project will protect and improve existing values and significantly reinstate and create new habitat strategically located within the same sub bio-region ecological context where MNES habitat is being reduced.

MEO's Rosevale offset property is large in scale (over 800ha) and can cater for both very large and or and aggregation of smaller impacts within a single consolidated offset area and land holding. The site is diverse in existing environmental values with Assessment Units covering existing remnant vegetation, both immature and advanced regrowth vegetation and open paddocks designation for new habitat creation. Existing trees and habitat features provide the ideal foundation for seed harvest and expansion through revegetation. Additionally, the site includes ecosystems ranging from lower ridges, through foothills, flood plains and riparian waterways associated with Bundamba Creek and its tributaries. Evidence of MNES habitat features and species are observed over all parts of the site and through the surrounding fragmented and connected landscape.

Importantly the land holding is owned outright by MEO and managed by full time employees with co-existing rural business uses. MEO intends to utilise the bulk of the suitable areas on the site for biodiversity offsets (evidenced by the four separate EPBC projects currently seeking to utilise the land for offset outcomes). Ownership of the Rosevale offset property holding provides greater direct commercial control from the proponent and the conditions of approval onto the Rosevale offset property to ensure offset outcomes are achieved and de-risks inadvertent third party non-compliant uses from occurring.

LANDSCAPE CONTEXT

The Rosevale offset property is located approximately 41km from the Barrams Road Project, occurring within the suburb of Ripley where MNES habitat impacts are occurring. Importantly both the impact and offset property occur within the same Interim Biogreographic Sub Region (SEQ 02 Moreton Basin Sub-region) as sought in draft Updated Offset Guideline material (**Plan 1.1**). The sites are also located within the same South East Queensland bioregion (SEQ Bioregion 12) established and mapped by the Queensland Government. Furthermore, both the impact and offset propertys are located within the same sub-region of Bioregion 12 mapped under the South East Queensland Biodiversity Planning documents (**Plan 1.2**). The impact and the offset property are located in adjacent Local Government Areas.

Within the South East Queensland Biodiversity Planning Assessment for the South East Queensland Bioregion (Version 4.1) the Rosevale offset property is located at the junction of a number of a number of State-wide and Regional Terrestrial Corridors with areas proposed for offset straddling a mapped Regionally Significant Riparian Corridor, centred on Bremer River (**Plan 1.3 & Plan 1.4**).

The southern allotments of the offset property falls within the mapped extent of Regional Biodiversity Corridor 101 described as *Kangaroo Mountain to Rosewood Corridor: Extends from Kangaroo Mountain (Main Range National Park) through to Mt Walker and Rosewood. Regional (5km)* (**Plan 1.5**). All habitat protection and habitat creation is supported by this strategic intent and importantly the land is not located within an area at threat of new development expansion, new road or rail upgrades or extractive resource uses. At the strategic scale the area is proposed for rural and environmental uses throughout the landscape context connecting to the significantly large Border Range National Park.

REGIONAL AND SITE CONTEXT

Locally the Rosevale offset property builds on a large cluster of vegetation mapped as 'Essential Habitat' for the Koala species by the Queensland Government (**Plan 2.1**). The mapping of vegetated strands and fragments within the Rosevale offset property and surrounding the offset property strongly indicates that protected and created habitat through this project will ultimately also from part of the essential habitat network for the koala species. Where vegetation does occur in on the offset property it is mapped as Core Koala Bushland under the Queensland Governments *South East Queensland Koala Conservation Strategy – 2020-2025* (**Plan 2.2**). The unique characteristics of soil, land zone, topography, elevation and geographical region show that additional habitat creation through the offset works will also be mappable as Core Koala Bushland within 12-15 years of planting. Under the Scenic Rim Regional Council's *Biodiversity Strategy -2015-2025* the offset property contains a mix of areas mapped as 'Core Nodes' and 'Landscape Linkage' areas. The Rosevale offset property will help link key stepping-stone nodes to the very large Border Range National Park (**Plan 2.3**).

On the site, vegetated areas contain a dominant mix of locally important koala tree species as listed in Table 35 of the ANU *A review of Koala Habitat Assessment Criteria and Methods* (8.17 South East QLD – Table 35 – Page 58). A combination of existing koala records shown in Wildnet and the Atlas of Living Australia (**Plan 3.1 & Plan 3.2**), combined with consistent evidence of koala usage via SAT surveys and the actually recording of the species on trees at the offset property provide strong confidence towards the future role the offset will play for the Koala Species. Pre-clear mapping (**Plan 3.3**) and actual on-site vegetation communities show the Rosevale Offset contains a broad distribution of the following regional ecosystem types (Code plus Dominant Species):

12.3.3 – *Eucalyptus tereticornis, Eucalyptus crebra, Eucalyptus moluccana*

12.8.17 - *Eucalyptus melanophloia, Eucalyptus crebra, Eucalyptus tereticornis, Corymbia intermedia*

12.8.16 – *Eucalyptus melliodora, Eucalyptus crebra, Eucalyptus tereticornis*

12.8.14a - *Eucalyptus moluccana, Eucalyptus tereticornis, Eucalyptus siderophloia*

Underlined species are additionally listed as significant food plants for the Grey-headed Flying-fox (Eby & Law 2008). Furthermore the Rosevale offset property is located approximately 14km from the Mount French GHFF roosting camp [288], 20km from the Boonah roost [289] and 36km from the Kooralbyn roost [551]. Records under the National Flying Fox web viewer vary with only recent surveys confirmed at the Kooralbyn site. All three sites are listed as active under the Scenic Rim Regional Council Flying-Fox Management Strategy.

Plan 1.1 Interim Biographical Regionalisation of Australia (IBRA) -SEQ02 – Moreton Basin Sub-Region

Montalbar Environmental Offsets

N
W E
S

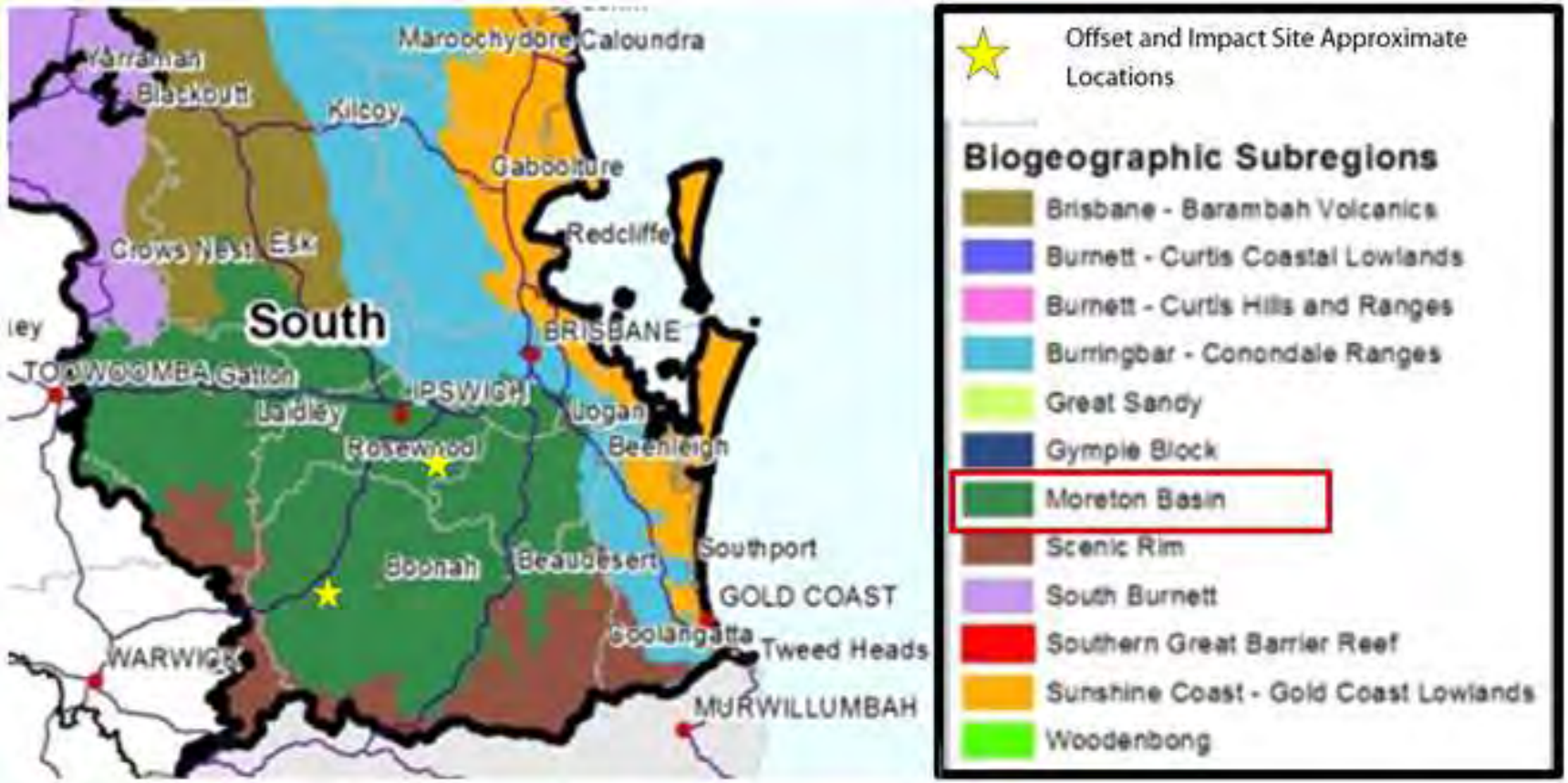
DISCLAIMER
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED

Location/Adress:Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 1 1 Conservation Figures V2

References:

Legend

Plan 1.2 SEQ Bioregion 12 - Biographic Subregions



Montalbar Environmental Offsets

Location/Adress: Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 1 2 Conservation Figures V2

References:

N
W E
S

Legend

Plan 1.3 South East Queensland Bioregional Planning Assessment – Corridor Mapping (Landscape Context)

Montaubar Environmental Offsets

N
W E
S

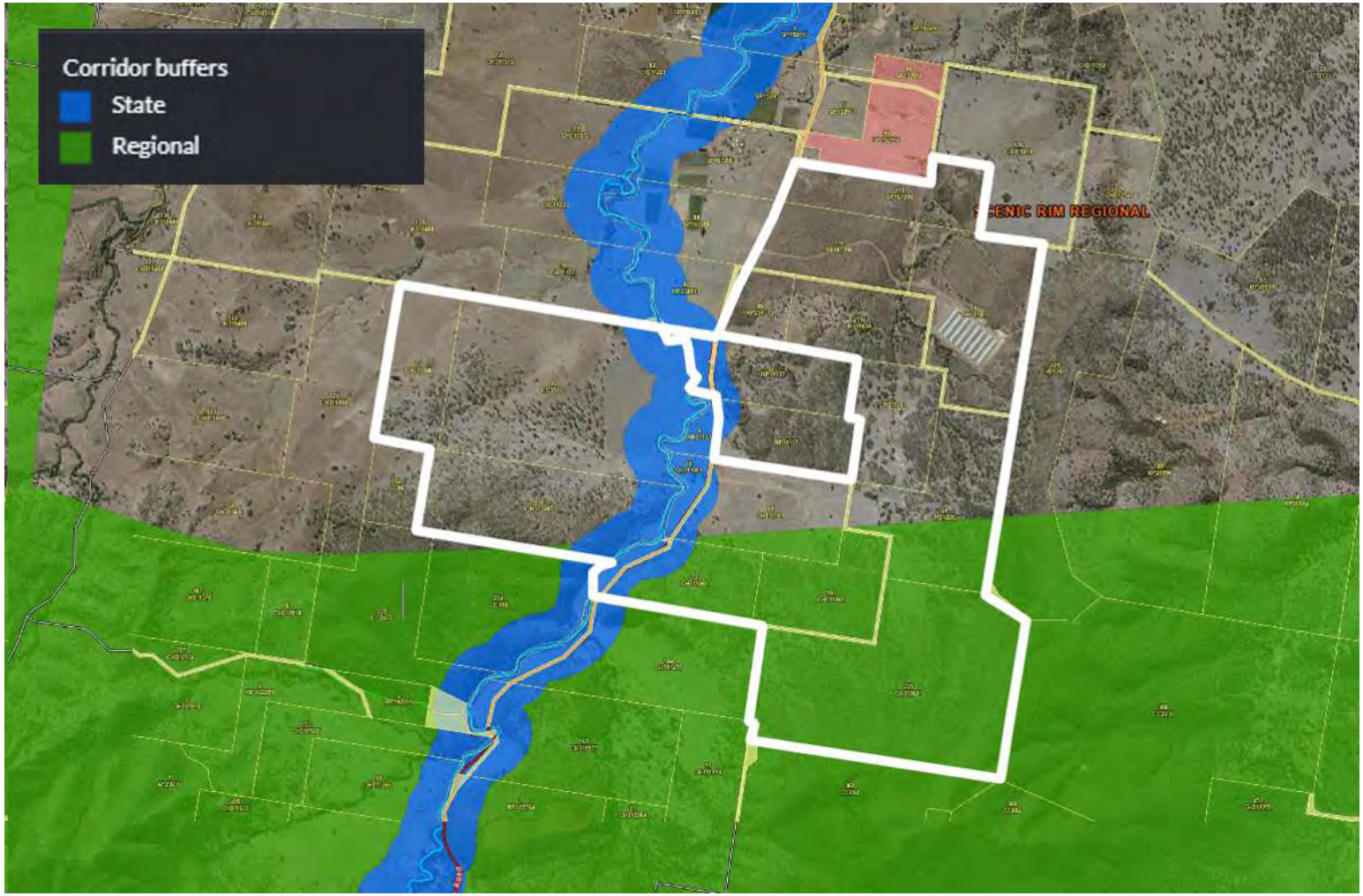
DISCLAIMER
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED

Location/Adress:Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 1 3 Conservation Figures V2

References:
© State of Queensland, 2022

Legend

Plan 1.4 South East Queensland Bioregional Planning Assessment – Corridor Mapping (Site Context)



Montalban Environmental Offsets

N
W E
S

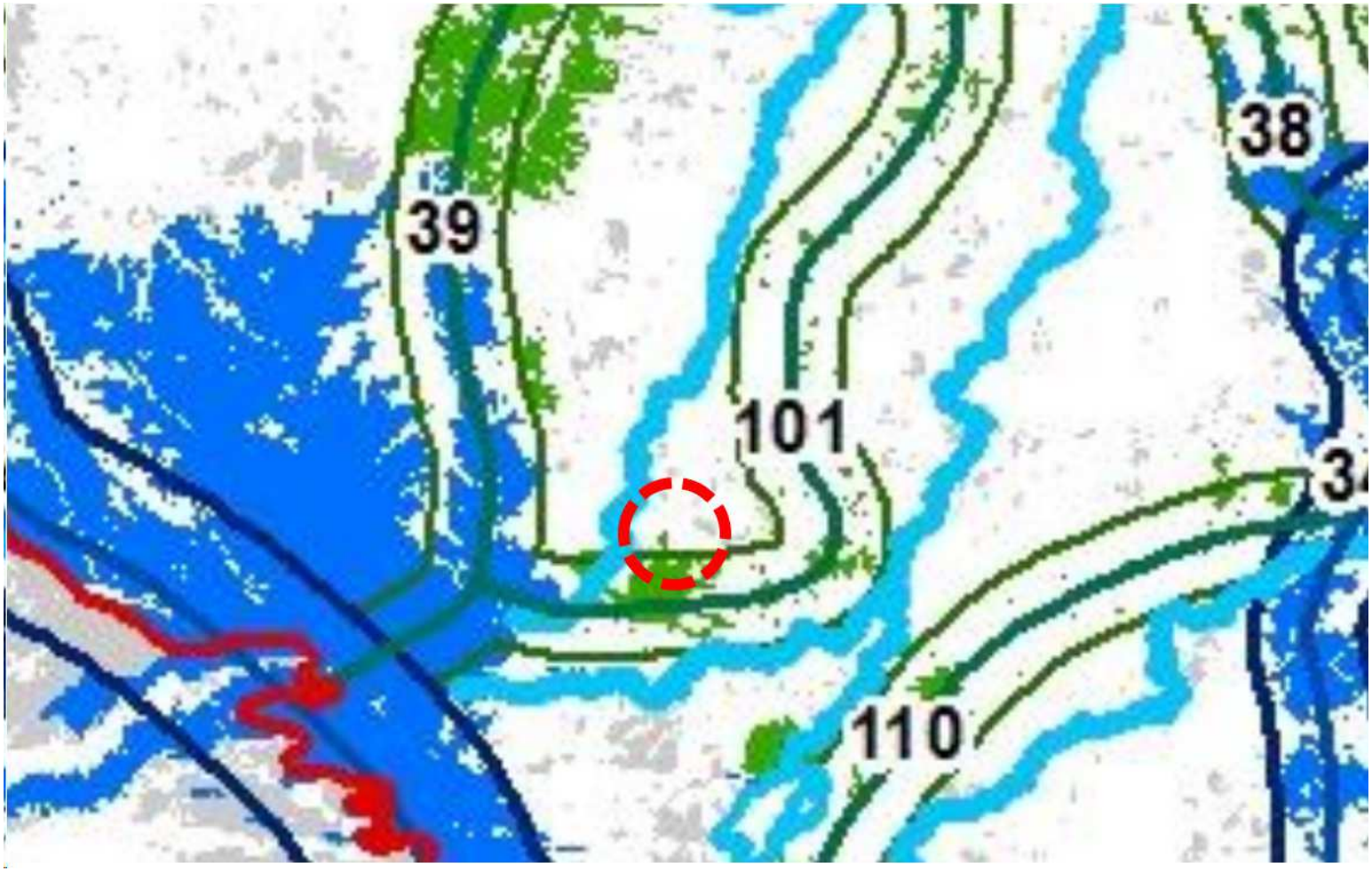
DISCLAIMER
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED

Location/Adress: Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 1 4 Conservation Figures V2

References:
© State of Queensland, 2022

Legend

Plan 1.5 South East Queensland Bioregional Planning Assessment – Corridor Mapping (Corridor Descriptions)



Montaubar Environmental Offsets

DISCLAIMER
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. RESPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED

Location/Adress: Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 1 5 Conservation Figures V2

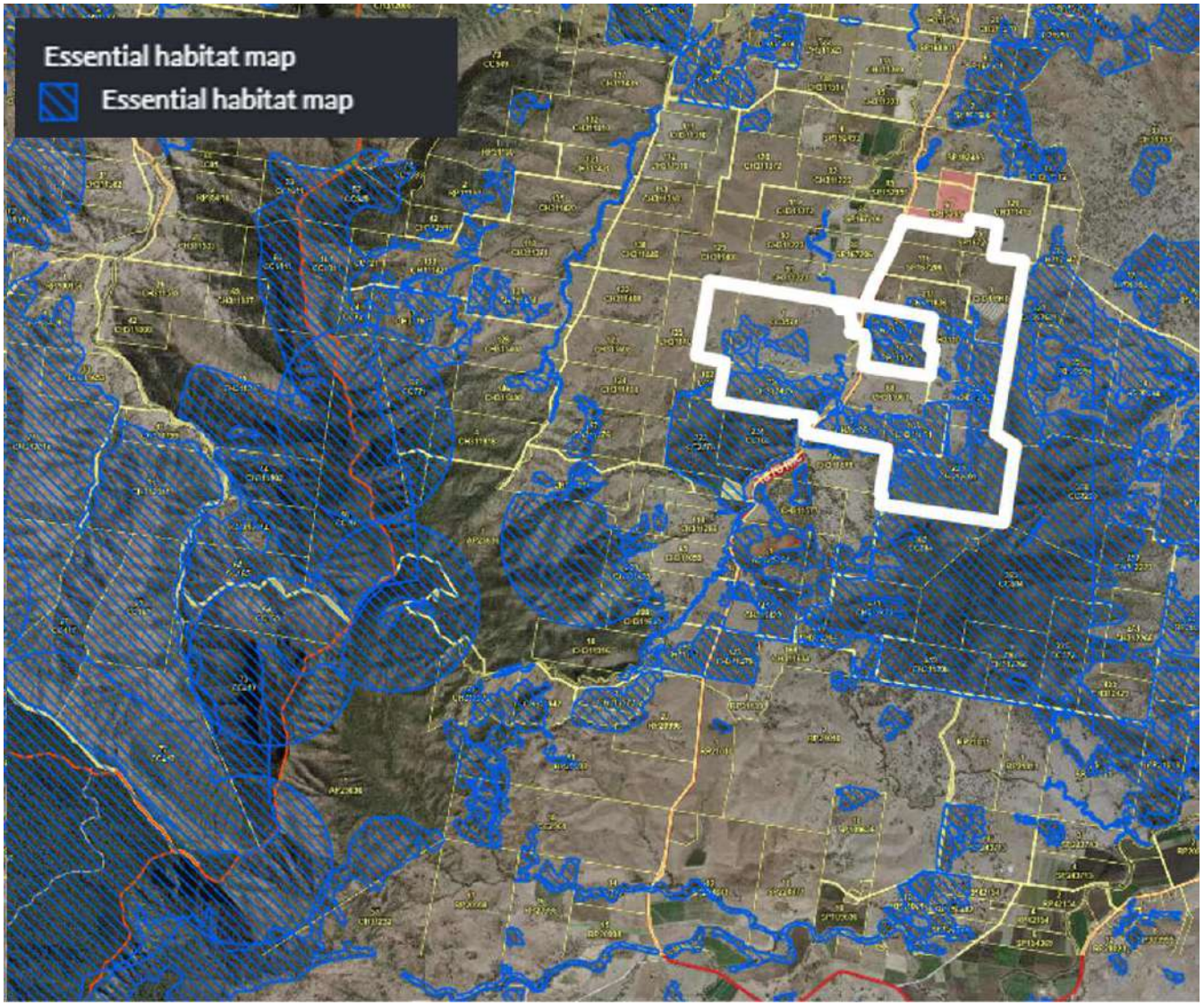
References:
© State of Queensland, 2022

N
W E
S

Legend

Rosevale Offset Site

Plan 2.1 Essential Habitat Mapping – Queensland Government



Montauban Environmental Offsets

N
W E
S

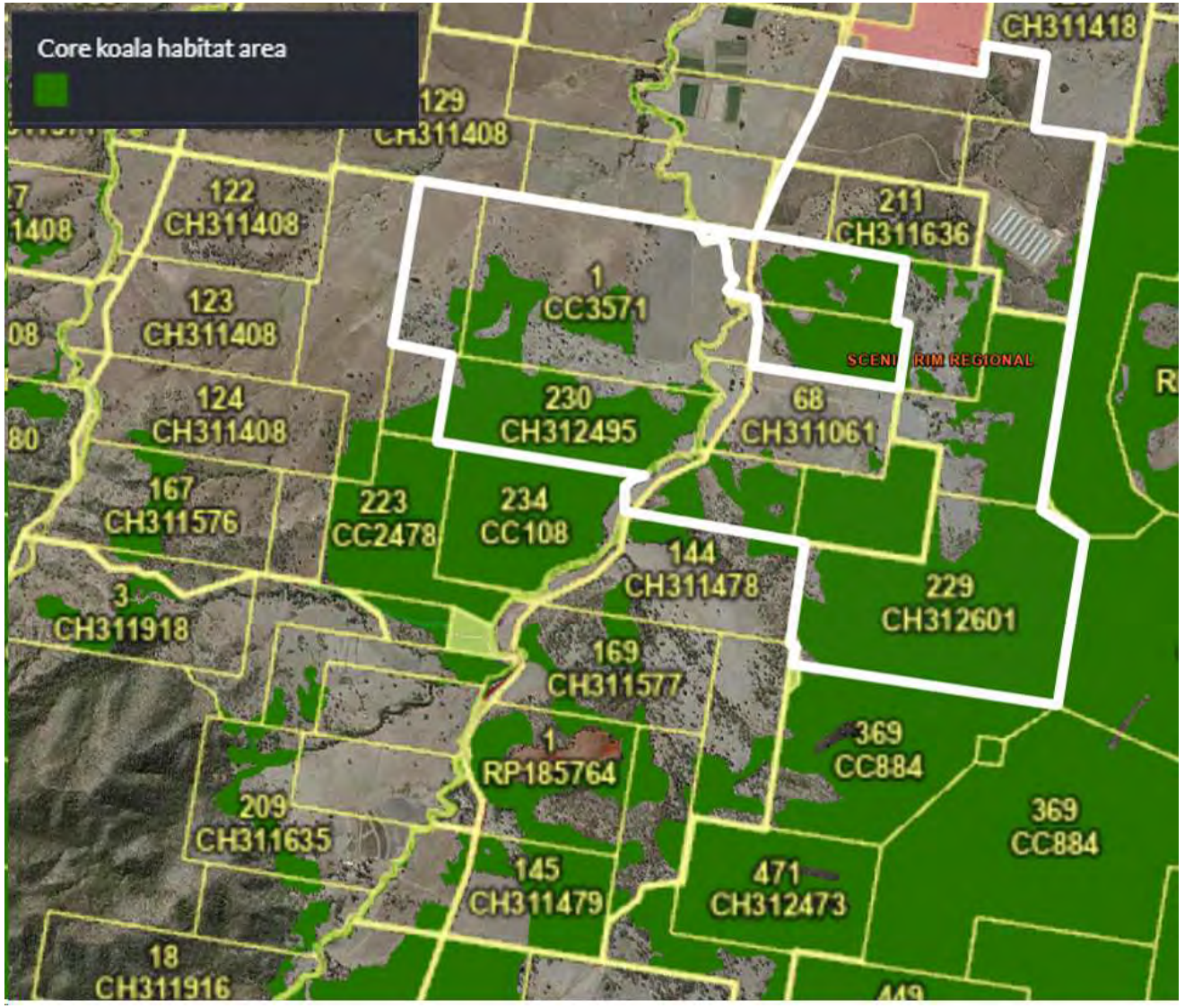
DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED .

Location/Adress:Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 2_1 Conservation Figures 2 V2

References:
© State of Queensland, 2022

Legend

Plan 2.2 Core Koala Habitat Area – Queensland Governments SEQ Koala Conservation Strategy – 2020-2025



Montalubar Environmental Offsets

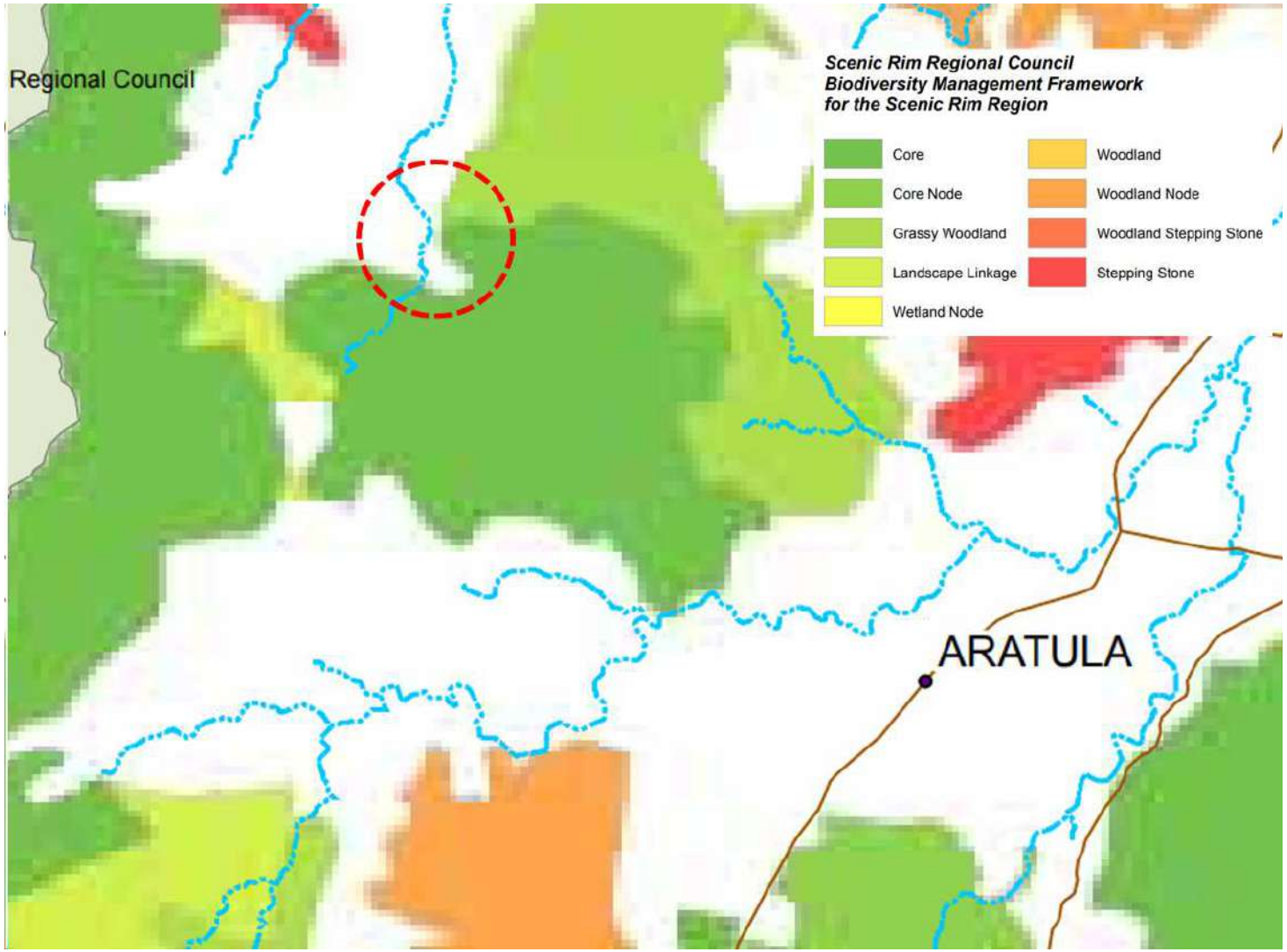
DISCLAIMER
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED

Location/Adress: Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 2_2 Conservation Figures 2 V2

References:
© State of Queensland, 2022

Legend

Plan 2.3 Scenic Rim Regional Council – Biodiversity Strategy



Montalbar Environmental Offsets

DISCLAIMER
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED

Location/Adress:Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 2_3 Conservation Figures 2 V2

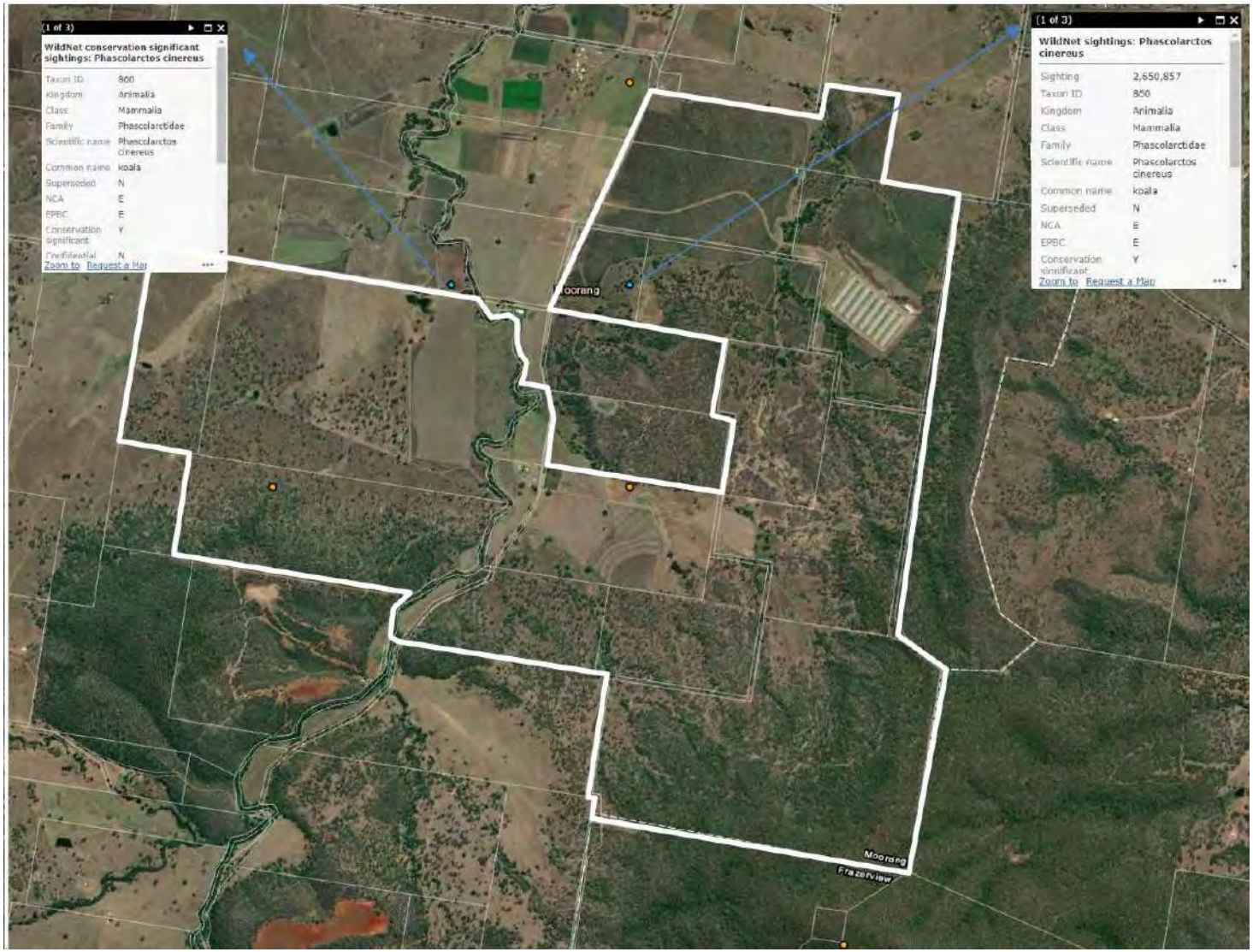
References:
© State of Queensland, 2022

N
W E
S

Legend

Rosevale Offset Site

Plan 3.1 Wildnet Database Mapping Search – Prior Koala Records Highlighted



Montalbar Environmental Offsets

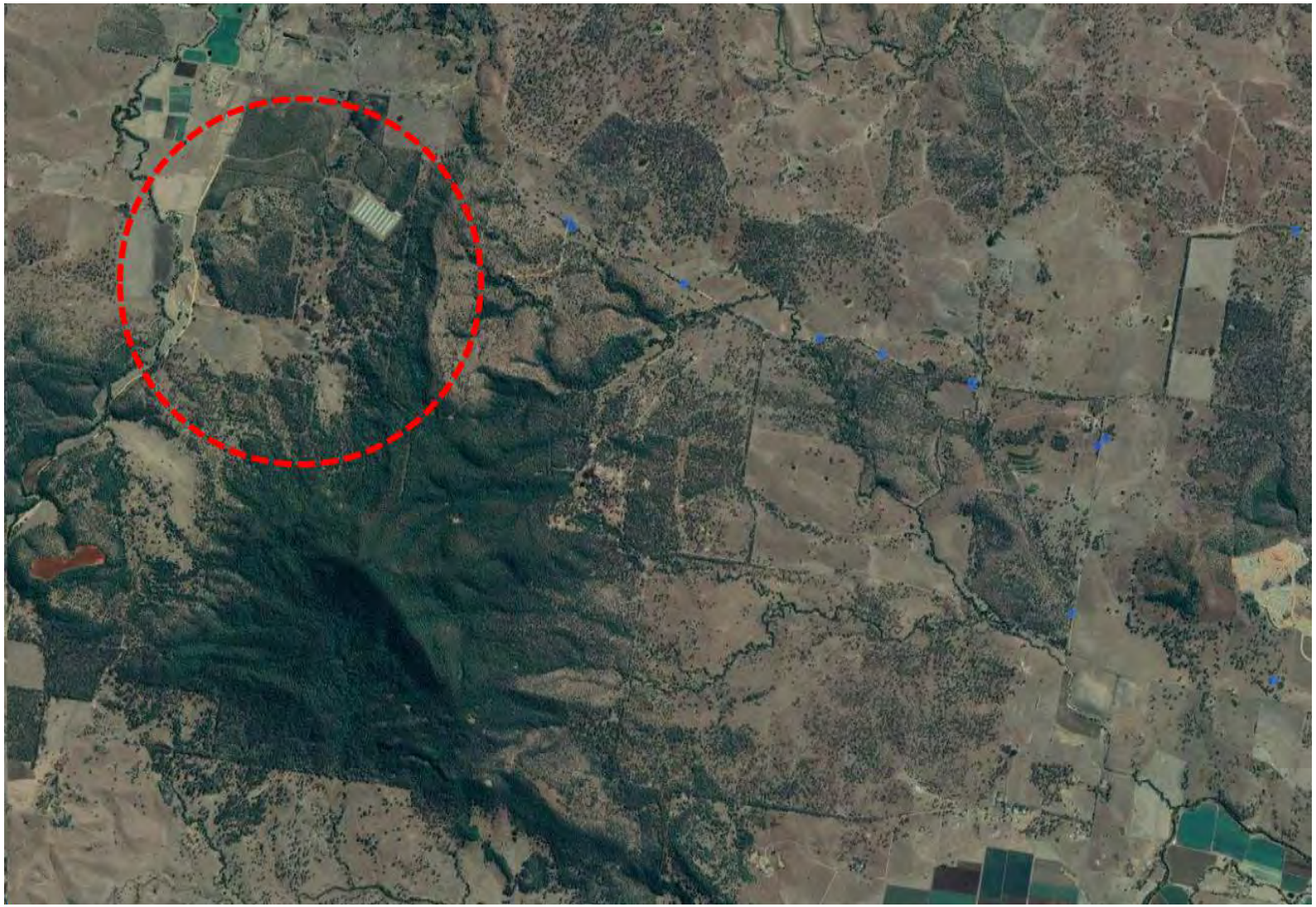
DISCLAIMER
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED

Location/Adress:Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 3_1 Conservation Figures 3 V2

References:
© State of Queensland, 2022

Legend

Plan 3.2 Atlas of Living Australia – Koala Records Near Rosevale Offset Site



Montalbar Environmental Offsets

DISCLAIMER
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED

Location/Adress:Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 3_2 Conservation Figures 3 V2

References:
© State of Queensland, 2022

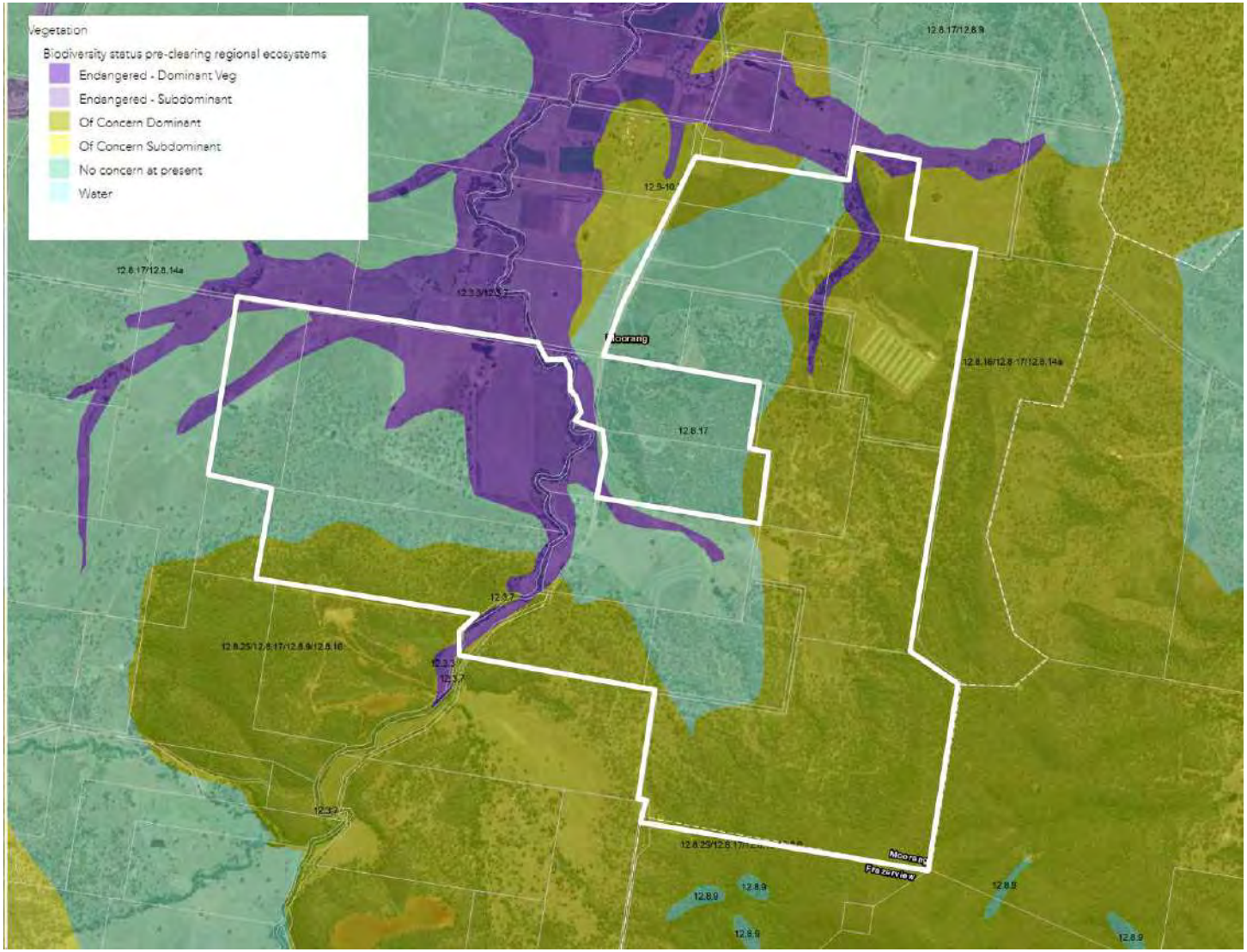
N
W E
S

Legend

Rosevale Offset Site Approximate Location

Recorded Koala Species

Plan 3.3 Pre-Clear Vegetation and Biodiveristy Status Mapping – Queensland Government



Montalubar Environmental Offsets

Location/Adress: Aratula, QLD
Date: 22/07/2022
Plan Name: Plan 3_3 Conservation Figures 3 V2

References:

N
W E
S

Legend

Rosevale Offset Site Approximate Location

Recorded Koala Species

COMPLIANCE WITH THE OFFSET POLICY PRINCIPLES

Table 1 lists the principles of the EPBC Act Environmental Offsets Policy and describes how the proposed offset strategy has been developed to adhere to these principles.

Table 1: Compliance with EPBC Act Environmental Offsets Policy Principles

Principle	Offset Strategy Compliance
Deliver an overall conservation outcome that improves or maintains the viability of the aspect of the environment that is protected by national environment law and affected by the proposed action	The offset area delivers a conservation gain for the Koala through: • The creation of new habitat through the revegetation of 17.00 ha. • Providing new connectivity with surrounding habitat for the protected matters. • Providing further expansion and connectivity to other EPBC offsets for the same protected matter (Koala). • Introducing, funding and continually improving offset area Management Actions to reduce and manage threats (feral dogs, Lantana) in protected and created habitat areas. • Averting the direct and indirect losses via declaring the land a Voluntary Declaration area for High Value Conservation under the *Vegetation Management Act 1999*. This removes future wholesale and selective clearing opportunities and through the management plan removes ongoing impacts caused by livestock intrusion into habitat areas.
be built around direct offsets but may include other compensatory measures	The offset area includes legally securing the land area and undertaking necessary improvements to achieve a greater than 100% offset outcome for impacts calculated on the APD Projects Pty Ltd Barrams Road project for Koala Habitat (100%). The Offset Area is wholly achieved through direct delivery to land.
be in proportion to the level of statutory protection that applies to the protected matter	At the time of the EPBC referral decision, the Koala was scheduled within the EPBC Act as 'Vulnerable'. Under the International Union for Conservation of Nature data the probability of annual extinction is 0.2. This factor applies through the meta data of the Offset Guide assessment calculation sheets for which each species has been assessed as achieving greater than 100% offset through the proposed offset area.
be of a size and scale proportionate to the residual impacts on the protected matter	Direct and indirect impacts for the protected matters have been calculated at the impacts site using the Modified Habitat Quality Assessment (MHQA) for the Koala. Within the Assessment Guide calculator the Quantum Impact for each species is listed as: • Koala (3.28 ha) To achieve and offset for both of these impacts the offset area provides a direct land-based outcome over 17.00 ha through habitat recreation activities on historically cleared land devoid of native vegetation.

effectively account for and manage the risks of the offset not succeeding	The offset area forms part of the balance land of a large rural scale operation. This offset strategy identifies 7 key risks to some or all of the offset principles and outcomes not being achieved. Each of these risks have influenced the specific management actions proposed in the relevant assessment units where the risk may occur and more importantly the monitoring, measuring of success and adaptive management for the offset succeeding. Further, the offset provider intends to engage third party, suitably qualified professional(s) to ensure that the management outcomes of the Rosevale offset property are achieved and risk of the offset not succeeding is mitigated. Repetitive monitoring and survey replication is to be a feature of the Offset Management Plan to ensure adaptive management changes are made as soon as identified and throughout the life of the offset.
be additional to what is already required, determined by law or planning regulations or agreed to under other schemes or programs	The Barrams Road project occurs in the Ripley Valley Priority Development Area declared by the State Government. There are few environmental controls at the impacts site with the Queensland Government's *Environmental Offset Act 2014* not being applicable. There are no guidelines or controls around offset or rehabilitation for the Koala. Further, the offset property is currently utilised for various rural activities, and not protected or managed for conservation purposes. Therefore, without the triggering of the EPBC Act and the Controlled Action Assessment the offset as proposed in the Offset Strategy is not required for either of the protected matters and the offset property would not be protected in perpetuity for conservation purposes.
be efficient, effective, timely, transparent, scientifically	Through conditions of approval the offset area will be legally secured prior to the commencement of any clearing on the impact site. The offset area and its value (as finalised through the EPBC Act Approval) will be legally secured through a Voluntary Declaration (V-Dec) declared under the Queensland Government's *Vegetation Management Act 1999*. A V-Dec protects land and values and is binding on future owners. The declaration and management plan will be noted on the land title, which informs prospective buyers of current declarations and management plans and where copies are available. This information is important to the property market as future owners will be bound by the plan and declaration. The legally securing of the land will be made through declaring the area as having High Nature Conservation Values. The V-Dec will be lodged and legally secured by evidence of encumbrance on Registered Land Title prior to the commencement of any clearing works on the Impact Site.

	The offset management plan is to list the specifically designed scientific methodologies for the measuring of base line and improved outcomes for the protected matters. The OMP will also require the use of tertiary trained and experienced experts along with appropriately certified and experienced contractors for the implementation of a host of actions.
have transparent governance arrangements including being able to be readily measured, monitored, audited and enforced	The offset property is owned by a large rural enterprise who has a variety of rural activities occurring on-site. The third party offset provider will fund all actions listed as approved in an offset management plan. An executed legal contract (Offset Provider Deed) is in place outlining the legal and committed relationship of the funding and delivery of the offset outcomes. Clearly articulated goals are to be approved within the Offset Management Plan for each proposed action within each assessment unit. Collectively these goals link directly to the achievement of the overall *conservation gain* for the protected matters as designed, assessed and calculated through the selection and delivery of the offset area. The management actions and implementation schedule to be included in the offset management plan are designed to be measured, monitored, audited and enforced year upon year during the life of the offset.

EPBC OFFSET ASSESSMENT GUIDE SUMMARY

The completed EPBC offset assessment guide calculator sheets is included in **Appendix A**, with a summary of the EPBC offset assessment guide calculator inputs included below. It should be noted that the OAG values provided are not agreed by the Department.

- **Impact area (hectares) –** 16.38 ha
- **Impact area habitat quality score –** Koala (2/10)
- **Impact area quantum impact (hectares) –** 3.28 QI ha
- **ROA 1 (hectares) –** 17.00 ha
- **ROA 1 start habitat quality score –** Koala (1/10)
- **Time until ecological benefit –** 20 years
- **Time over which loss is averted –** 20 years
- **Risk of loss without the offset –** 0 %
- **Risk of loss with the offset –** 0 %
- **ROA 1 future quality score without offset –** Koala (1/10)
- **ROA 1 future quality score with offset –** Koala (5/10)
- **Confidence in averted loss (risk of loss) values –** 90 %
- **Confidence in result (quality score increase) values –** 75 %
- **Total % of Impact Area Offset –** 149.58%

TECHNICAL SURVEY METHODOLOGIES

Koala Habitat - Modified Habitat Quality Assessment Tool

The offset property 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. 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.

The modified habitat quality assessment (MHQA) combines the three (3) core indicators into two (2) (site condition and site context) with each Site Condition being weighted 40% of the final score and Site Context being weighted 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 has been added to the MHQA to better incorporate MNES, and for the purpose of this preliminary documentation, the vulnerable-listed Koala MNES. The following section details the methodology utilised to assess the site condition, site context and species stocking rate under the MHQA.

Site Condition (30 %)

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 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;
- quality and availability of food and foraging habitat; and
- quality and availability of shelters.

Assessment methodology of the above condition characteristics do not differ from the traditional habitat quality assessment. In developing the MHQA to better incorporate MNES, two (2) species habitat index characteristics, being, quality and availability of food and foraging habitat and quality and availability of shelters have been added to the site condition indicator.

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.

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.

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 Koala carrying capacity of the site at the time of undertaking the survey. Given the discreet nature of the Koala 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. **Table 2** outlines the attributes utilised to assess species stocking rate.

Table 2: Species Stocking Rate 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
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
Total Species Stocking Rate Score	/70
Species Stocking Rate Score – out of 4	

PROJECT DESCRIPTION

Table 3 provides details on the impact area:

Table 3: Details on impact area

Address	254 Barrams Road, Ripley
RPD	Lot 108 on M3174
Project Area	24.94 ha
Impact Area	16.38 ha

APD Projects Pty Ltd ('the Proponent') is proposing to develop a residential community on land located at 254 Barrams Road, South Ripley, described as Lot 108 on M3174. The site is located within the 'Urban Living' zone of the Ripley Valley Priority Development Area (RVPDA) and the broader surrounding area includes residential developments, future sports precinct and town centre with shopping precinct. A portion of 'Environmental Protection' zone mapped under the PDA is located within the referral area.

The referral area encompasses the entire lot and accounts for a total of 24.94 hectares (ha). The proposed action involves the creation of a residential development within the 'Urban Living' zone of the RVPDA. The proposed action includes mixed-density residential dwellings, linear parks, environmental protection area, sub arterial road, internal road network, and supporting infrastructure. This will involve the construction of 220 dwellings.

The referral area is located in a highly degraded landscape containing fragmented ecological values dominated by historic and ongoing agricultural land uses. The site is bound by Barrams Road to the south, Cumner Road to the east, rural landscape to the west and east and mapped Category C (high value regrowth) and Category B (remnant) vegetation to the north. The site itself does not contain regulated vegetation.

The impact area is contained to the construction of the residential allotments, internal roads and local parks, totalling 16.38 ha. The balance of the referral area is linear park containing the site's drainage lines and conservation land in the north-east corner together totalling 9.55 ha that will be retained and rehabilitated for ongoing habitat and connectivity value. Notably, 0.55 ha along the Barrams Road frontage will be lost to the trunk upgrade of Barrams Road, which is a separate action.

Open Linear Park Areas – Encompasses the park areas either side of the major and minor waterways on the site. The park will retain existing trees to provide for site amenity and ecological connectivity and be rehabilitated. The major corridor runs east to west (north of the development) and will maintain the linkage to Bundamba Creek corridor, and the minor corridor runs south to north (through the development) and will assist with flood management across the application area.

Environmental Protection Area – Portions of the broader site are to be retained to provide ongoing environmental values as per the intent of the Development Scheme. The preservation of these areas is intended to augment the values preserved within adjoining landscapes. The over-arching design philosophy of the site layout is to concentrate development impacts within the lower value areas across the property to enable genuine and robust

protection of the Significant Biodiversity Values in the major waterway area and along the ground truthed remnant regional ecosystem. This will ensure that areas of greater habitat value within the development area will remain connected and intact. The concentration of impacts away from these values integrates environmental features within development zones. Any habitat losses are to be compensated by retention of trees within proposed park area and the ground truthed remnant regional ecosystem, and rehabilitation works within retained areas

OFFSET PROPERTY DESCRIPTION

The offset property (Rosevale) is located on Tarome Road, Tarome. The property is within the Scenic Rim Regional Council and is approximately 9.5 km north-west of Aratula. Rosevale is contained on the following allotments:

- Part of Lot 1/CC3571
- Lot 103/CH311061
- Lot 115/SP167206
- Lot 116/SP167206
- Lot 211/CH311636
- Lot 229/CH312601
- Lot 24/CH312265
- Lot 230/CH312495
- Lot 4/RP31137
- Lot 71/CH311061
- Lot 72/CH311061
- Lot 77/CH311086
- Lot 9/CH311910
- Lot 86/RP234513
- Lot 68/CH311061

For this offset strategy, the proposed offset area is contained on the following allotments of the offset property:

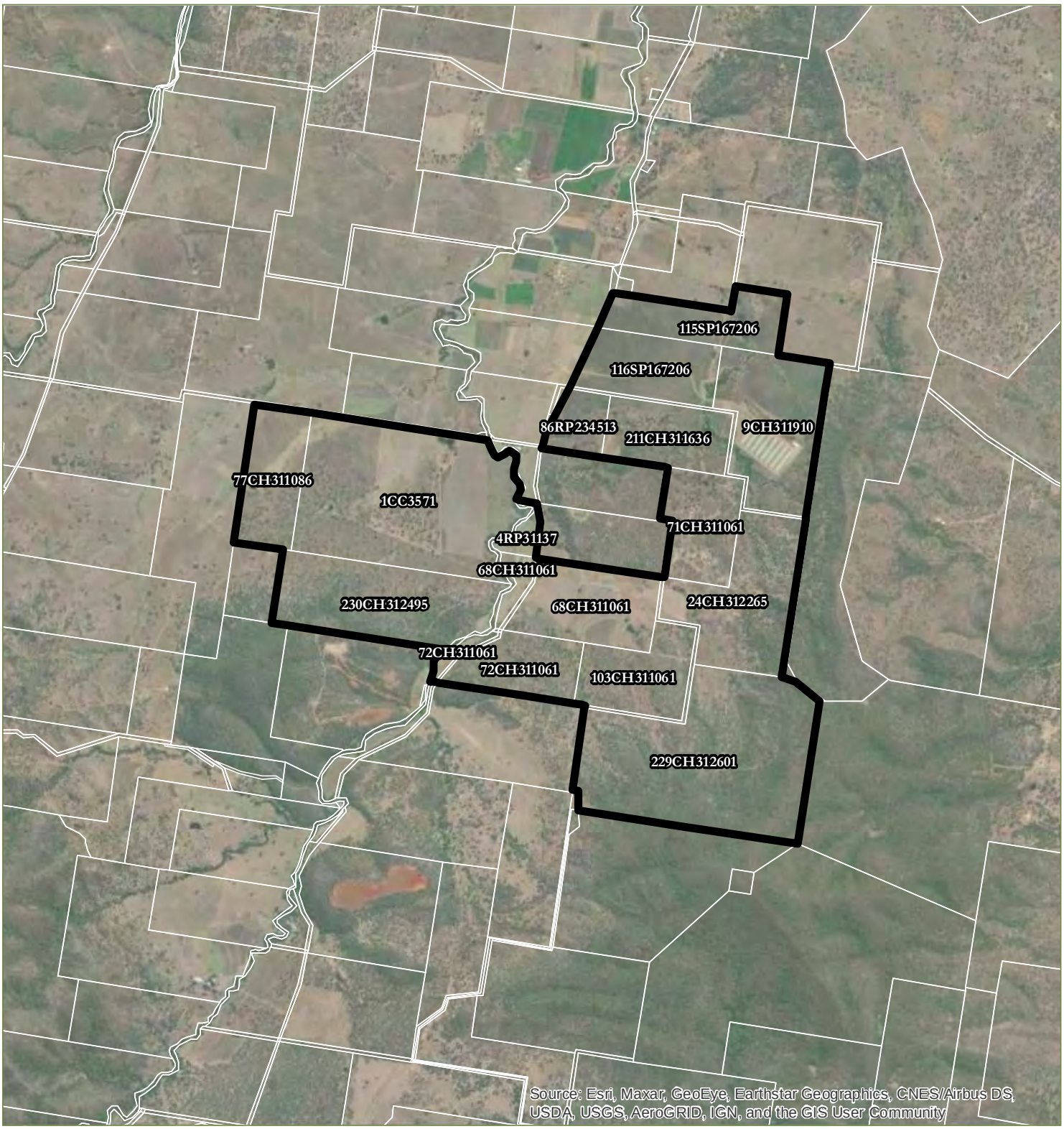
- Lot 115/SP167206

Refer to **Figure 1** for the offset property aerial imagery and **Figure 2** for the offset area.

The land tenure of Rosevale is freehold, where it retains a rural land use zoning under the Scenic Rim Planning Scheme 2020. The offset property can be accessed via Tarome Road which is a rural road starting in the Aratula town centre. From boundary to boundary, the offset property is located approximately 46 km south-west of the impact site (refer to **Plan 1** for the context assessment).

For baseline habitat areas at the impact site and offset property, refer to **Plan 5** and **Plan 6**.

Figure 1 Site Context



Montauban Environmental Offsets

N
W E
S

1:35,000

0 150 300 600 900 1,200
Meters

Cordinate System: GDA2020 MGA Zone 56

DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED.

Location/Adress: Aratula, QLD

Date: 27/04/2022

Figure Name: Figure 1 Site Context V1

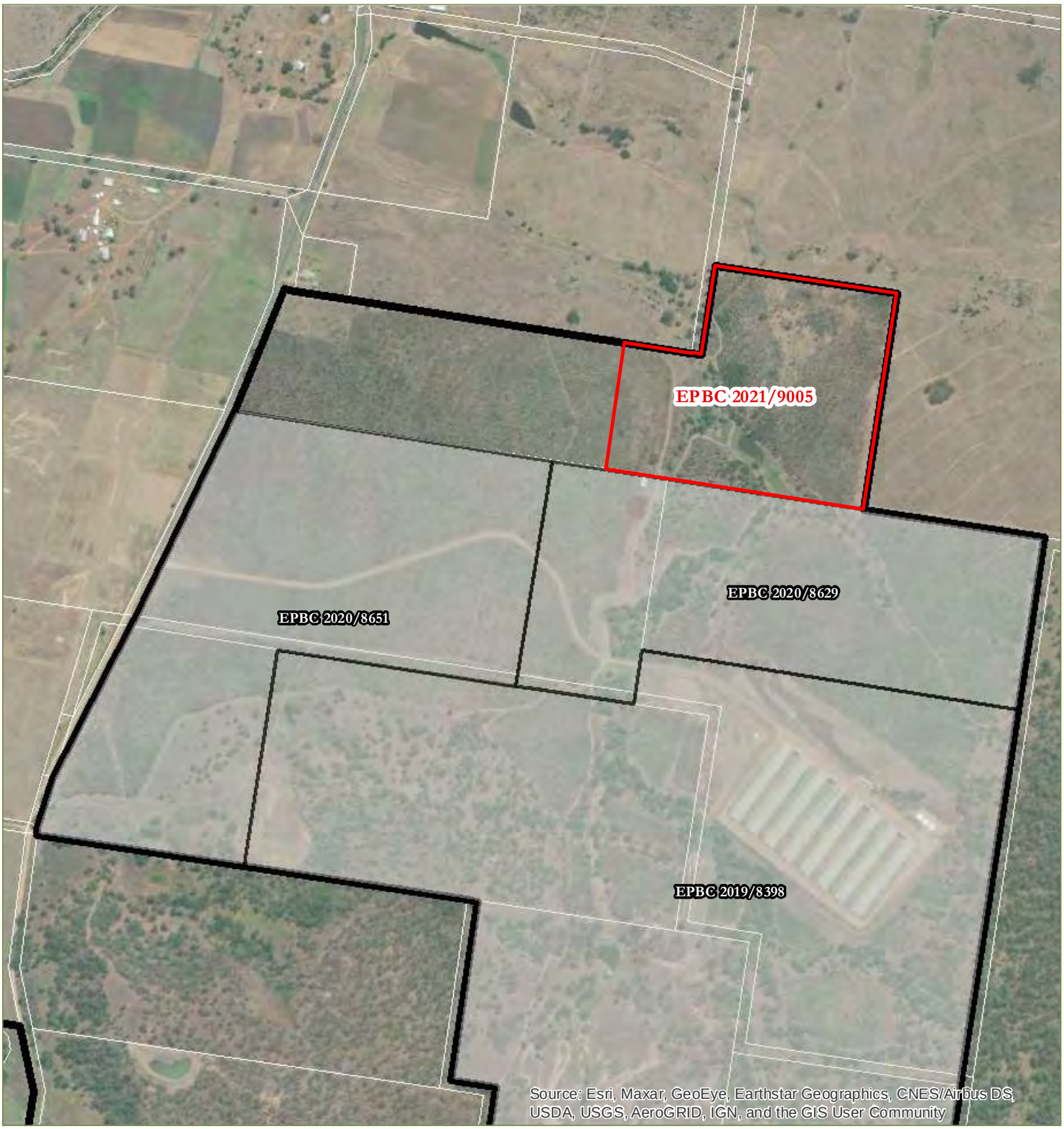
References:
© State of Queensland, 2022

Legend

Offset Area DCDB

Qld DCDB

Figure 2 Site Aerial



Montauban Environmental Offsets

N
W E
S

1:10,000

0 50 100 200 300
Meters

Cordinate System: GDA2020 MGA Zone 56

DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED.

Location/Adress: Aratula, QLD

Date: 27/04/2022

Figure Name: Figure 2 Site Aerial V1

References:
© State of Queensland, 2022

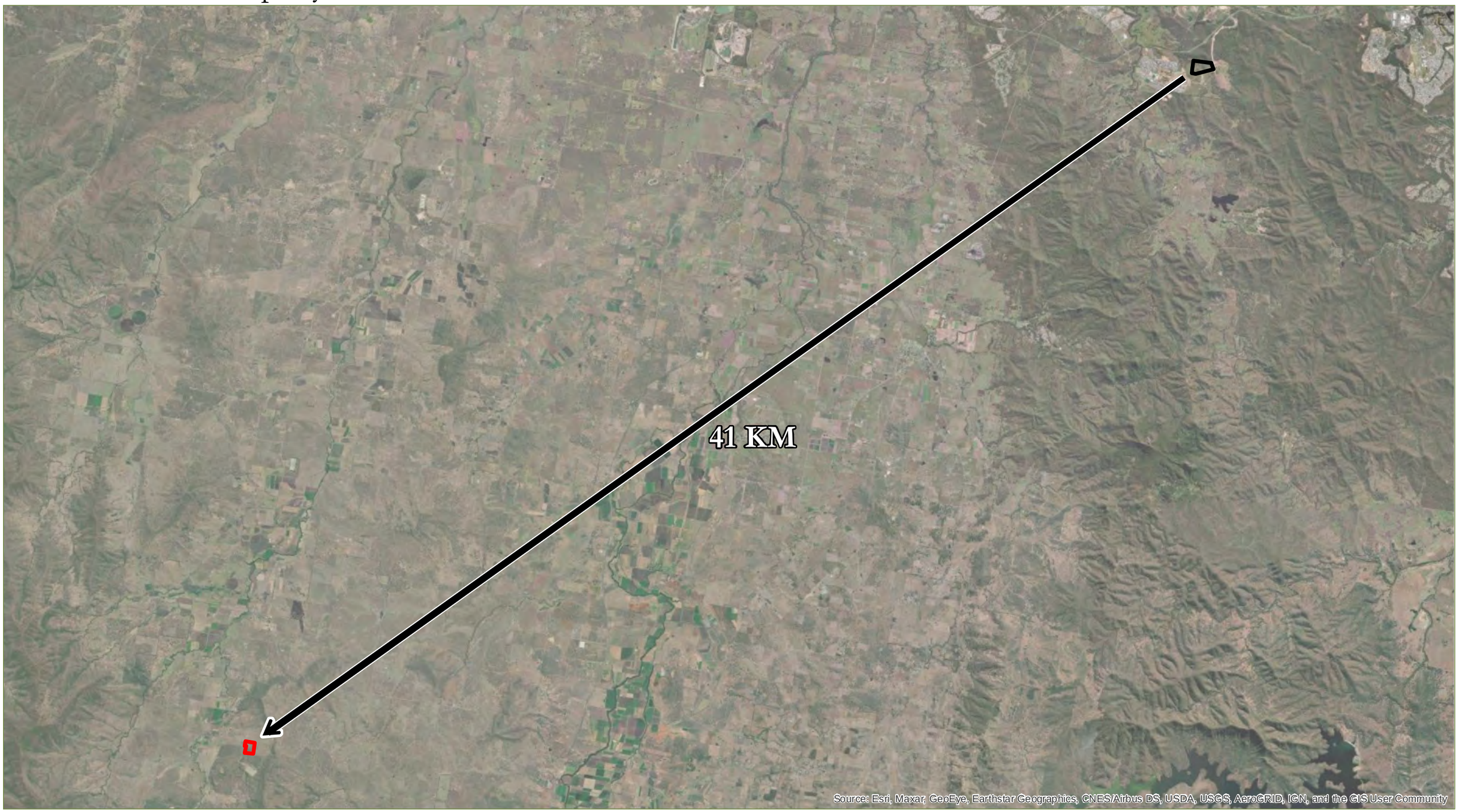
Legend

- Offset DCDB
- Qld DCDB
- Offset Area
- Surrounding Approvals

IMPACT AND OFFSET SUMMARY

MNES	EPBC Act status	Impact area (ha)	Impact site quality score (/10)	Quantum impact area (QI ha)	Offset property start quality score (/10)	Offset property quality without offset (/10)	Offset property quality with offset (/10)	Offset assessment unit area and % of liability provided
Koala	VUL	16.38	2/10	3.28	AU1 – 2.08/10 (rounded to 2.00)	AU1 – 1/10	AU1 – 5/10	AU1 (17 ha) – 149.58% **Total – 149.58%**

Plan 4 Offset Property Context Plan



Montauban Environmental Offsets

N
W E
S

0 1 2 4 Kilometers

1:130,000

Cordinate System: GDA2020 MGA Zone 56

DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED .

Location/Adress:Aratula, QLD

Date: 27/04/2022

Plan Name: Plan 4 Property Context V1

References:
© State of Queensland, 2022

Legend

Impact Area

Offset Area

Plan 5 Assessment Units

Montauban Environmental Offsets

N
W E
S
0 25 50 100 Meters

1:3,000

Cordinate System: GDA2020 MGA Zone 56

DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED .

Location/Adress:Aratula, QLD

Date: 27/04/2022

Plan Name: Plan 5 Assessment Units V1

References:
© State of Queensland, 2022
© Nearmap, 2021

Legend

Referral Area

Qld DCDB

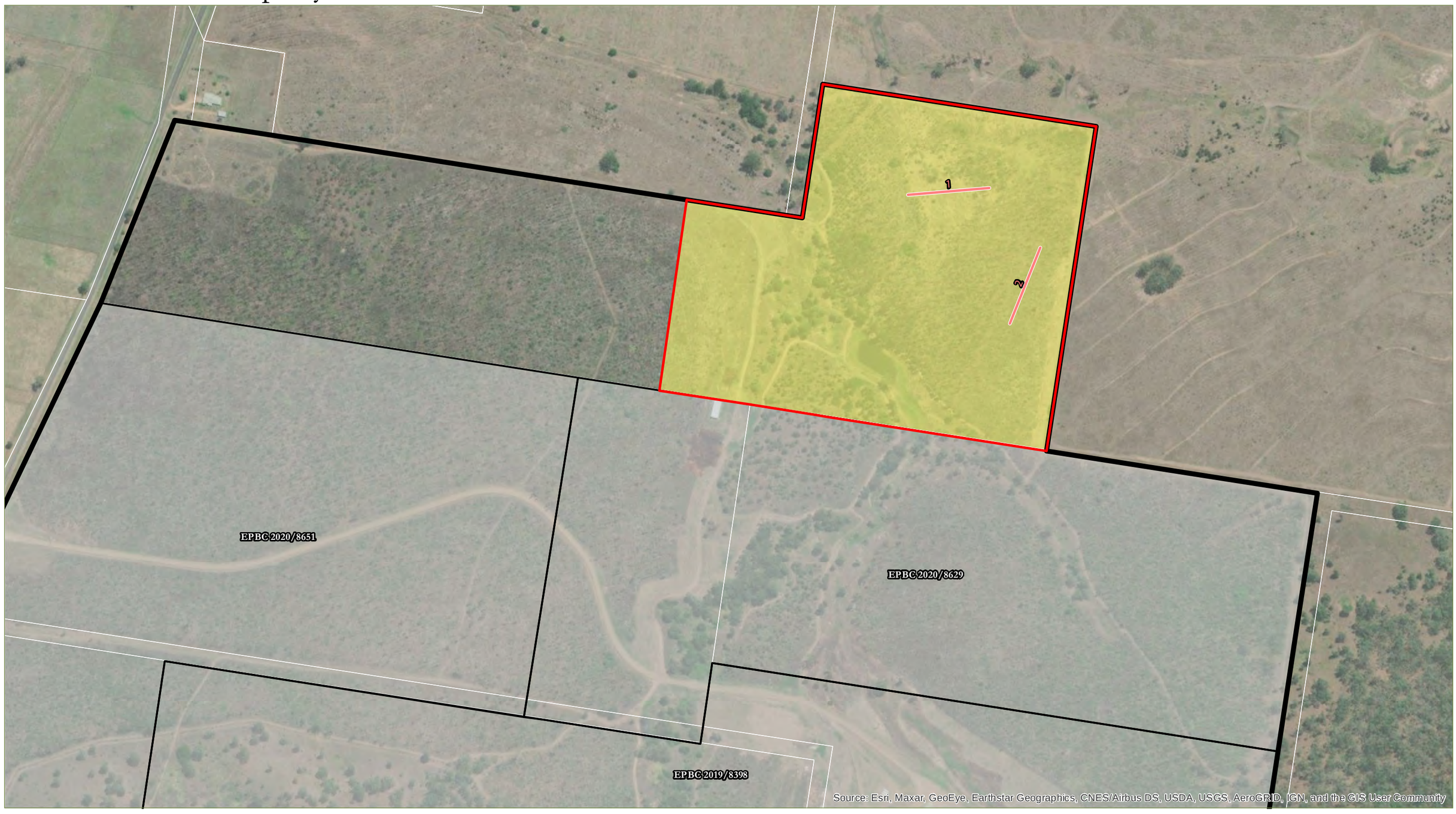
Vegetation Assessment Units

AU1 Regrowth Eucalypt Woodland - 10.85 ha

AU2 Open Paddock with Scattered Trees - 13.54 ha

Trunk Sewer Road Acquisition - 0.55 ha

Plan 6 Offset Property Offset Assessment Unit



Montauban Environmental Offsets

N
W E
S

0 25 50 100 150 Meters

1:4,500

Cordinate System: GDA2020 MGA Zone 56

DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED .

Location/Adress: Arratula, QLD

Date: 11/05/2022

Plan Name: Plan 7 Offset Assessment Units V1

References:
© State of Queensland, 2022

Legend

- Offset DCDB
- Qld DCDB
- Offset Area
- Surrounding Approvals
- Assessment unit area [71 ha]
- Modified habitat quality transect

OFFSET MANAGEMENT DETAILS

IMPACT AREA DESCRIPTION

The site is located within the 'Urban Living' zone of the Ripley Valley Priority Development Area (RVPDA) and the broader surrounding area includes residential developments, future sports precinct and town centre with shopping precinct. A portion of 'Environmental Protection' zone mapped under the PDA is located within the referral area.

The referral area encompasses the entire lot and accounts for a total of 24.94 hectares (ha). The proposed action involves the creation of a residential development within the 'Urban Living' zone of the RVPDA. The proposed action includes mixed-density residential dwellings, linear parks, environmental protection area, sub arterial road, internal road network, and supporting infrastructure. This will involve the construction of 220 dwellings.

The referral area is located in a highly degraded landscape containing fragmented ecological values dominated by historic and ongoing agricultural land uses. The site is bound by Barrams Road to the south, Cumner Road to the east, rural landscape to the west and east and mapped Category C (high value regrowth) and Category B (remnant) vegetation to the north. The site itself does not contain regulated vegetation.

The impact area is contained to the construction of the residential allotments, internal roads and local parks, totalling 16.38 ha. The balance of the referral area is linear park containing the site's drainage lines and conservation land in the north-east corner together totalling 9.55 ha that will be retained and rehabilitated for ongoing habitat and connectivity value. Notably, 0.55 ha along the Barrams Road frontage will be lost to the trunk upgrade of Barrams Road, which is a separate action.

Open Linear Park Areas – Encompasses the park areas either side of the major and minor waterways on the site. The park will retain existing trees to provide for site amenity and ecological connectivity and be rehabilitated. The major corridor runs east to west (north of the development) and will maintain the linkage to Bundamba Creek corridor, and the minor corridor runs south to north (through the development) and will assist with flood management across the application area.

Environmental Protection Area – Portions of the broader site are to be retained to provide ongoing environmental values as per the intent of the Development Scheme. The preservation of these areas is intended to augment the values preserved within adjoining landscapes. The over-arching design philosophy of the site layout is to concentrate development impacts within the lower value areas across the property to enable genuine and robust protection of the Significant Biodiversity Values in the major waterway area and along the ground truthed remnant regional ecosystem. This will ensure that areas of greater habitat value within the development area will remain connected and intact. The concentration of impacts away from these values integrates environmental features within development zones. Any habitat losses are to be compensated by retention of trees within proposed park area and the ground truthed remnant regional ecosystem, and rehabilitation works within retained areas

The site is mapped as Category X (non-remnant) vegetation under the rectified Property Map of Assessable Vegetation. The site is confirmed to be mostly cleared with scattered trees, with a portion of regrowth eucalypt woodland. Pre-clear RE mapping indicates the site was historically comprised of Of Concern RE12.9-10.7 and Endangered RE12.3.3, described below:

- RE12.9-10.7: *Eucalyptus crebra +/- E. tereticornis, Corymbia tessellaris, Angophora leiocarpa, E. melanophloia woodland. Occurs on Cainozoic and Mesozoic sediments. (BVG1M: 13c)*
- RE12.3.3: *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. (BVG1M: 16c)*

The regrowth eucalypt woodland portion of the site contained species consistent with pre-clear RE12.9-10.7 with elements of RE12.3.3 in gully lines. The canopy vegetation where present was dominated by *Eucalyptus tereticornis* (Forest Red Gum) with *E. crebra* (Narrow-leaved Grey Ironbark). Other observed eucalypt species were *E. moluccana* (Gum-topped Box), *Corymbia intermedia* (Pink Bloodwood), *C. tessellaris* (Moreton Bay Ash) and *Lophostemon suaveolens* (Swamp Box). This extended from the southern central portion of the site to the north-west of the site. The woodland was observed to be highly disturbed, with cleared tracks and a high weed presence. The groundcover contains a mix of native and weed species, with the dominant species including *Lantana camara* (Lantana), *Baccharis halimifolia* (Groundsel Bush), *Heteropogon contortus* (Black Speargrass), *Aristida vagans* (Threeawn Speargrass), *Imperata cylindrica* (Blady Grass) and *Lobelia purpurescens* (White Root).

The majority of the area described as Land Zone 3 was largely devoid of native vegetation with only some scattered *E. tereticornis* and *E. moluccana* observed. The ground and shrub layer was dominated by weed species *Baccharis halimifolia* (Groundsel) which is a restricted weed under the *Biosecurity Act 2014*. Two (2) flow paths intersect the site within Land Zone 3 running from south to north. These were found to be highly disturbed and eroded.

The balance of the site consists of open paddock.

Refer to **Plan 5** for the assessment units identified on the impact site.

The proposed action will result in the direct clearing and loss of 16.38 ha of koala habitat. Refer to **Plan 7** for the proposed action impact plan.

Plan 7 Proposed Action Impact Area

Montauban Environmental Offsets

N
W E
S

0 25 50 100 Meters

1:3,000

Cordinate System: GDA2020 MGA Zone 56

DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED .

Location/Adress:Aratula, QLD

Date: 27/04/2022

Plan Name: Plan 6 Impact Area V1

References:
© State of Queensland, 2022
© Nearmap, 2021

Legend

Referral Area

Qld DCDB

Vegetation Community Impacts

Open paddock with scattered trees within works extent - 10.36 ha

Habitat within works extent critical to the survival of the Koala - 6.02 ha

IMPACT ASSESSMENT TABLE

MHQA Final Weighting	Assessment Unit 1	Assessment Unit 2
Site Condition (/3)	1.50/3.00	0.78/3.00
Site Context (/3)	1.55/3.00	1.23/3.00
Species Stocking Rate (/4)	0.00/4.00	0.00/4.00
Assessment Unit Area (ha)	6.02	10.36
Total Impact Area (ha)	16.38	16.38
Size Weighting	0.37	0.632
AU Weighted Score	1.12	1.27
Total Weighted Score	**2.39**	

OFFSET PROPERTY DESCRIPTION

The offset property, Rosevale, comprises of mixed vegetation values, ranging from cleared open paddocks and dead plantation trees, through to regrowth and remnant open eucalypt forest. The offset area for this project consists of entirely open paddocks and dead plantation trees (refer to **Plan 6** for the assessment units).

Topography

The Rosevale offset property is characterised by a high point located in the south-eastern corner of the site (Lot 229/CH312601) which slopes to west, where the low point is associated with the Bremer River. The balance of the offset property is considered undulating, where there are timbered hills and cleared gully lines.

Water Resource(s)

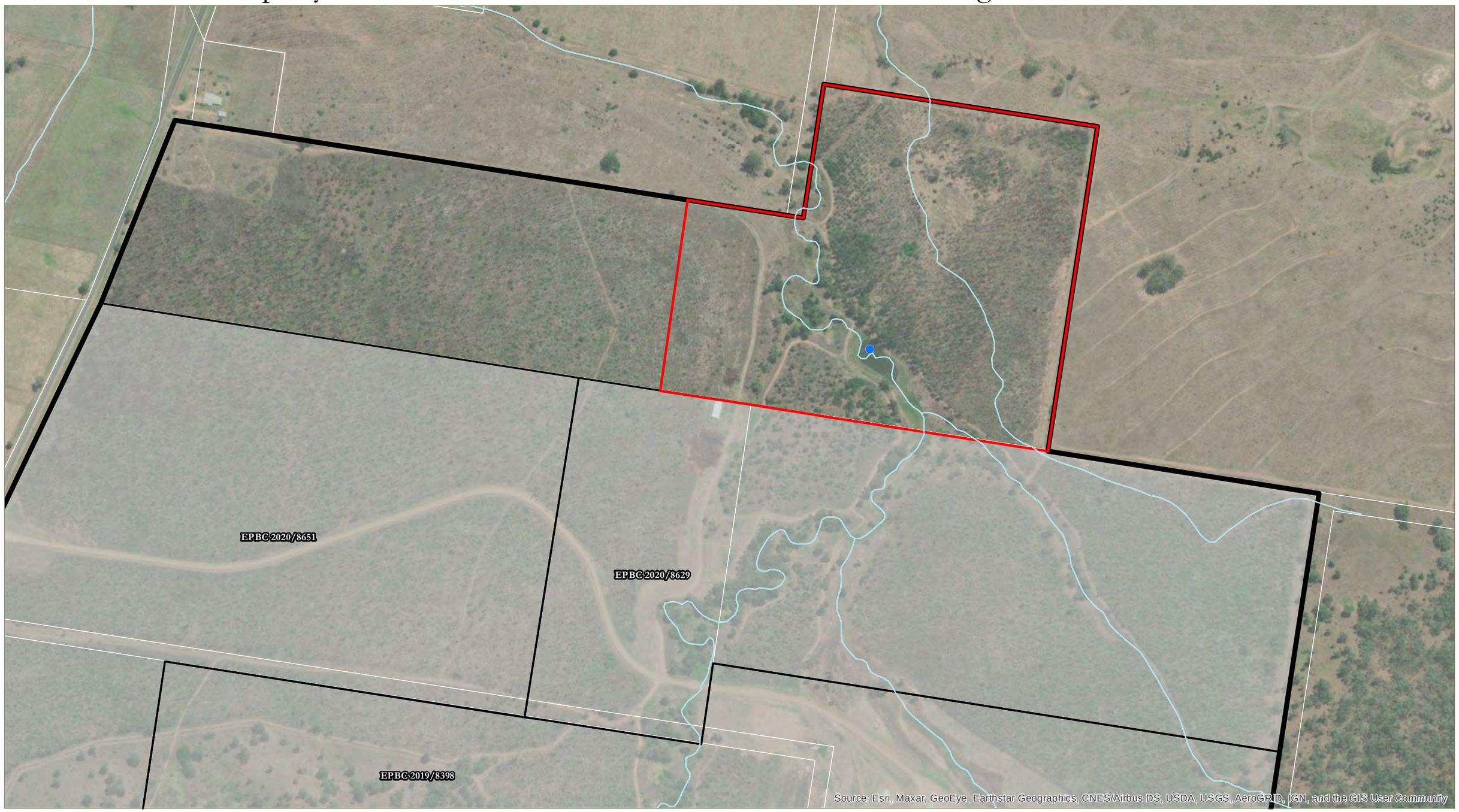
The Rosevale offset property contains numerous man-made farm dams which have been utilised for historic cropping and agricultural purposes. Natural water resources on-site are defined by the Bremer River which straddles the eastern boundary of the western parcels of the Rosevale offset property (Lot 230/CH312495 and Lot 1/CC3571). Refer to **Plan 8** for identification of the water resources on the offset property.

Landscape Context Values

The offset property is located approximately 9 km north-west of Aratula and adjoins a large tract of remnant vegetation associated with Mount Fraser to the south and Main Range National Park to the west. The offset property and restoration efforts will improve and promote east-west connectivity into the National Park, providing critical habitat refugia for native fauna. Presently, the offset property forms part of a greater than 10,000 ha contiguous landscape of native regrowth and remnant vegetation (refer to **Plan 9** for the contiguous landscape plan).

Review of publicly available data (QLD BioMaps & Atlas of Living Australia) indicate that there are numerous historical and recent koala sightings surrounding the site (refer to **Plan 3.2**). Of particular interest, Atlas of Living Australia (2021) identifies nine koala sightings to the immediate west of the offset property associated with Parsons Gate Road, with seven of the sightings recorded in November and December 2019. This data indicates that the vegetation on and surrounding the offset property is suitable habitat for the koala, and more importantly, the creation and enhancement of the east-west corridor connection to the Main Range National Park is an important outcome in achieving a positive conservation gain for the species and the genetic diversity of the koala population in the Aratula and Scenic Rim locality.

Plan 8 Offset Property Water Resources and Indicative Offset Area Fencing



Montauban Environmental Offsets

N
W E
S

0 25 50 100 150 Meters

1:4,500

Cordinate System: GDA2020 MGA Zone 56

DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED .

Location/Adress:Arratula, QLD

Date: 11/05/2022

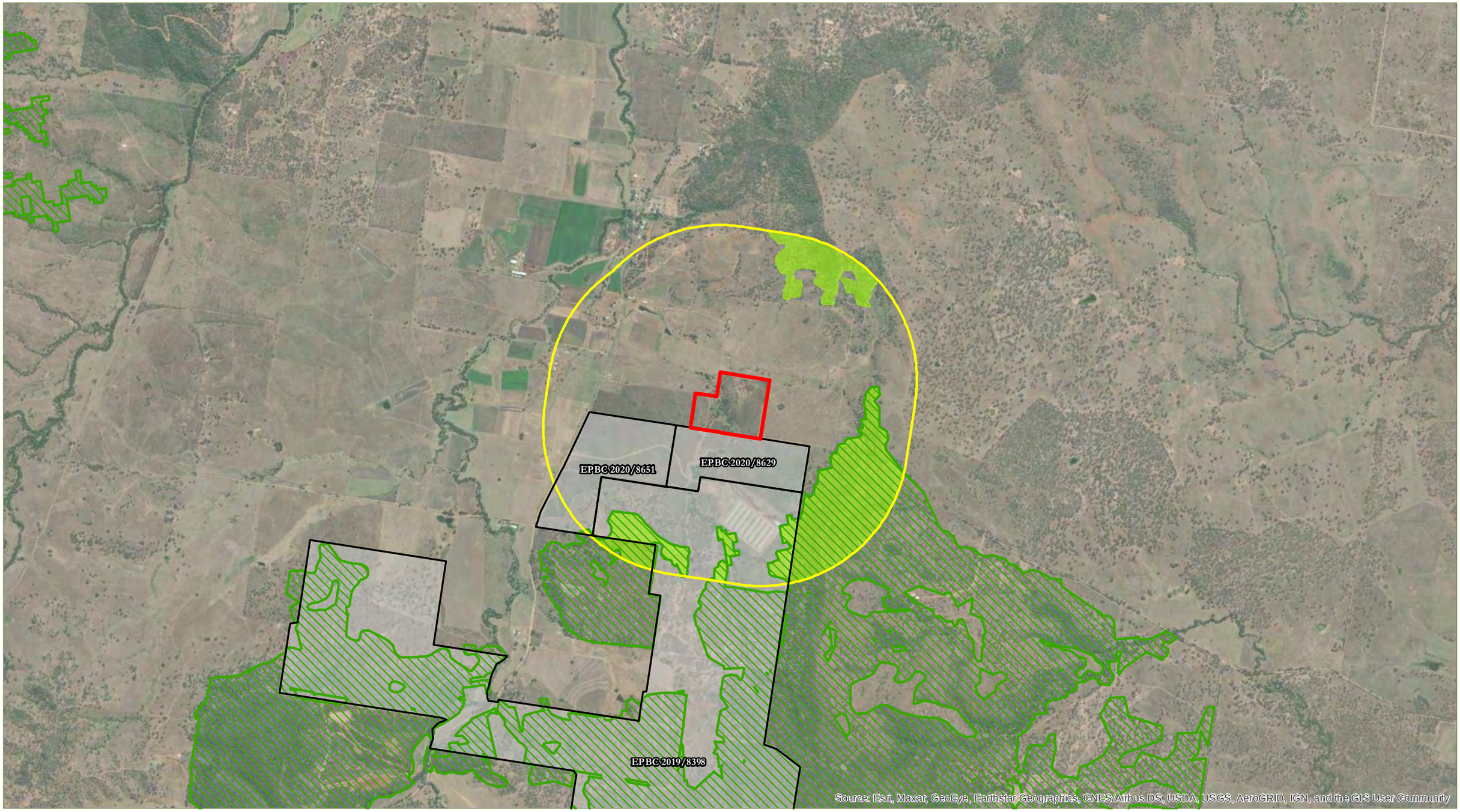
Plan Name: Plan 8 Water Rescources V1

References:
© State of Queensland, 2022

Legend

- Offset DCDB
- Qld DCDB
- Indicative Offset Area Fencing
- Surrounding Approvals
- Creeks and Drainage Features

Plan 9 Offset Site Koala Context Assessment



Montauban Environmental Offsets

N
W E
S

0 250 500 1,000 Meters

1:25,000

Cordinate System: GDA2020 MGA Zone 56

DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED .

Location/Adress:Aratula, QLD

Date: 11/05/2022

Plan Name: Plan 9 Context Assessment V1

References:
© State of Queensland, 2022

Legend

- Offset Area
- Surrounding Approvals
- Site 1km Buffer
- Percentage of Koala Critical habitat within 1km of Referral area (18%)
- Size of Koala critical habitat patch >200m corridor connectivity (>200 ha)
- Percentage of Referral area boundary length supporting a koala critical habitat connection off and on site - 0%

Assessment Unit Descriptions

The offset area associated with this project is characterised by one distinct assessment unit:

- Assessment Unit 1 – Historically cleared open paddocks and dead plantation trees;

Refer to **Plan 7** for the assessment units on the offset property and the habitat quality transect locations.

Assessment Unit 1 – Historically cleared open paddocks and dead hardwood plantation trees

Assessment Unit (AU) 1 consists of historically cleared open paddocks and dead hardwood plantation trees. This AU is characterised by its lack of native tree, shrub and forb species, with only native grass species such as, *Heteropogon refractus, imperata cylindrica* and *Themeda triandra* present (refer to **Photo Plate 1 – 4**). This AU contains heavy weed infestations, with *Lantana camara* infestations observed throughout the offset property. AU 1 contains no MNES habitat values for the koala. This is further supported by the lack of koala evidence recorded during site surveys when implementing the SAT methodology.

Photo Plate 1: Dead hardwood plantation trees.

Photo Plate 2: Dead hardwood plantation trees, Lantana infestations and cleared open paddock.

Photo Plate 3: Historically cleared open paddock.

Photo Plate 4: Historically cleared open paddock adjoining regrowth vegetation.

Assessment Unit Habitat Quality

The one assessment unit was assessed utilising the MHQA method to determine the baseline habitat quality score. A summary of the habitat quality of the Rosevale offset area is included in **Table 4**.

Table 4: Offset property MHQA Summary

	Assessment Unit 1
Site Condition (/3)	0.68/3.00
Site Context (/3)	0.43/3.00
Species Stocking Rate (/4)	0.29/4.00
Total (/10)	**1.39/10.00**

Current Management Arrangements

Presently, the Rosevale offset property is utilised for poultry farming, hardwood plantation, cattle grazing and cropping. A description of the current management arrangements is included below. Further, refer to **Plan 10** which identifies the location of the current management arrangements.

Poultry Farming

Presently, the offset property retains existing poultry farming operations. The poultry farming operations have been occurring on the offset property since 2018. The poultry farming operations consist of 8 commercial broiler sheds with a capacity of approximately 360,00 birds. A Development Application has been approved for a further 8 sheds (360,00 birds) which will be constructed in the next 2 years. This current management arrangement results in an intensive agricultural function on a large portion of land, which is retained and utilised for other compatible uses. Refer to **Plan 10** for the location of the poultry farming operations on the offset property.

Hardwood Plantation

The offset property contains approximately 110 ha of land which has historically been utilised for hardwood plantation. The hardwood plantation consisted of native eucalypt species, which were planted in 2009, and then harvested and sold for commercial uses. The hardwood plantation management arrangement is a popular use in the surrounding area. The most recent hardwood plantation was impacted during a property maintenance burn which damaged the plantation stock and it was unable to be harvested for commercial purposes. The financial incentive of hardwood plantation surrounding the poultry farming operations deems this a viable land management arrangement. Refer to **Plan 10** for the hardwood plantation management area.

Cattle Grazing

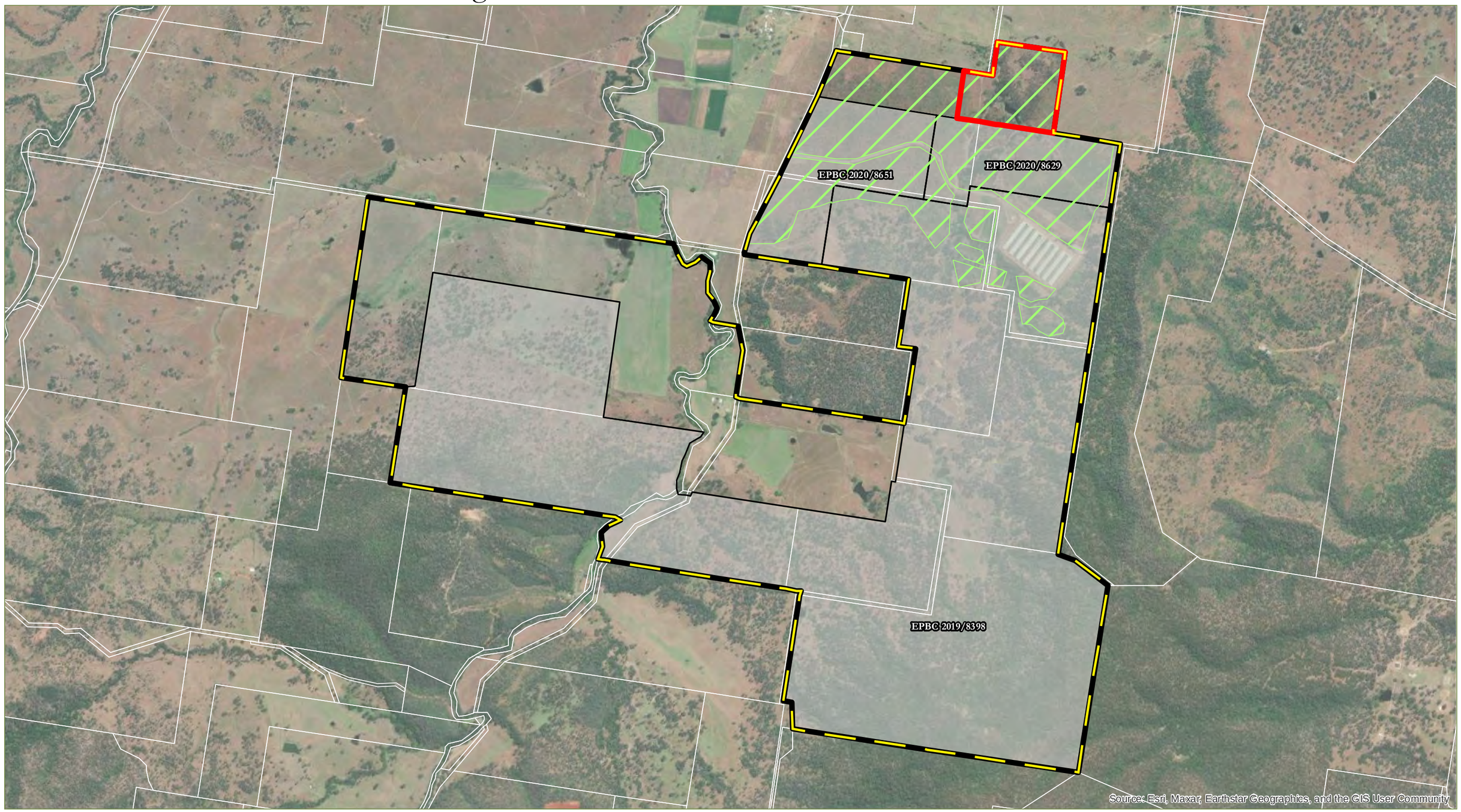
The rural designation, undulating landscape and historically cleared open paddocks of the offset property provide for suitable cattle grazing practices. The offset property has a cattle carrying capacity of approximately 300 head of cattle. The cattle grazing management arrangement compliments the poultry farming and hardwood plantation land uses, with no loss in cattle grazing capacity. The cattle grazing management practices occurs over the entirety of the offset property.

Cropping

The western offset property parcel (Lot 1 / CC3571) which is bound by the Bremer River on the eastern property boundary contains suitable land type and topography to facilitate agricultural cropping. Given the accessibility

to water (Bremer River) and compatibility for cropping uses, the flat land on Lot 1 / CC 3571 is suitable for an intensive management action, which compliments other compatible land uses on the offset property. The ability to undertake agricultural cropping on the offset property allows the landholder to provide feed for or fatten the cattle on-site. Refer to **Plan 10** for the location of the cropping use on the offset property.

Plan 10 Offset Area Current Management Activities



Montauban Environmental Offsets

N
W E
S

0 100 200 400 600 Meters

1:18,130

Cordinate System: GDA2020 MGA Zone 56

DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED .

Location/Adress:Aratula, QLD

Date: 22/07/2022

Plan Name: Plan 10 Management Activities V2

References:
© State of Queensland, 2022

Legend

- Offset DCDB
- Qld DCDB
- Offset Area (17 ha)
- Surrounding Offset Proposals
- Cattle Grazing
- Historical Hardwood Plantation Area
- Existing and Approved Poultry Sheds

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 on the offset property is feral dogs. The Department of Agriculture and Fisheries (DAF) lists feral dogs as abundant and widespread throughout the Scenic Rim region. Wild dogs (*Canis familiaris dingo, Canis familiaris dingo X Canis familiaris, Canis familiaris*) are listed as declared pest animals by Scenic Rim Regional Council, with the local council website documenting that the impact of wild dog activity has increased in the past 10 years due mainly to the increasing population in the region. Further, residents are increasingly engaged in raising livestock and poultry, resulting in a readily available food sources for wild dogs (SRRC 2021). The Scenic Rim Regional Council currently runs baiting, shooting and trapping programs throughout the region.

Presently, under the *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 (ie. 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 (ie. the expenditure to undertake feral animal control would not result in enough economic gain in productivity to warrant implementation).

Evidence of wild dog was recorded on the offset property (refer to **Photo Plate 5**). Research by Pest Animal Management QLD (2020) found that the Scenic Rim region contains an abundance of wild dogs, with evidence indicating that calf predation has increased significantly.

Photo Plate 5: Wild dog evidence recorded on the offset property.

Other threats include:

- Clearing and harvesting of hardwood eucalypt plantation, and
- Significant weed infestations, in particular, *Lantana camara.*

ROSEVALE OFFSET AREA 1 MANAGEMENT ACTIONS

There are five (5) management actions identified as relevant and necessary for the ROA 1 to achieve outcomes which will benefit MNES and in particular, the Koala. The management actions focus on the recreation of habitat for the Koala, while also reducing threats to the Koala. Although there may be overlap between some of the management actions, all management actions are considered to contribute to the improvement of Koala habitat on ROA 1.

Where logical, performance indicators have been transcribed from the Offset Assessment Chapter included in the Preliminary Documentation Submission (*Saunders Havill Group, 2022*). This includes the use of the *Modified Quality Habitat Assessment* (MQHA) method for Koala habitat to set benchmarks and targeted improvements within the ROA 1.

Actions to be completed in accordance with this OMP include:

- **Management Action 1:** Feral Animal Control (primarily targeting wild dogs)
- **Management Action 2:** Weeds of National Significance Control (reduction and management)
- **Management Action 3:** Livestock Control
- **Management Action 4:** Access and Trespass Management
- **Management Action 5:** MNES Habitat Restoration

The following detailed information is included in the following sections:

- Management action outcome;
- Management action location;
- Management action tasks and completion criteria;
- Management action risk reduction measures;
- Management action timing and preliminary completion criteria;
- Management action responsibility;
- Management action monitoring; and
- Management action risks and adaptive management.

A summary table of the management measures and commitments is included in **Table 5** below. It should be noted that all management measures are to be completed across the entirety of the ROA 1.

Table 5: Summary of Management Actions and Commitments

	Completion Criteria	Preliminary Completion Criteria	Monitoring Activity
Management Action 1 – Feral Animal Control			
Year 1	Complete detailed baseline / seasonal feral animal management survey(s)	Baseline of pest animals established; Quarterly or bi-annually meeting organised with SRRC or the Regional Pest Management Representative; Finalise the Pest Management Implementation Strategy.	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
	Consult Scenic Rim Regional Council and / or the Regional Pest Management Representative		
	Develop a Pest Management Implementation Strategy		
Year 5	Replicate the Year 1 detailed baseline / seasonal pest management survey(s) to demonstrate less than 5% of the Year 1 baseline survey results.	Implement the Pest Management Implementation Strategy (Year 2 - 5); Demonstrate that pest animals have been reduced to less than 5% of the year 1 baseline survey results.	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Year 10, 15 & 20	Repeat the baseline surveys in year 10, 15 and year 20 to demonstrate a maintenance of year 5 statistically reduced vertebrate pest species incidence and or occurrence below the 5%-year 1 baseline survey results.	Implement the Pest Management Implementation Strategy (Year 5 - 20); Continue to demonstrate that pest animals have been reduced to less than 5% of the year 1 baseline survey results.	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Adaptive Management	If greater than 5% of the baseline pest survey results remain in the Year 5 survey and reporting, Year 10 survey results to demonstrate that the less than 5% of the baseline survey has been achieved.		Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Management Action 2 - Weeds of National Significance Control			
Year 1	Complete detailed baseline / weed extent surveys utilising an antenna based GPS system	Complete mapping of all *Lantana spp*. infestations across the ROA 1; Detailed maps identifying the extent of *Lantana spp.* infestations; Specific total area of *Lantana spp.* infestations within the ROA 1; Exclusion of stock from the ROA 1	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website

Year 5	Replicate Detailed Weed Extent Re-Survey through the ROA 1 – Include plans and calculations in the Year 5 OAAR demonstrating less than 5% of the ROA 1 area to contains weed infestations.	Demonstrate that woody weed coverage across ROA 1 has been reduced by 95%; Demonstrate that all stock has been excluded from the ROA 1;	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Year 10	Replicate Detailed Weed Extent Re-Survey through the ROA 1 – Include plans and calculations in the Year 10 OAAR demonstrating less than 5% of the ROA 1 area to contains weed infestations	Continue to demonstrate that woody weed coverage across ROA 1 has been reduced by 95%;	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Year 15 & 20	Repeat of Baseline surveys in year 15 and year 20 to demonstrate a maintenance of year 10 significant reductions to the extent of Lantana spp. below 5% of the ROA 1 area to contains weed infestations	Continue to demonstrate that woody weed coverage across ROA 1 has been reduced by 95%;	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Management Action 3 – Livestock Control			
Year 2	Erect fauna friendly exclusion perimeter fencing	Demonstrate that the fencing is completed in year 1 and 2 until the entire ROA 1 is fenced;	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Other	Annual inspection of the fencing integrity and stock breaches	Nil stock breaches into the ROA 1 from Year 3 - Year 20;	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Management Action 4 - Access and Trespass Control			
Year 1	Inspection and rectification of all perimeter fencing Notification of offset areas, purpose and outcomes to all adjoining land holders	Provide evidence of the notification letter issued to the adjoining landholders;	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Other	Access gates and signage to be installed where ROA 1 fencing crosses tracks required to be maintained for access	Installation of access gates and signage throughout the ROA 1 to be completed by Year 2, when Action 3 is completed;	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website

Management Action 5 – MNES Habitat Restoration			
Year 1	Finalise locations, sequence and timing for revegetation program	Revegetation is undertaken where identified to planting specifications and consistent with the pre-clear Regional Ecosystem type; All revegetation will be completed by end of Year 2, with the revegetation area totalling 17.0 ha; Minimum of 90% survival rate of the revegetation stock or equivalent stem density (ie. through natural regeneration) by the Year 10 major monitoring period;	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
	Cultivate and prepare ROA 1 (17.0ha) area in preparation for year 2 planting		
	Create ROA 1 water source for revegetation establishment (purpose located dam or broadscale irrigation)		
	Establish photo monitoring points and protocols for the ROA 1		
Year 2	Complete ROA 1 MNES habitat restoration (17.0ha)		Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Year 5	Replicate transects surveys completed in accordance with the Modified Habitat Quality Assessment (Koala) tool, species stocking rate surveys and photo point monitoring	Demonstrate MNES habitat restoration survival rate; Demonstrate an increase in the MHQA score	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
	For the ROA 1, achieve a MHQA score of 3/10		
Year 10	Replicate transects surveys completed in accordance with the Modified Habitat Quality Assessment (Koala) tool, species stocking rate surveys and photo point monitoring	Demonstrate an increase in the Koala usage in ROA 1 based on the baseline and future increased expected; Demonstrate an increase in the MHQA score.	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
	For the ROA 1, achieve a MHQA score of 4/10		
Year 15	Replicate transects surveys completed in accordance with the Modified Habitat Quality Assessment (Koala) tool, species stocking rate surveys and photo point monitoring	Demonstrate an increase in the Koala usage in ROA 1 based on the baseline and future increased expected; Demonstrate an increase in the MHQA score.	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
	For the ROA 1, achieve a MHQA score of 6/10		

Year 20	Replicate transects surveys completed in accordance with the Modified Habitat Quality Assessment (Koala) tool, species stocking rate surveys and photo point monitoring For the ROA 1, maintain a MHQA score of 7/10	Demonstrate an increase in the Koala usage in ROA 1 based on the baseline and future increased expected; Demonstrate an increase in the MHQA score..	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website
Other			
Annually & Year 5, 10, 15 & 20	Complete Offset Area Annual Reports, with major milestone reporting completed in Year 5, Year 10, Year 15 and Year 20.	Provide the Offset Area Annual Reports to the proponent to be published with the Annual Compliance Report	Offset Area Annual Report (OAAR) to be published in the EPBC Approval Annual Compliance Report and on the Approval Holders website

ACTION 1: FERAL ANIMAL MANAGEMENT

MANAGEMENT ACTION OUTCOME

The Department of Agriculture and Fisheries (DAF) lists feral dogs as abundant and widespread throughout the Scenic Rim region. Wild dogs (*Canis familiaris dingo, Canis familiaris dingo X Canis familiaris, Canis familiaris*) are listed as declared pest animals by Scenic Rim Regional Council, with the local council website documenting that the impact of wild dog activity has increased in the past 10 years due mainly to the increasing population in the region. Further, residents are increasingly engaged in raising livestock and poultry, resulting in a readily available food sources for wild dogs (SRRC 2021). The Scenic Rim Regional Council currently runs baiting, shooting and trapping programs throughout the region.

Presently, under the *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 (ie. 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 (ie. the expenditure to undertake feral animal control would not result in enough economic gain in productivity to warrant implementation).

A core role of the management action 1will be for the prolonged control and reduction in feral dogs over the Rosevale offset property for the offset period.

MANAGEMENT ACTION LOCATION

- Feral animal control will be focussed within ROA 1;
- Incidental feral animal control will be extended to the entire Rosevale offset property if the feral animal control measures are not resulting in the desired results.

MANAGEMENT ACTION TASKS AND COMPLETION CRITERIA

- Reduce the occurrence of feral animal species (namely wild dogs) below the baseline survey in the ROA 1 within 5 years from the commencement of the action;
- Maintain the statistical reduction of feral animal species within the ROA 1 at or below the baseline survey results for the life of the approval; and
- Ensure no koala injury or mortality occurs within the ROA 1 for the life of the approval.

MANAGEMENT ACTION RISK REDUCTION MEASURES

Management actions to reduce the risk of feral animal predation impacts on the Rosevale offset property include:

- Undertake baseline and periodical surveys and monitoring of feral animal populations, locations and dispersal patterns within the Offset property (Survey methods to include – direct observation / remote sensor camera and sand traps for print record). Develop a baseline of feral animal populations and 'hot spots' and key activity periods (eg dusk);
- Develop a purpose built offset property Pest Management Action Plan – method to include trapping, shooting, baiting. Develop an adaptive management approach to pest management which considers each method relative to the base line data collected to determine the most effective pest management measures for the offset property; and
- Undertake stakeholder engagement with immediate land holders to foster joint sub regional scale action plan.

MANAGEMENT ACTION TIMING AND PRELIMINARY COMPLETION CRITERIA

Timing	Preliminary Completion Criteria
Year 1	Complete detailed baseline / seasonal feral animal survey(s)
Year 1	Develop a Pest Management Plan
Year 2 – 5	Implement the Pest Management Plan
Year 5	Replicate the Year 1 detailed baseline / seasonal pest management survey(s) to demonstrate a statistical reduction of the Year 1 baseline survey results
Year 5 – 20	Implement the Pest Management Plan
Year 10, Year 15 & Year 20	Repeat the baseline surveys in year 10, 15 and year 20 to demonstrate a maintenance of year 5 statistically reduced vertebrate pest species incidence and or occurrence below the-year 1 baseline survey results

MANAGEMENT ACTION RESPONSIBILITY

The Offset Provider will establish, resource and fund the pest management components of the Offset Management Plan. The following tasks will require specific expertise or appointed contractors to complete:

- Baseline and repeat surveys to be completed by a senior tertiary trained ecologist, zoologist or environmental scientist with a minimum of five years industry field experience;
- Use of 1080 or sodium fluoroacetate poisons is regulated under the *Health (Drugs and Poisons) Regulations 1996*. Deployment and use of this control method to be via a registered contractor holding relevant permits and demonstrated experience;

- Deployment and use of suitable wild dog traps and euthanasia to be in accordance with Queensland *Biosecurity Act 2014*; and
- Hunting / shooting program to occur in accordance with all relevant Queensland Government permits and regulations.

The Offset Provider is responsible for preparing and issuing Offset Area Annual Reports to the proponent within contracted timeframes for inclusion in the Approved Project Annual Compliance Report.

MANAGEMENT ACTION MONITORING

Completion of baseline surveys and range estimate of feral animal populations, seasonal locations, dispersal patterns and hot spots, including sighting and incidence (death / injury) data. Survey methods and results provided in Year 1 Offset Area Annual Report (and incorporated in Year 1 Annual Compliance Report for the Approved Action).

To determine the baseline level of feral animals within the ROA 1, a non-invasive survey technique utilising baited camera traps will be implemented, as per the methodology in the following section.

Interim actions and results provided in Year 2-4 Offset Area Annual Report. (provided as conditioned in the relevant Annual Compliance Report for the Approved Action).

Replicated baseline surveys in year 5, 10, 15 & 20 to demonstrate statistical reduction in:

- Incidental sighting and records of feral animals on-site (at or below the baseline survey results);
- Feral animal scat / track or imprint evidence at targeted survey locations;
- Reduced site population census on infrared drone and baited remote sensor camera surveys;
- Reduced scalp collection or animal kills on diurnal hunting (Shooting) events;
- Stock losses over the property; and
- Statistical reduction or nil occurrence of injury or mortality of vertebrate pest species on site koala populations.

Year 5 Offset Area Annual Report (OAAR) to include repeat survey methods, results data and comparative analysis demonstrating statistical reduction in vertebrate pest management evidence and impacts. Report to include any adaptive management recommended changes to pest control and reduction methods to be deployed for years 6-10. Details of surveys, results and alterations to management strategies to be provided to proponent in the Year 5 OAAR for issue to DAWE in the Year 5 Annual Compliance Report for the Action.

Interim actions and results provided in Year 6-9 Offset Area Annual Report (provided as conditioned in the relevant Annual Compliance Report for the Approved Action)

Repeat of Baseline surveys in year 10, year 15 and year 20 to demonstrate a maintenance of year 5 statistically reduced vertebrate pest species incidence and or occurrence at or below the year 1 baseline survey results.

If greater than the baseline pest survey results remain in the Year 5 survey and reporting, then consultation with an expert in feral animal control is required to assist in adaptively managing the program and implementation to ensure a statistical reduction at or below the baseline survey has been achieved.

Year 10 Annual OAAR to include repeat survey methods, results data and comparative analysis demonstrating a maintenance or statistical reduction in vertebrate pest species evidence and impacts. Report to include any adaptive management recommended changes to pest control and reduction methods to be deployed for years 11-19. Details of surveys, results and alterations to management strategies to be provided to proponent in the Year 10 OAAR for issue to the Department in the Year 10 Annual Compliance Report for the Action.

Repeat of Baseline surveys in year 15 and year 20 to demonstrate a maintenance of year 10 statistically reduced vertebrate pest species incidence and or occurrence at or below the year 1 baseline survey results.

Actions and results provided in Year 11-19 of continuation of Year 10 adaptive management feral animal management strategy (provided as conditioned in the relevant Annual Compliance Report for the Approved Action).

BAITED MOTION SENSOR CAMERA TRAP METHODOLOGY

Camera trapping involves setting up a fixed digital camera to capture images or video of animals which pass in front of a camera. It is a non-invasive technique designed to detect medium to large sized animals as they pass, although it is possible to detect smaller animals depending on the set-up. This set-up identifies fauna activity beyond the scope of direct observational studies and with the absence of potential observer impacts.

Infrared sensing cameras with an infrared flash are deployed, which use motion to trigger. Three cameras will be set up within the ROA 1. The cameras are to be systematically located to capture a representative of the ROA 1. The three cameras are to be deployed seasonally, with a focus on spring and summer, where wild dogs are known to be more active. Cameras are to be attached 30-100 cm from the ground on a tree or post, and directed towards landscape features. The cameras are to be left to record for a minimum of two weeks. The cameras are to be baited in order to target evidence of wild dogs and other potential threats to known MNES in the broader area.

MANAGEMENT ACTION RISKS AND ADAPTIVE MANAGEMENT

Without intervention and active management, the risk of feral animal impacts on the Koala are assessed as ‘high’ (refer to **Risk Management Section**). This is based on regional and local government data on feral animals combined with evidence of livestock predation recorded on-site and an abundance of research in the surrounding area indicating the prevalence of feral dogs. The pest management strategies incorporate intensive implementation methods and three major data collection survey events for confirming base case and successful reduction of pest management impacts.

The repeat survey points are designed to deliver data on outcomes being achieved. If the surveys do not demonstrate the targeted effectiveness the implementation strategy will be adjusted to:

- Adopt new management techniques;
- Increase successful techniques and reduce less successful management methods;
- Increase intensity of implementation program;
- Change the timing or locality of proposed target treatment locations or events; and
- Allow the site strategy to assimilate into any new broader threat abatement programs.

The feral animal management implementation strategy will use the baseline data to build a calendar of annual activities based around varying control methods, seasons and species. The threat abatement actions and outcomes within any calendar year will be reported on within the OAAR and will provide a number of lead indicators towards a reduction in occurrence and impacts. Major survey and review periods for independent review of the OMP are set at year 5 and year 10 to ensure the program achieves long term reduction and does not respond to specific stochastic events such a contextual fluctuation in pest populations such as feral dogs.

ACTION 2: WEEDS OF NATIONAL SIGNIFICANCE MANAGEMENT

MANAGEMENT ACTION OUTCOME

Preliminary site surveys and observations over the Rosevale offset property recorded a number of weed species, with the most prevalent and inhibitive to Koala movement and habitat restoration being *Lantana camara*. The Scenic Rim Regional Council Biosecurity Plan aims to control declared pest plants within the region. This plan includes information and strategies for landholders to effectively manage pest species. *Lantana camara* is listed as a declared pest plant within the Scenic Rim region.

Lantana camara is listed as a 'weed of national significance' under the EPBC Act. Further, in 2006, the NSW Government nominated *Lantana camara* as a key threatening process under the EPBC Act.

Under the Queensland *Biosecurity Act 2014* it requires everyone to take all reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control, this is called the General Biosecurity Obligation (GBO). The GBO states that reasonable and practical is dependent on the current land use practices undertaken by the landholder. The GBO is a risk ratings-based approach, where risks are managed appropriately based on their threat to the land use practices. Given that the site is currently used for cattle grazing, the risk of weed species such as lantana to current land use practices is low, and therefore, under the GBO of the Biosecurity Act, these risks are managed in a low-risk way. As such, the proposed management actions are above and beyond what is currently completed on-site.

Lantana camara occurs on the Rosevale offset property both in open paddock areas as isolated clusters and thickets, as the dominant understorey amongst regrowth and remnant vegetation and as a prolific shrub in gully lines. Within open areas existing farm practices result in periodical pesticide application limiting spread, however, this does not occur to the extent of entire eradication as the costs of treatment to result in an economical return for the grazing benefit are non-existent. An exact volume or extent of Lantana at the offset property has not been calculated.

Lantana infestations suppress and inhibit the natural regeneration of regrowth vegetation on-site which directly limits the growth rates and regeneration of non-juvenile koala habitat trees. Although baseline data is limited to the survey events undertaken for this EPBC Application research infers the highly invasive and spreading nature of the species, coupled with the in-active management in areas would result in progressive increases as local climatic events align with optimal germination and seeding periods. In areas blanket layers of *Lantana camara* additionally form a barrier to terrestrial species, which would include limiting the Koalas ability to access areas containing and over-canopy of NJKHTs. Refer to **Photo Plate 6** for on-ground images of *Lantana camara* infestations on the Rosevale offset property.

Photo Plate 6: Dense *Lantana camara* infestations observed on the Rosevale offset property.

MANAGEMENT ACTION LOCATION

- Management of weeds of national significance (WONS) is to occur in the entire ROA 1, with a particular focus on *Lantana camara*.

MANAGEMENT ACTION TASKS AND COMPLETION CRITERIA

- Removal and control of all major *Lantana camara* infestations from within the ROA 1 using a variety of mechanical and herbicide methods. *Lantana camara* infestations are to be reduced to below 5 % of the ROA 1 area. Areas identified as containing higher infestations are to be targeted during weed removal events.
- Ongoing maintenance to ensure that *Lantana camara* extents within the ROA 1 are retained at or below the 5 % of the total area through weed management actions; and
- Prevent the further spread or establishing of new *Lantana camara* outbreaks within the ROA 1 by excluding cattle from the offset management zone.

MANAGEMENT ACTION RISK REDUCTION MEASURES

Management actions to reduce the risk of weeds of national significant increased infestation impacts on the Rosevale offset property include:

- Use an Antenna based GPS system to map the full extent (as description polygons) of all *Lantana camara* areas within the ROA 1 (achieve a total ha extent of weed infestations / occurrences within the ROA 1);
- Exclude stock (cattle) access from *Lantana camara* infestation areas within the ROA 1 (grazing cattle provide the most continuous source of *Lantana camara* spread);
- Undertake detailed weed management control activities within the ROA 1. The following methods are to be deployed:
    - Stick rake, grubbing, ploughing or slashing major accessible areas of Lantana where not on a slope greater than 15% or where no existing native values occur; and
    - Apply broadscale herbicide and spot spray during high germination summer periods (Nov-March). Utilise organic based Lantana targeted herbicides which minimise impacts on native vegetation regenerating within and surrounding Lantana patches.
- Undertake periodical weed maintenance rotations for removal / suppression of Lantana regeneration; and
- Incorporate adaptive management principles into weed management methods to streamline overall management to the most effective control types.

MANAGEMENT ACTION TIMING AND PRELIMINARY COMPLETION CRITERIA

Timing	Preliminary Completion Criteria
Year 1	Complete detailed baseline / weed extent survey utilising an antenna-based GPS system to map the full extent of all *Lantana camara* areas within the ROA 1. Results of baseline weed extent surveys to be included in year 1 Offset Area Annual Report for inclusion in the project ACR.
Year 1	Exclude cattle from within the ROA 1. By Year 2, the entire ROA 1 will retain cattle exclusion fencing (refer to **Management Action 3**)
Year 2 – 5	Commence detailed weed management control activities within the ROA 1. Methods deployed are to be based on extent of infestation, existing native vegetation values, topography and sensitive receiving environments. The following methods are to be deployed: o Stick rake, grubbing, ploughing or slashing major accessible areas of Lantana where not on a slope greater than 15% or where no existing native values occur; and o Apply broadscale herbicide and spot spray during high germination summer periods (Nov-March). Utilise organic based Lantana targeted herbicides which minimise impacts on native vegetation regenerating within and surrounding Lantana patches.
Year 2 – 5	Demonstrate a downward trend in the weed extent, vigor and health annually through years 2-5, achieving a significant reduction in *Lantana spp*. extent within the ROA 1 by year 5, with less than 10% of the ROA 1 area to contains weed infestations. Actions and downward trend to be reported annually in the OAAR.
Year 5	Replicate detailed weed extent survey through the ROA 1 – Include plans and calculations in the Year 5 OAAR demonstrating less than 10% of the year 1 baseline survey results.
Year 6 – 10	Continue to implement detailed weed management control methods – In accordance with any recommended adaptive management changes incorporated in response to Year 5 replicated baseline surveys as documented in the year 5 OAAR. Demonstrate a downward trend in the weed extent, vigor and health annually through years 6-10, achieving a further reduction in *Lantana spp*. extent within the ROA 1 by year 10, with less than 5% of the year 1 baseline survey results. Actions and downward trend to be reported annually in the OAAR.
Year 10	Remobilise and replicate detailed weed extent survey through the ROA 1 – Compare and report on data in year 10 OAAR along with proposed amendments to the targeted pest management activities. Include plans and calculations in the Year 10 OAAR demonstrating less than 5% of the year 1 baseline survey results.

Year 11 – 19	Continue to implement Detailed Weed Management Control Methods – In accordance with any recommended adaptive management changes incorporated in response to Year 10 replicated baseline surveys as documented in the year 10 OAAR.
Year 15 & Year 20	Repeat of baseline surveys to demonstrate a maintenance of Year 10 significant reductions to the extent of *Lantana spp.* below the 5%-year 1 baseline survey results.

MANAGEMENT ACTION RESPONSIBILITY

The Offset Provider will establish, resource and fund all weed management components of the Offset Management Plan. The following tasks will require specific expertise or appointed contractors to complete:

- Baseline and repeat surveys to be completed by a senior tertiary trained ecologist, or environmental scientist with a minimum of 5 years industry field experience; and
- Use of any herbicides to be undertaken by a licensed contractor or strictly in accordance with the *Agricultural Chemicals Distribution Control Act 1996* and or in accordance with manufactures recommendations or label instructions.

The Offset Provider is responsible for preparing and issuing Offset Area Annual Reports to the proponent within contracted timeframes for inclusion in the Approved Project Annual Compliance Report.

MANAGEMENT ACTION MONITORING

Completion of baseline Lantana surveys providing an actual mapped extent of infestations and occurrences in hectares to be used as the benchmark for measuring improvement. Survey methods and results provided in Year 1 Offset Area Annual Report (And incorporated in Year 1 Annual Compliance Report for the Approved Action).

Interim actions and results provided in Year 2-5 Offset Area Annual Report (published as conditioned in the relevant Annual Compliance Report for the Approved Action). Year 2 to 5 annual results are to demonstrate a downward trend in weed extent and outbreak to less than 10% of the year 1 base case data.

Replicate baseline surveys in year 5 to demonstrate less than 20% of the year 1 baseline survey extents of *Lantana camara* infestations.

Year 5 OAAR to include repeat survey methods, results data and comparative analysis demonstrating less than 20% of the year 1 baseline survey extents of *Lantana camara* infestations. Report to include any adaptive management recommended changes to weed control methods to be deployed for years 6-10. Details of surveys, results and alterations to management strategies to be provided to proponent in the Year 5 OAAR for issue to the Department in the Year 5 Annual Compliance Report for the Action.

Interim actions and results provided in Year 6-9 Offset Area Annual Report (provided as conditioned in the relevant Annual Compliance Report for the Approved Action)

Replicate of baseline surveys in year 10 to demonstrate a downward trend in the weed extent, vigor and health annually through years 6-10, achieving a further reduction in *Lantana camara* extent within the ROA 1 by year 10, with less than 5% of the year 1 baseline survey results

Year 10 OAAR to include repeat survey methods, results data and comparative analysis less than 5% of the year 1 baseline survey extents of *Lantana camara* infestations. Report to include any adaptive management recommended changes to weed control to be deployed for years 11-19. Details of surveys, results and alterations to management strategies to be provided to proponent in the Year 10 OAAR for issue to the Department in the Year 10 Annual Compliance Report for the Action.

Repeat of baseline surveys in year 15 and year 20 to demonstrate a maintenance of Year 10 significant reductions to the extent of *Lantana camara* below the 5%-Year 1 baseline survey results. Actions and results provided in Year 11 – 19 Offset Area Annual Reports of continuation of Year 10 adaptive management weed control measures and the demonstration that *Lantana camara* is maintained below 5% of the year 1 baseline survey results provided as conditioned in the relevant Annual Compliance Report for the Approved Action.

MANAGEMENT ACTION RISKS AND ADAPTIVE MANAGEMENT

The primary weed issue through the ROA 1 is Lantana. Mapping of Lantana populations and areas is relatively simple enabling the tables in this management plan to set a number of weed reduction and management targets.

Periodical repeat survey points are designed to deliver data on outcomes being achieved. If the surveys don't demonstrate the targeted effectiveness the implementation strategy will be adjusted to:

- Adopt new management techniques
- Increase successful techniques and reduce less successful management methods
- Increase intensity of implementation program
- Change the timing or locality of proposed target treatment locations or events

ACTION 3: STOCK MANAGEMENT

MANAGEMENT ACTION OUTCOME

The Rosevale offset property has historically been utilised for agricultural uses, including, cattle grazing. The property has retained extensive pasture paddocks consisting of native grasses and artificially improved introduced pastures. Cattle grazing is consistently observed on the Rosevale offset property, with the intensity of grazing directly related to the density of pasture available (ie. correlated with rainfall) and the beef market prices. Given the La Nina climatic season prediction for 2020-2021 and increased beef prices, the head of cattle on the Rosevale offset property have increased.

Although there is some limited research that intensive cattle grazing can result in some positive biodiversity outcomes generally cattle farming re-engineers the landscape to support predator species.

The risks of ongoing cattle grazing on the land could vary from low to medium to high subject to the future maintenance or expansion of the grazing use which is driven by a number of economic factors, however primarily the rise and fall of the beef market. Regardless the long term and current highest and best use for the land is the continuation of cattle grazing. No reduction in risk or improvement in condition or value of the koala and Grey-headed Flying-fox habitat will occur without direct intervention and a change in use (such as this offset outcome).

Fauna friendly stock exclusion fencing or removal of all livestock is the ultimate proposed solution for restricting stock from accessing the Offset Area (ROA 1).

MANAGEMENT ACTION LOCATION

- Livestock control is to focus on ROA 1. ROA 1 is to be fenced with fauna friendly livestock exclusion fencing OR removal of all livestock from the ROA 1.

MANAGEMENT ACTION TASKS AND COMPLETION CRITERIA

- Prevention and management of livestock from the ROA 1 utilising fauna friendly livestock exclusion fencing OR removal of all livestock from the ROA 1.

MANAGEMENT ACTION RISK REDUCTION MEASURES

Management actions to reduce the risk of livestock control and access and trespass management impacts on the Rosevale offset property include:

- Ownership of the land by the offset provider and therefore any residual grazing activities will be secondary land uses to the approved offset outcomes;
- Implementation of a legally binding mechanism (Voluntary Declaration under the *Vegetation Management Act 1999*) which provides protection of existing and created habitat values. The Voluntary Declaration applies the regulations of the *Vegetation Management Act 1999* to the land title which remains regardless of the transfer of ownership or sale of the land; and
- Fauna friendly livestock exclusion fencing around the perimeter of the ROA 1.

MANAGEMENT ACTION TIMING AND PRELIMINARY COMPLETION CRITERIA

Timing	Preliminary Completion Criteria
Year 1	Fencing of the ROA 1 (ROA 1) will commence immediately and will be completed by end of Year 1. Alternatively, removal of all livestock from within ROA 1.
Year 1	A status update on completed fencing locations will be provided in the Offset Area Annual Report (OAAR) for inclusion in the Annual Compliance Report (ACR).
Year 2 – 20	All fencing is to be inspected annually and reported on in the OAAR. OR Annual status update to confirm that livestock have continued to be excluded from ROA 1. This is to be reported on in the OOAR.

It should be noted that fencing is proposed as a permanent outcome and thus, there is no currency on removal.

MANAGEMENT ACTION RESPONSIBILITY

The Offset Provider will establish, resource and fund the construction, monitoring, maintenance and reporting on all fencing (using fencing contractors where deemed appropriate) OR the Offset Provider will remove all livestock from ROA 1.

The Offset Provider is responsible for preparing and issuing Offset Area Annual Reports to the proponent within contracted timeframes for inclusion in the Approved Project Annual Compliance Report.

MANAGEMENT ACTION MONITORING

- All fencing shown on the **Plan 8** to be in place by Year 1 reporting;

- Nil stock breaches into ROA 1s from year 2-20 (post completion of all fencing);
- No reporting of stock impacts as justification for not achieving:
    - Habitat quality improvements; and
    - Weed spread targets.
- Annual documented evidence of fence monitoring and maintenance rectifications in each Offset Area Annual Reporting period from years 2-20.

MANAGEMENT ACTION RISKS AND ADAPTIVE MANAGEMENT

Providing the right type of fencing is installed in the correct locations and monitored the risk of failure is extremely unlikely. Regardless any breach of cattle accessing the ROA 1 would be identified through the general course of offset establishment or maintenance or as part of the cattle operator's routine stock checks (typically daily). Damage as a result of a short-term breach is likely to be minimal and reversible through reinstatement works.

ACTION 4: ACCESS AND TRESPASS MANAGEMENT

MANAGEMENT ACTION OUTCOME

The Rosevale offset property is surrounded to the north, east and west by large cattle grazing operations. The impacts of unlawful access and trespassing mimic those listed in the 'Livestock Control' management action section of this management plan (trampling, compacting, weed spread, fence destruction). Without a system for identifying and preventing or controlling access and trespassing the actions established for on-site stock management will be undermined.

MANAGEMENT ACTION LOCATION

- The ROA 1 will be fenced, however, the purpose of this management action is to target the boundary of the offset property which shares a common boundary with adjoining landholders.

MANAGEMENT ACTION TASKS AND COMPLETION CRITERIA

- Prevention / control of unauthorised access and trespass through the ROA 1.

MANAGEMENT ACTION RISK REDUCTION MEASURES

Management actions to reduce the risk of livestock control and access and trespass management impacts on the Rosevale offset property include:

- Ownership of the land by the offset provider and therefore any residual grazing activities will be secondary land uses to the approved offset outcomes;
- Implementation of a legally binding mechanism (Voluntary Declaration under the *Vegetation Management Act 1999*) which provides protection of existing and created habitat values. The Voluntary Declaration applies the regulations of the *Vegetation Management Act 1999* to the land title which remains regardless of the transfer of ownership or sale of the land; and
- Fauna friendly livestock exclusion fencing around the perimeter of the ROA 1.

MANAGEMENT ACTION TIMING AND PRELIMINARY COMPLETION CRITERIA

Timing	Preliminary Completion Criteria
Year 1	Inspection and rectification of all external fence boundaries of ROA 1.
Year 1	Notification of ROA 1, purpose and outcomes to all adjoining land owners (where applicable)
Year 1 – 20	No new access tracks through ROA 1 unless to support offset outcomes

MANAGEMENT ACTION RESPONSIBILITY

The Offset Provider is responsible for funding and undertaking all actions relating to access and trespass management.

The Offset Provider is responsible for preparing and issuing Offset Area Annual Reports to the proponent within contracted timeframes for inclusion in the Approved Project Annual Compliance Report.

MANAGEMENT ACTION MONITORING

- Evidence of erected fencing and notification to adjoining land owners (where applicable);
- Fence monitoring as per Management Action 3: Livestock Control; and
- No evidence of stock or illegal access influence in outcomes scheduled for the ROA 1 habitat improvement.

MANAGEMENT ACTION RISKS AND ADAPTIVE MANAGEMENT

Given there is not legal requirement for access through the land holding (eg no formal access easement) if necessary enforcement options are available, however it is considered extremely unlikely this would be required provided alternative access points are established which do not conflict with the offset outcomes.

ACTION 5: REHABILITATION AND RESTORATION MANAGEMENT

MANAGEMENT ACTION OUTCOME

The entirety of the offset is to consist of MNES habitat restoration activities. The MNES habitat restoration is to:

- Be in accordance with the pre-clear regional ecosystem(s), being, RE12.8.17;
- Expand the available Koala habitat through infill planting of broad hectare cleared land;
- Expand the available habitat for MNES and in particular, the Koala by adjoining other EPBC offsets; and
- Provide new connectivity with surrounding habitat for the protected matters and adjoins the bioregional conservation corridor.

MNES habitat restoration will occur through the transitioning of grassed grazing areas (ROA 1) into vegetated ecosystems supporting habitat for the koala. In total the entire 17.0 ha is proposed for MNES habitat restoration. Restoration is a high cost and high labour intensive task from preparation to commencement through to the first 5 years of establishment. Only planning and preparation works are proposed within year 1 of the offset while beginning communication with a local nursery for stock will be conducted. All rehabilitation planting is to be completed by the end of Year 2. All revegetation and planting species are to be in accordance with the technical regional ecosystem description and the Rehabilitation Management Plan included in **Appendix B**.

The rehabilitation planting is to consist of the following species:

- *Angophora subvelutina* (Rough-barked Apple)
- *Eucalyptus crebra* (Narrow-leaved Ironbark)
- *Eucalyptus melliodora* (Yellow-box Gum)
- *Eucalyptus tereticornis* (Queensland Blue Gum)
- *Eucalyptus melanophloia* (Silver-leaved Ironbark)
- *Corymbia intermedia* (Pink Bloodwood)
- *Corymbia tessellaris* (Moreton Bay Ash)

At a minimum, the rehabilitation is to contain a density of 250 non-juvenile koala habitat tree stems per hectare.

Where vegetation does occur within the ROA 1, transects have been completed in accordance with the Modified Habitat Quality Assessment (Koala) tool to establish a base score. ROA 1 scored a 2/10 under this system for Koala habitat. As areas are restored, new transect locations will be established for future monitoring, however in years 1-5 for revegetation areas transect surveys will be replaced by a mix of photo monitoring / stem count

/ mortality rate and Projective Foliage Cover. After 5 years of established and maintained growth habitat quality transects will be re-introduced as part of survey and monitoring.

MANAGEMENT ACTION LOCATION

- The entirety of ROA 1 is to contain MNES habitat restoration.

MANAGEMENT ACTION TASKS AND COMPLETION CRITERIA

- Ceasing grazing activities within the ROA 1;
- Tilling / cultivating grazed grass areas for treatment of pasture grass seedbank in preparation for planting;
- Revegetation in accordance with the pre-clear regional ecosystem technical description. The canopy planting mix is to consist of Grey-headed Flying-fox foraging tree species and non-juvenile Koala habitat tree species; and
- Monitoring and maintaining the MNES habitat restoration works until the ROA 1 is a self-sustaining regrowth vegetation community.

MANAGEMENT ACTION RISK REDUCTION MEASURES

Management actions to reduce the risk of plant stock failure impacts on the Rosevale offset property include:

- Undertake soil testing for both the modified planting soil and for the planting locations;
- Match species to pre-clear regional ecosystem vegetation communities based on geography, soil and region specifications;
- Undertake planting in manageable mosaic to ensure monitoring, watering etc can be implemented as required;
- Use experienced contractors and bushland regenerators to undertake all revegetation and rehabilitation works. Ensure selected contractors included relevant insurances and payment retentions for success rates from part of contract obligations;
- Over plant all revegetation areas by 10% on allocated numbers to cater for a natural 10% failure rate; and
- Undertake planting during warmer frost-free months.

MANAGEMENT ACTION TIMING AND PRELIMINARY COMPLETION CRITERIA

Timing	Preliminary Completion Criteria
Year 1	Undertake soil testing for both the modified planting soil and for the planting locations; Finalise locations, sequence and timing of MNES habitat restoration program; Cultivate and prepare the ROA 1 for year 2 planting; Create ROA 1 water source for MNES habitat restoration activities (purpose located dam, temporary tank or slow-release gravity feed).
Year 2	Complete ROA 1 MNES habitat restoration activities (17.0 ha).
Year 3 – 20	Monitor and maintain the ROA 1 (17.0 ha MNES habitat restoration area) inclusive of rectification and replacement works for failed area or plant dieback.
Year 5	Complete transect surveys in accordance with the Modified Habitat Quality Assessment (Koala) tools within established MNES habitat restoration area (ROA 1); Undertake Koala Spot Assessment Technique to derive koala occurrence category for MNES habitat restoration area; and Report on results of both surveys within the Year 5 Offset Area Annual Report inclusive of any adaptive management changes.
Year 10	Complete transect surveys in accordance with the Modified Habitat Quality Assessment (Koala) tools within established MNES habitat restoration area (ROA 1); Undertake Koala Spot Assessment Technique to derive koala occurrence category for MNES habitat restoration area; and Report on results of both surveys within the Year 10 Offset Area Annual Report inclusive of any adaptive management changes.
Year 15	Complete transect surveys in accordance with the Modified Habitat Quality Assessment (Koala) tools within established MNES habitat restoration area (ROA 1); Undertake Koala Spot Assessment Technique to derive koala occurrence category for MNES habitat restoration area; and Report on results of both surveys within the Year 15 Offset Area Annual Report inclusive of any adaptive management changes.
Year 20	Complete transect surveys in accordance with the Modified Habitat Quality Assessment (Koala) tools within established MNES habitat restoration area (ROA 1); Undertake Koala Spot Assessment Technique to derive koala occurrence category for MNES habitat restoration area; and

	Report on results of both surveys within the Year 20 Offset Area Annual Report inclusive of any adaptive management changes.

MANAGEMENT ACTION RESPONSIBILITY

The Offset Provider is responsible for:

- Funding the appointment of trained and experienced Bushland Regenerators or Revegetation contractors for the completion of all implementation works associated with revegetation areas (site preparation, planting, establishment and maintenance)
- Commissioning and funding tertiary trained ecologists for the survey, monitoring and reporting of interim and milestone revegetation outcomes.

The Offset Provider is responsible for preparing and issuing Offset Area Annual Reports to the proponent within contracted timeframes for inclusion in the Approved Project Annual Compliance Report.

MANAGEMENT ACTION MONITORING

Achievement of the results outlined in **Table 6** from the replicated transect surveys completed in accordance with the Modified Habitat Quality Assessment methodology (Koala). Evidence through photo point monitoring of established habitat containing NJKHTs and Grey-headed Flying-fox foraging trees. Plan of completed MNES habitat restoration extents in the Year 2 OAAR demonstrating the completion of all restoration works.

Spot Assessment Technique (SAT) surveys showing the establishment of koala usage within the ROA 1 will be undertaken every five years in accordance with milestone completion criteria.

Reporting on MNES habitat restoration activities will occur with each 12 month Offset Area Annual Report with major surveys results and adaptive management changes documented at Year 5, 10, 15 & 20.

Table 6: MHQA Completion Criteria

Assessment Unit - Regional Ecosystem	AU1- Cat X - cleared areas with dead plantation trees (RE12.8.17)													
	RE12.8.17 Benchmark	Transect 1	Transect 2	Average of Transect(s)	% Benchmark	Score	Year 5	Year 5 Score Increase Justification	Year 10	Year 10 Score Increase Justification	Year 15	Year 15 Score Increase Justification	Year 20	Year 20 Score Increase Justification
SITE CONDITION														
Recruitment of woody perennial species in EDL	100	0	0	0	0	0	0		3		3		5	
Native plant species richness - trees	7	1	1	1	14.29	0	2.5		5		5		5	Recruitment of a minimum of six tree species (>75% of the recruitment of woody perennial species in EDL benchmark)
Native plant species richness - shrubs	5	0	1	0.5	10.00	0	2.5		5		5		5	
Native plant species richness - grasses	12	3	4	3.5	29.17	2.5	2.5		2.5		5		5	Maintain recruitment of two koala food tree species (28.5% of the recruitment of woody perennial species in EDL benchmark)
Native plant species richness - forbs	27	5	2	3.5	12.96	0	0		0		0	Maintain recruitment of two koala food tree species (28.5% of the recruitment of woody perennial species in EDL benchmark)	0	Maintain a minimum of seven tree species (100% of the tree species richness benchmark)
Tree canopy height (Canopy)*	19	8	8	8	42.11	3						Maintain a minimum of seven tree species (100% of the tree species richness benchmark)		Maintain a minimum of minimum of five shrub species (100% of the shrub species richness benchmark)
Tree canopy height (Sub-canopy)*	10	4	2	3	30.00	3						Maintain a minimum of minimum of five shrub species (100% of the shrub species richness benchmark)		Maintain a minimum of 12 grass species (100% of the grass species richness benchmark)
*Average tree canopy height						3	3	Establish a minimum of two tree species (28.5% of the tree species richness benchmark)	3	Recruitment of two koala food tree species (28.5% of the recruitment of woody perennial species in EDL benchmark)	3		5	
Tree canopy cover (Canopy)**	48	0	0	0	0.00	0		Establish a minimum of two shrub species (40% of the shrub species richness)		Establish a minimum seven tree species (100% of the tree species richness benchmark)		Establish a minimum of 12 grass species (100% of the grass species richness benchmark)		Tree species plantings to be a minimum of 13.3m height (70% of the tree canopy height benchmark)
Tree canopy cover (Sub-canopy)**	20	0	0	0	0.00	0		Shrub canopy cover to be a minimum of 2.5m (50% of the shrub canopy cover benchmark)		Establish a minimum of five shrub species (100% of the shrub species richness benchmark)		Tree canopy cover to be a minimum of 4.8m (10% of the tree canopy cover (canopy) benchmark)		Tree species plantings to be a minimum of 7m height (70% of the tree sub-canopy height benchmark)
**Average tree canopy cover						0	0		0		2		5	
Shrub canopy cover	5	0	0	0	0.00	0	3		3	Maintain shrub canopy cover at a minimum of 2.5m (50% of the shrub canopy cover benchmark)	5	Tree sub-canopy cover to be a minimum of 2.0m (10% of the tree canopy cover (sub-canopy) benchmark)	5	Tree canopy cover to be a minimum of 24m (50% of the tree canopy cover (canopy) benchmark)
Native grass cover*	32	59	52	55.5	173.44	5	5		5	Weed coverage to be less than 5% of the entire offset area (baseline weed coverage to be established in Year 1)	5	Maintain shrub canopy cover at a minimum of 2.5m (50% of the shrub canopy cover benchmark)	5	Tree sub-canopy cover to be a minimum of 10m (50% of the tree canopy cover (sub-canopy) benchmark)
Organic litter*	21	6	9	7.5	35.71	3	3		3		3	Record a minimum of 117m of coarse woody debris per hectare (50% of the coarse woody debris benchmark)	5	Maintain shrub canopy cover at a minimum of 2.5m (50% of the shrub canopy cover benchmark)
Large trees (euc plus non-euc) (per ha)	24	0	0	0	0.00	0	0		0		0		0	Organic Litter to be 10.5% of 1m X 1m quadrats (50% of organic litter benchmark)
Coarse woody debris (per ha)	234	1566	1105	1335.5	570.73	2	2		2		5	Weed coverage to be less than 5% of the entire offset area (baseline weed coverage to be established in Year 1)	5	Maintain a minimum of 117m of coarse woody debris per hectare (50% of the coarse woody debris benchmark)
Non-native plant cover	0	46	31	38.5	38.50	5	5		10		10		10	Weed coverage to be less than 5% of the entire offset area (baseline weed coverage to be established in Year 1)
Quality and availability of food and foraging habitat	NA	1	1	1	-	1	5		5		10		10	
Quality and availability of shelter	NA	1	1	1	-	1	5		5		5		10	
Site Condition Score (/100)						22.5	38.5		51.5		66		80	
Overall Site Condition Score - out of 3						0.68	1.16		1.55		1.98		2.40	
SITE CONTEXT														
Size of patch	10	10	10	10		0	0		0		0		0	Maintain less than 5% of the year 1 baseline survey results and zero (0) koala mortalities or injury in the Offset Area
Connectedness	5	2	2	2		0	0		0		0	Maintain less than 5% of the year 1 baseline survey results and zero (0) koala mortalities or injury in the Offset Area	0	Tree species plantings to be a minimum of 13.3m height (70% of the tree canopy height benchmark)
Context	5	4	4	4		2	2		2		2		2	
Ecological Corridors	6	0	0	0		0	0	Less than 5% of the year 1 baseline survey results and zero (0) koala mortalities or injury in the Offset Area	0	Maintain less than 5% of the year 1 baseline survey results and zero (0) koala mortalities or injury in the Offset Area	0	Tree canopy cover to be a minimum of 4.8m (10% of the tree canopy cover (canopy) benchmark)	0	Tree species plantings to be a minimum of 7m height (70% of the tree sub-canopy height benchmark)
Role of site location to species overall population in the state	5	1	1	1		1	1		1		5	Tree sub-canopy cover to be a minimum of 2.0m (10% of the tree canopy cover (sub-canopy) benchmark)	5	Tree canopy cover to be a minimum of 24m (50% of the tree canopy cover (canopy) benchmark)
Threats to the species	15	1	1	1		1	7		7		7		7	Tree sub-canopy cover to be a minimum of 10m (50% of the tree canopy cover (sub-canopy) benchmark)
Species mobility capacity	10	4	4	4		4	4		4		7		7	
Site Context Score (/56)						8	14		14		21		21	
Overall Site Context Score - out of 3						0.43	0.75		0.75		1.13		1.13	
SPECIES STOCKING RATE														
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	70	5	5	5		5	5		30	KOALA DETECTED ON-SITE = 10/10 KOALA FORAGING ON-SITE = 10/15 KOALA SAT SURVEY RESULTS (LOW) = 10/30	30	KOALA DETECTED ON-SITE = 10/10 KOALA FORAGING ON-SITE = 10/15 KOALA SAT SURVEY RESULTS (LOW) = 10/30	30	KOALA DETECTED ON-SITE = 10/10 KOALA FORAGING ON-SITE = 10/15 KOALA SAT SURVEY RESULTS (LOW) = 10/30
Species Stocking Rate Score (/70)						5.00	5		30		30		30	
Overall Species Stocking Rate Score - out of 4						0.29	0.29		1.71		1.71		1.71	
Overall Assessment Unit Score						1.39	2.19		4.01		4.82		5.24	

MANAGEMENT ACTION RISKS AND ADAPTIVE MANAGEMENT

The potential for large scale revegetation to fail can occur from controllable factors (poor soil preparation, planting stock or maintenance regime) or external events (extreme frost, pest invasion, drought, flood or major wind). Losses from these factors will be catered for in two ways:

1) Contractual obligations of appointed bushland regenerators or revegetation contractors to ensure retention funds and minimum success rates (eg contractor responsible for replacement and re-establishing failed stock or areas); and
2) Contractor & Offset Provider will have insurance for major external events.

Criteria for successful offset outcomes for this zone are established in this management plan and the approval of the project. If revegetation fails, it will need to be replaced. If growth rates are below expectations the tenure of the offset period will increase until targeted outcomes have been demonstrated as achieved.

CORRECTIVE ACTIONS

Table 7 outlines a number of triggers and corrective actions which are to be implemented in instances of non-compliance or the lack of success toward the gradual achievement of the completion criteria identified during internal (annual) monitoring and major milestone monitoring events (every 5 years).

Table 7: Triggers and Corrective Actions (including timeframes)

Triggers	Corrective Actions	Timeframes for Corrective Actions
Trees and plantings showing signs of ill health, decline or death.	• The restoration contractor will engage a suitably qualified professional to identify the likely cause of health decline • Apply recommended mitigation measure/s to improve growing conditions (as recommended by the suitably qualified professional) • Remove ill or dead plantings, undertake any remediation works and re-establishment planting	• Engage the suitably qualified professional within three months of detection • Implement recommended mitigation measures within six months of detection • Remove ill or dead plantings and undertake remediation works within six months of detection
Weed re-establishment	• Immediately treat all WoNs, particularly *Lantana camara,* with delicate methods to avoid impacts to restoration works (mechanically or chemically dependent on circumstances) • Undertake an investigation of the potential source point of seeding • Additional treatment and removal works are to be followed up during the next potential growth period to avoid any regeneration and potential seeding events	• Within three months of detection, noting that treatment during non-growth periods may be ineffective and are best targeted during growth periods for greater effectiveness • Within three months of detection • Within six months of initial detection
Plant failure (>10% of stock) during the establishment period	• Supplementary planting will be undertaken • Should the planting fail again, the contractor is to engage a suitably qualified professional to identify the likely cause of plant failure	• Within six months or the next appropriate planting period (whichever comes first) of detection • Within month of detection

	• Apply recommended mitigation measure/s to improve growing conditions (as recommended by the suitably qualified professional)	• Apply in alignment with the recommendations made by the suitably qualified professional
Coarse woody debris is failing to become present naturally	• The selective removal of limbs, shrubs, or trees (particularly from the shrub layer were forming dense thickets) • Importation of felled native timber from known impact areas where it would ordinarily be mulched and sent to land fill	• At the 5, 10, 15 and 20 year monitoring events • At the 5, 10, 15 and 20 year monitoring events
Growth rates not as expected	• Engage a suitably qualified professional to review the plantings and advise on methods to increase growth rates through other interventions • Undertake soil testing to determine what rate of soil ameliorants or fertilizers may be required to improve the chemical balance of the soils for improved plant growth • Revise management actions for offset • Discuss with the Department of Agriculture, Water and the Environment to negotiate changes to timeframes to meet the completion criteria • Revise OMP and submit to Minister for the Environment for approval	• Within three months of detection • Within three months of detection • Within 12 months of detection • Within 24 months of detection if the corrective actions have not amended the slowing growth rates • Within 24 months of detection if the corrective actions have not amended the slowing growth rates
Stochastic or nuisance events	• While such events (eg. Fire, flood, drought, vandalism etc) are rare and can be managed by the contractor, where events take place, restoration works are to replace losses and reporting to the DAWE is required • Evidence of impacts and rectification measures are to be	• Within six months of the event • Within six months of rectification

	issued to the DAWE within three months	
Ongoing presence of pest fauna (eg. Feral dogs)	• Where recurrent pest animal species are detected, re-engagement with the surrounding landholders and SRRC to re-deploy management measures. Should recurrent pest fauna be observed going forward, revised management measures to include more site specific measures including targeted baiting and/or trapping	• Within three months of continued presence identification
Monitoring and reporting illustrates that KPIs are unlikely to be achieved at the end of the 20 year management timeframe and other corrective actions are failing to progress the achievement of the KPI	• Engage a suitably qualified professional to review the plantings and advise on methods to increase growth rates through other interventions • Undertake soil testing to determine what rate of soil ameliorants or fertilizers may be required to improve the chemical balance of the soils for improved plant growth • The proponent / approval holder will request an extension to the 20 year management timeframe from the Minister • Revise the management actions for the offset • Extend timeframes to meet completion criteria • Revise the OMP and submit to the Minister for the Environment for approval	• Within three months of detection • Within three months of detection • Within 24 months of detection if corrective actions have not amended the slowing growth rates • Within 24 months of detection if corrective actions have not amended the slowing growth rates • Within 24 months of detection if corrective actions have not amended the slowing growth rates • Within 24 months of detection if corrective actions have not amended the slowing growth rates

RISK MANAGEMENT

A limited number of risks associated with climate change, pest control, large scale rehabilitation and grazing land uses are evaluated for the Offset property. Risks are generally described and assessed against the likelihood and consequence model outlined in the Commonwealth Government's Department of Environment – *Environmental Management Plan Guidelines* (2014). The following risk factors are considered in more detail in this OMP:

- Risk 1: Wildfire;
- Risk 2: Drought;
- Risk 3: Shifting habitat range;
- Risk 4: Plant stock failure;
- Risk 5: Feral animal control;
- Risk 6: Weeds of National Environmental Significance increased infestations; and
- Risk 7: Livestock control and access and trespass management.

Table 8: Risk Rating Table (DAWE, 2022)

RISK MATRIX	
Likelihood (L): A qualitative measure of likelihood how likely is it that this event/circumstances will occur both before and after management activities are 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
Consequence (C): Qualitative measure of what will be the consequence/result if the issue does occur	
Minor	Minor incident of environmental damage that can be reversed (*e.g. short-term delays to achieving strategy objectives, implementing low-cost, well-characterised corrective actions*)
Moderate	Isolated but substantial instances of environmental damage that could be reversed with intensive efforts (*e.g. short-term delays to achieving strategy objectives, implementing well-characterised, high cost/effort corrective actions*)
High	Substantial instances of environmental damage that could be reversed with intensive efforts (*e.g. medium-long term delays to achieving objectives, implementing uncertain, high-cost/effort corrective actions*)
Major	Major loss of environmental amenity and real danger of continuing (*e.g. strategy objectives are unlikely to be achieved, with significant legislative, technical, ecological and/or administrative barriers to attainment that have no evidenced mitigation strategies*)
Critical	Severe widespread loss of environmental amenity and irrecoverable environmental damage (*e.g. strategy objectives are unable to be achieved, with no evidenced mitigation strategies*)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)

		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

RISK 1: BUSHFIRE

The Rosevale offset property retains little to no existing vegetation, however, given its historical use as a native plantation site, it is reflected as high and very high-risk fuel loads for wildfire in both State Government and Scenic Rim Regional Council mapping (refer to **Figure 1**). The last recorded bushfire within the vicinity of the offset property occurred in January 2022. The bushfire was contained by Queensland Fire and Emergency Services (QFES) with no recorded damage to people or property. The ROA 1 was not impacted by this bushfire.

The Rosevale offset property retains limited vegetation interspersed with open pasture land and includes a system of boundary line firebreaks and access tracks for the protection of stock and farming infrastructure. This fire management system will be maintained as the offset property transitions from open pasture to MNES habitat restoration as specific offset activities are sequentially completed.

The overall assessment of bushfire risk is that their occurrence is **unlikely** within the life of the offset and consequences of such an event would be **moderate**. Without intervention and management, bushfire is evaluated as a **low risk** to this offset project. Refer to **Table 9** for the initial risk rating calculation.

Table 9: Bushfire Risk Rating (Initial Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

Management actions to reduce the risk of bushfire impacts on the Rosevale offset property include:

- Maintain existing bushfire breaks between adjacent landholders, in particular along the boundaries where the State Planning Policy bushfire hazard mapping indicates there is a 'high' or 'very high' risk of bushfire occurring;
- Cooperate with the local Queensland rural fire service, Scenic Rim Regional Council and adjoining land owners to minimise bushfire risk at a regional scale; and
- Undertake a feasibility assessment on insurance for plant stock replacement.

Through the implementation of the management actions listed above and **Corrective Actions**, the residual risk rating for this offset project is that it is **rare** that it would occur within the life of the offset and the consequences of such an event would be **moderate**. With intervention and management, the residual risk of a bushfire is evaluated as a **low risk** to this offset project. Refer to **Table 10** for the residual risk rating calculation

Table 10: Bushfire Risk Rating (Residual Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

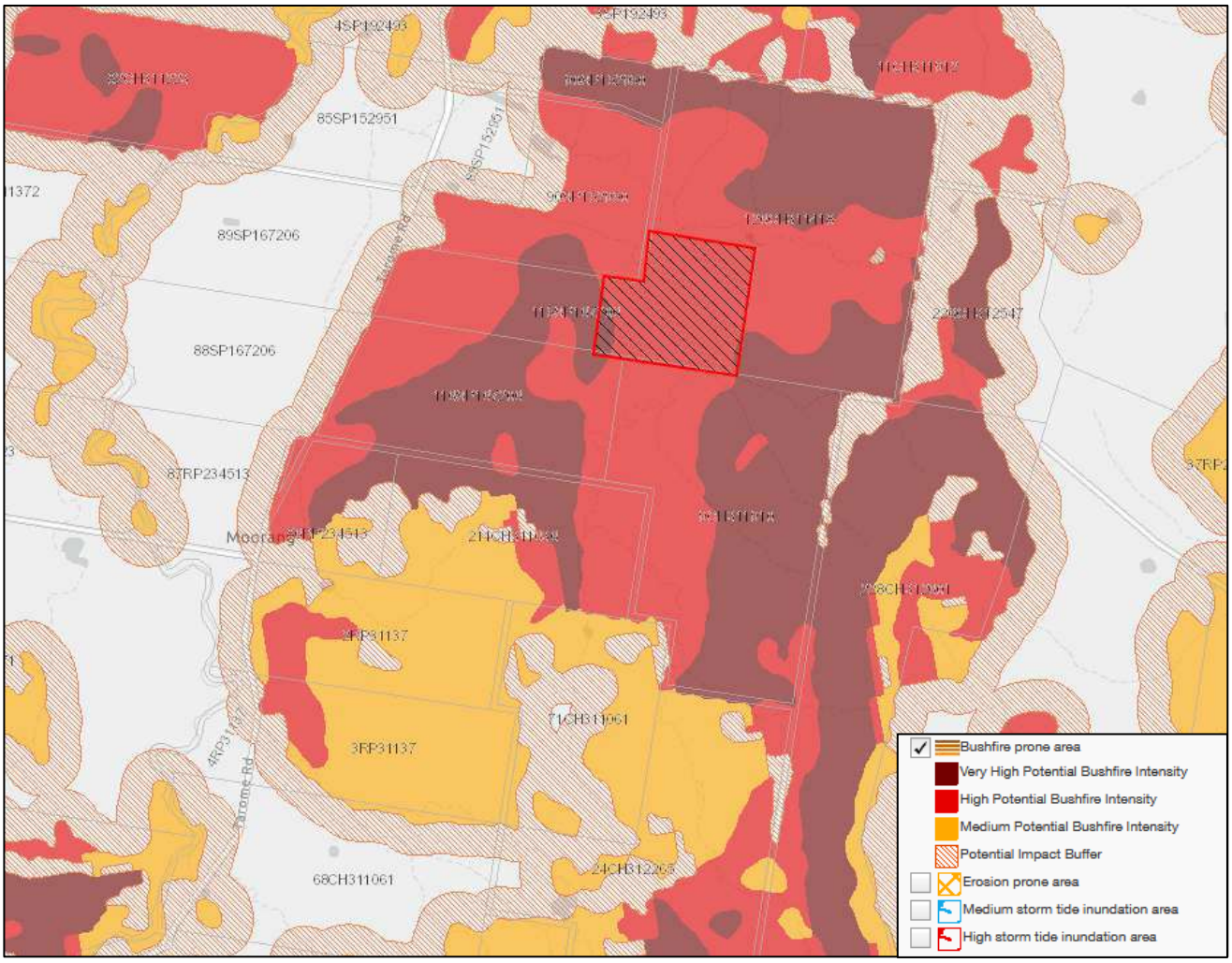


Figure 1: State Planning Policy bushfire hazard mapping (source: Queensland Government 2021)

RISK 2: DROUGHT

In May 2019 the Queensland Government declared the Scenic Rim Regional Council amongst a number of Local Government Areas as a drought area for the purposes of accessing funding and concessions for rural land holders. As of 1 December 2020, this declaration remains, despite several localised recent rain events. The total rainfall received in Boonah (nearest rain data collection centre) totalled 268.00 mm. This is 490.1 mm below the historical annual rainfall average for the local area. In contrast, the year of 2020 resulted in 741.00 mm of rain recorded, while 2021 resulted in 1,387.6 mm.

The Climate Change Adaptation Strategies for the Koala prepared by Christine Adams-Hosking concluded that the highest probability of koala presence occurred at a mean annual rainfall of 700mm (Adams-Hosking *et al.* 2011). Therefore, despite unprecedented drought conditions, the offset property maintains rainfall similar to the optimal range to support koala presences.

The overall assessment of drought risk is that its occurrence is **likely** within the life of the offset and consequences of such an event would be **moderate**. Without intervention and management, drought is evaluated as a **medium risk** to this offset project. Refer to **Table 11** for the initial risk rating calculation.

Table 11: Drought Risk Rating (Initial Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

Management actions to reduce the risk of drought impacts on the Rosevale offset property include:

- Ensure offset design includes restoration and connection to higher moisture content soils associated with gully lines;
- Maintain site dams and waterbodies for use in offset MNES habitat restoration activities and as water sources for native animals; and
- Consider small 'turkey' dams as part of upper ridge rehabilitation for the purposes of water access for fauna and the creation of patches of high moisture soils and vegetation.

Through the implementation of the management actions listed above and **Corrective Actions**, the residual risk rating for this offset project is that it is **likely** that it would occur within the life of the offset and the consequences

of such an event would be **moderate**. With intervention and management, the residual risk of a drought is evaluated as a **medium risk** to this offset project. Refer to **Table 12** for the residual risk rating calculation.

Table 12: Drought Risk Rating (Residual Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

RISK 3: SHIFTING HABITAT RANGE

A number of contemporary case studies and research papers have investigated the combined weather characteristics of climate change on the current and future distribution of suitable Koala habitat into the future. Koalas are considered to be at risk of these factors because of their low tolerance to adapt to environmental changes combined with the number of existing non-climatic related threats already well documented. More recently both species and their habitat have been affected nationally by the 2019-2020 bushfires. GHFF are also considered to be affected by climate change, however most studies relate to the increased temperatures at the camp and roosting sites, with less material available on their foraging range. The proposed offset provides foraging habitat and thus not directly influence temperatures at the roosting locations, which periodically shift for a range of factors.

The Climate Change Adaptation Strategies for the Koala by Christine Adams-Hosking applied climate change distribution models for the koala and five of its essential eucalypt food trees to a conservation prioritisation framework ('Zonation'), to determine which Queensland local government areas (LGAs) were the highest priority for koala conservation and adaptation. The study included current (2011) and future predicted koala habitat distribution in 2070 showing a substantial migration eastward. The study further concludes that:

"*The highest probability of koala presence occurred at a mean maximum summer temperature of approximately 27oC and a mean annual rainfall of approximately 700 mm" (Adams-Hosking, C., Grantham, H. S., Rhodes, J.R., McAlpine, C. and Patrick T. Moss (2011). Modelling climate-change-induced shifts in the distribution of the koala. Wildlife Research, 38, 122–130).*

As previously stated the Rosevale offset property average rainfall in 2019 was 268 mm down on the annual rainfall average of 741 mm, however these results have occurred while the LGA was declared in a drought situation, with this being the lowest ever annual rainfall recording for the local area (Kalbar rainfall data collection centre first recorded rainfall data in 1887). Additionally, the mean recorded minimum and maximum

temperatures for the region are 13.1°C to 27.1°C, thus even with predicted temperature increases the Rosevale offset property would remain around the noted 27°C mean maximum parameter of the study. The land is also located within the current and 2070 koala habitat distribution maps based on the A1F1 climate change scenario (Adams-Hosking, et al, 2011).

At the site scale the offset design is founded in the re-establishment of connected koala habitat along gully lines and through higher moisture content soils. The design will connect existing low range and foothill habitat with gully lines and contiguous koala habitat within a known biodiversity corridor which contains all necessary habitat criteria.

The overall assessment of shifting habitat range risk is that its occurrence is **unlikely** within the life of the offset and consequences of such an event would be **high**. Without intervention and management, shifting habitat range is evaluated as a **low risk** to this offset project. Refer to **Table 13** for the initial risk rating calculation.

Table 13: Shifting Habitat Range Risk Rating (Initial Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

Management actions to minimise the risk of shifting habitat range on the Rosevale offset property include implementing the risk management actions outlined above.

Through the implementation of the management actions listed above and **Corrective Actions**, the residual risk rating for this offset project is that it is **unlikely** that it would occur within the life of the offset and the consequences of such an event would be **high**. With intervention and management, the residual risk of a shifting habitat range is evaluated as a **low risk** to this offset project. Refer to **Table 14** for the residual risk rating calculation.

Table 14: Shifting Habitat Range Risk Rating (Residual Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

RISK 4: PLANT STOCK FAILURE

The entirety of the ROA 1 requires significant MNES habitat restoration activities. In projects that include wholesale restorations works, the risk exists for planting stock to fail in large volumes due to:

- Poor soil quality or incompatible match of soils to replanted vegetation types;
- Weather related impacts – frost / prolonged dry periods, excessive heat or cool periods;
- Poor quality planting stock or the sourcing of planting stock from a different geographic region; and
- Lack of appropriate planting area preparation – weed removal / pasture seed removal / cultivation, etc.

The majority of these challenges are expected to be managed through the use of experienced bushland regeneration experts and contractors with relevant insurance and payment retentions. Failure of planting stock is primarily an economic impact for this project as the ROA 1 will not achieve committed condition improvement and habitat expansion targets without rectification of planting works.

The overall assessment of plant stock failure risk is that its occurrence is **possible** within the life of the offset and consequences of such an event would be **major**. Without intervention and management, plant stock failure is evaluated as a **high risk** to this offset project. Refer to **Table 15** for the calculation of risk rating.

Table 15: Plant Stock Failure Risk Rating (Initial Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

Management actions that will be implemented to reduce the risk of plant stock failure impacts on the Rosevale offset property include:

- Undertake soil testing for both the modified planting soil and for the planting locations;
- Match species to pre-clear regional ecosystem vegetation communities based on geography, soil and region specifications;
- Undertake planting in manageable mosaic to ensure monitoring, watering etc can be implemented as required;
- Use experienced contractors and bushland regenerators to undertake all revegetation and rehabilitation works. Ensure selected contractors included relevant insurances and payment retentions for success rates from part of contract obligations;
- Over plant all revegetation areas by 10% on allocated numbers to cater for a natural 10% failure rate; and
- Undertake planting during warmer frost-free months.

Through the implementation of the management actions listed above and **Corrective Actions**, the residual risk rating for this offset project is that it is **unlikely** that it would occur within the life of the offset and the consequences of such an event would be **moderate**. With intervention and management, the residual risk of plant stock failure is evaluated as a **low risk** to this offset project. Refer to **Table 16** for the residual risk rating calculation.

Table 16: Plant Stock Failure Risk Rating (Residual Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

RISK 5: FERAL ANIMAL CONTROL

The Department of Agriculture and Fisheries (DAF) lists feral dogs as abundant and widespread throughout the Scenic Rim region. Wild dogs (*Canis familiaris dingo, Canis familiaris dingo X Canis familiaris, Canis familiaris*) are listed as declared pest animals by Scenic Rim Regional Council, with the local council website documenting that the impact of wild dog activity has increased in the past 10 years due mainly to the increasing population in the region. Further, residents are increasingly engaged in raising livestock and poultry, resulting

in a readily available food sources for wild dogs (SRRC 2021). The Scenic Rim Regional Council currently runs baiting, shooting and trapping programs throughout the region.

Evidence of wild dog predation on livestock was recorded on the offset property. Research by Pest Animal Management QLD (2020) found that the Scenic Rim region contains an abundance of wild dogs, with evidence indicating that calf predation has increased significantly.

The overall assessment of feral animal control risk is that its occurrence is **possible** within the life of the offset and consequences of such an event would be **moderate**. Without intervention and management, feral animal control is evaluated as a **medium risk** to this offset project. Refer to **Table 17** for the calculation of risk rating.

Table 17: Feral Animal Control Risk Rating (Initial Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

Management actions to reduce the risk of feral animal predation impacts on the Rosevale offset property include:

- Undertake baseline and periodical surveys and monitoring of feral animal populations, locations and dispersal patterns within the Offset property (Survey methods to include – direct observation / remote sensor camera and sand traps for print record). Develop a base line of feral animal populations and 'hot spots' and key activity periods (eg dusk);
- Develop a purpose built offset property Pest Management Action Plan – method to include trapping, shooting, baiting. Develop an adaptive management approach to pest management which considers each method relative to the base line data collected to determine the most effective pest management measures for the offset property; and
- Undertake stakeholder engagement with immediate land holders to foster joint sub regional scale action plan.

Through the implementation of the management actions listed above and **Corrective Actions**, the residual risk rating for this offset project is that it is **possible** that it would occur within the life of the offset and the consequences of such an event would be **minor**. With intervention and management, the residual risk of feral animal control is evaluated as a **low risk** to this offset project. Refer to **Table 18** for the residual risk rating calculation.

Table 18: Feral Animal Control Risk Rating (Residual Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

RISK 6: WEEDS OF NATIONAL SIGNIFICANCE INCREASED INFESTATIONS

Preliminary site surveys and observations over the Rosevale offset property recorded a number of weed species, with the most prevalent and inhibitive to Koala movement and habitat restoration being *Lantana camara*. The Scenic Rim Regional Council Biosecurity Plan aims to control declared pest plants within the region. This plan includes information and strategies for landholders to effectively manage pest species. *Lantana camara* is listed as a declared pest plant within the Scenic Rim region.

Lantana camara is listed as a 'weed of national significance' under the EPBC Act. Further, in 2006, the NSW Government nominated *Lantana camara* as a key threatening process under the EPBC Act.

Lantana camara occurs on the Rosevale offset property both in open paddock areas as isolated clusters and thickets and as a dominant shrub in gully lines. Within open areas existing farm practices result in periodical pesticide application limiting spread, however, this does not occur to the extent of entire eradication as the costs of treatment to result in an economical return for the grazing benefit are non-existent. An exact volume or extent of Lantana at the offset property has not been calculated.

Lantana infestations suppress and inhibit the natural regeneration of regrowth vegetation on-site which directly limits the growth rates and regeneration of non-juvenile koala habitat trees and Grey-headed Flying-fox foraging tree species. Although baseline data is limited to the survey events undertaken for this EPBC Application research infers the highly invasive and spreading nature of the species, coupled with the in-active management in areas would result in progressive increases as local climatic events align with optimal germination and seeding periods. In areas blanket layers of *Lantana camara* additionally form a barrier to terrestrial species, which would include limiting the Koalas ability to access areas containing and over-canopy of NJKHTs.

The overall assessment of weeds of national significant increased infestation risk is that its occurrence is **highly likely** within the life of the offset and consequences of such an event would be **high**. Without intervention and

management, WoNS increased infestations is evaluated as a **high risk** to this offset project. Refer to **Table 19** for the calculation of risk rating.

Table 19: Weeds of National Significance Increased Infestations Risk Rating (Initial Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

Management actions to reduce the risk of weeds of national significant increased infestation impacts on the Rosevale offset property include:

- Use an Antenna based GPS system to map the full extent (as description polygons) of all *Lantana camara* areas within the ROA 1 (achieve a total ha extent of weed infestations / occurrences within the ROA 1);
- Exclude stock (cattle) access from *Lantana camara* infestation areas within the ROA 1 (grazing cattle provide the most continuous source of *Lantana camara* spread);
- Undertake detailed weed management control activities within the ROA 1. The following methods are to be deployed:
    - Stick rake, grubbing, ploughing or slashing major accessible areas of Lantana where not on a slope greater than 15% or where no existing native values occur; and
    - Apply broadscale herbicide and spot spray during high germination summer periods (Nov-March). Utilise organic based Lantana targeted herbicides which minimise impacts on native vegetation regenerating within and surrounding Lantana patches.
- Undertake periodical weed maintenance rotations for removal / suppression of Lantana regeneration; and
- Incorporate adaptive management principles into weed management methods to streamline overall management to the most effective control types.

Through the implementation of the management actions listed above and the corrective actions listed in **Section 6**, the residual risk rating for this offset project is that it is **unlikely** that it would occur within the life of the offset and the consequences of such an event would be **minor**. With intervention and management, the residual risk of increased infestations of WoNS is evaluated as a **low risk** to this offset project. Refer to **Table 20** for the residual risk rating calculation.

Table 20: Weeds of National Significance Increased Infestations Risk Rating (Residual Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

RISK 7: LIVESTOCK CONTROL AND ACCESS AND TRESPASS MANAGEMENT

The Scenic Ridge property has historically been utilised for cattle grazing operations. The property has retained extensive pasture paddocks consisting of native grasses and artificially improved introduced pastures. Cattle grazing is consistently observed on the Rosevale offset property, with the intensity of grazing directly related to the density of pasture available (ie. correlated with rainfall) and the beef market prices. Given the La Nina climatic season prediction for 2020-2021 and increased beef prices, the head of cattle on the Rosevale offset property have increased.

The risks of ongoing cattle grazing on the land could vary from low to medium to high subject to the future maintenance or expansion of the grazing use which is driven by a number of economic factors, however primarily the rise and fall of the beef market. Regardless the long term and current highest and best use for the land is the continuation of cattle grazing. No reduction in risk or improvement in condition or value of the koala and Grey-headed Flying-fox habitat will occur without direct intervention and a change in use (such as this offset outcome).

The Scenic Ridge property is surrounded to the south and north by large cattle grazing operations. The impacts of unlawful access and trespassing mimic those listed in the 'Livestock Control' management action section of this management plan (trampling, compacting, weed spread, fence destruction). Without a system for identifying and preventing or controlling access and trespassing the actions established for on-site stock management will be undermined.

The overall assessment of livestock control and access and trespass management risk is that its occurrence is **possible** within the life of the offset and consequences of such an event would be **high**. Without intervention and management, livestock control and access and trespass management are evaluated as a **medium risk** to this offset project. Refer to **Table 21** for the calculation of risk rating.

Table 21: Livestock Control and Access and Trespass Management Risk Rating (Initial Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

Management actions to reduce the risk of livestock control and access and trespass management impacts on the Rosevale offset property include:

- Ownership of the land by the offset provider and therefore any residual grazing activities will be secondary land uses to the approved offset outcomes;
- Implementation of a legally binding mechanism (Voluntary Declaration under the *Vegetation Management Act 1999*) which provides protection of existing and created habitat values. The Voluntary Declaration applies the regulations of the *Vegetation Management Act 1999* to the land title which remains regardless of the transfer of ownership or sale of the land; and
- Fauna friendly livestock exclusion fencing around the perimeter of the ROA 1.

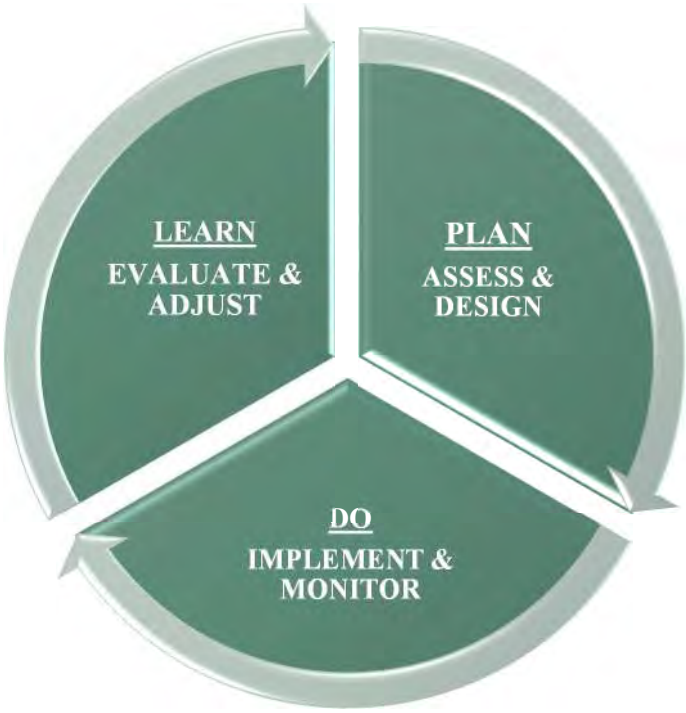
Through the implementation of the management actions listed above and **Corrective Actions**, the residual risk rating for this offset project is that it is **unlikely** that it would occur within the life of the offset and the consequences of such an event would be **minor**. With intervention and management, the residual risk of unauthorised livestock control, access or trespass is evaluated as a **low risk** to this offset project. Refer to **Table 22** for the residual risk rating calculation.

Table 22: Livestock Control and Access and Trespass Management Risk Rating (Residual Risk Rating)

Final Risk Rating (R): A function of multiplying Likelihood (L) and Consequence (C)						
		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

ADAPTIVE MANAGEMENT

This Offset Management Plan adopts a number of 'adaptive management' procedures both as a governing principle and within specific management activities. Most management activity table topics incorporate detailed baseline survey and data collection to be periodically repeated through the Offset Period and utilised for iterative changes to management implementation, particularly for stochastic habitat risks and threats. The primary purpose of adaptive management procedures for the Scenic Ridge ROA 1 is to allow on-ground monitoring and experiences on the most effective measures to feed into amendments to the OMP which focus on best return in Grey-headed Flying-fox and Koala Habitat outcomes for investment made.



OFFSET MANAGEMENT PLAN REPORTING STRUCTURE

As part of the commercial agreement between the Proponent and the Offset Provider all surveys, results, management activities statuses, alterations or amendments are recorded within an Offset Area Annual Report (OAAR) By executed contract each Offset Area Annual Report is to be completed by the Offset Provider and issued to the Proponent within 30 days of each 12 months anniversary of the documented commencement of the action. This commitment is purposely documented to ensure adequate time is provided to the proponent to evaluate and utilise the Offset Area Annual Report in preparing the Approved Action Annual Compliance Report. Although the reports precise inclusion in the ACR will be dictated by the Proponent.

APPENDIX A: OFFSET ASSESSMENT GUIDE CALCULATOR VALUES

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	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	Koala	**Area**	16.38	Hectares	
			Quality	**2**	Scale 0-10	
			Total quantum of impact	3.28	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	Yes				Count	1

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	3.28	Adjusted hectares	Montauban	**Time over which loss is averted (max. 20 years)**	20	**Start area (hectares)**	17	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	90%	0.00	0.00	4.90	149.58%	Yes	
									Future area without offset (adjusted hectares)	17.0	**Future area with offset (adjusted hectares)**	17.0								
					Time until ecological benefit	20	**Start quality (scale of 0-10)**	**1**	**Future quality without offset (scale of 0-10)**	**1**	**Future quality with offset (scale of 0-10)**	**5**	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	Yes		Count										0		0.00	0.00	#DIV/0!	#DIV/0!		

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	#DIV/0!	**#DIV/0!**	$0.00	#DIV/0!	#DIV/0!
Number of features	0				$0.00		$0.00
Condition of habitat	0				$0.00		$0.00
Area of habitat	3.276	4.90	149.58%	**Yes**	$0.00	N/A	$0.00
Area of community	0				$0.00		$0.00
					$0.00	**#DIV/0!**	**#DIV/0!**

APPENDIX B: REHABILITATION MANAGEMENT PLAN

REHABILITATION MANAGEMENT PLAN

Montauban Environmental Offsets

REHABILITATION APPROACHES

ECOLOGICAL RESTORATION APPROACHES	
NATURAL REGENERATION	
Applies:	To relatively large, intact and weed-free areas of native vegetation. Where native plants are healthy and capable of regenerating without human intervention. When native plant seed is stored in the soil or will be able to reach the site from nearby natural areas, by birds or other animals, wind or water. Where the plant community has a high potential for recovery after any short-live disturbance such as a fire or cyclonic winds. When preventative action is all that is required to avert on-going disturbances e.g. erection of fencing to prevent instruction by cattle.
Role of planting:	Planting in such areas can work against the aims of restoration by interfering with natural regeneration.
Goal vegetation community:	The re-establishing plant community will be similar in structure, composition and diversity to the original vegetation.
ASSISTED NATURAL REGENERATION	
Applies:	To natural areas where the native plant community is largely healthy and functioning. When native plant seed is still stored in the soil or will be able to reach the site from nearby natural areas, by birds or other animals, wind or water. Where the natural regeneration processes (seedling germination, root suckering, etc.) are being inhibited by external factors, such as weed invasion, soil compaction, cattle grazing, mechanical slashing, etc. When limited human intervention, such as weed control, minor amelioration of soil conditions, erection of fencing, cessation of slashing, etc. will be enough to trigger the recovery processes through natural regeneration. When the main management issue is weed infestation and/or current land use practices.
Role of planting:	Planting in such areas can work against the aims of restoration by interfering with natural regeneration except where species cannot return to site without direct intervention.
Goal vegetation community:	The re-establishing plant community will be substantially similar in structure, composition and diversity to the original vegetation.
RECONSTRUCTION	
Applies:	Where the site is highly degraded or altered. When the degree of disturbance has been so great and long-standing that the pre-existing native plant community cannot recover by natural means. To sites such as areas of fill, sites affected by stormwater flow, areas that have been drastically cleared, even though there may be a few remaining native trees or shrubs. When a greater degree of human intervention is required, such as weed control, cessation of grazing and/or slashing, amelioration of soil conditions such as importation of soils, drainage works or re-shaping of the landscape.
Role of planting:	Importation of native species to the area is required, either through planting or direct seeding (in some situations). natural regeneration and recruitment is insufficient to initially re-establish the original vegetation. Depending on the prevailing circumstances, the planting of a broad diversity of species from the target ecosystem may be unnecessary and the use of pioneers may be sufficient to re-establish ecological processes.
Goal vegetation community:	The re-establishing planted community should be similar to the original vegetation in structure, composition and diversity.
FABRICATION (TYPE CONVERSION)	
Applies:	Where site conditions have been irreversibly changed. When it is not possible to restore the original native plant community. Where a better-adapted local plant community can be planted that will function within the changed conditions. In situations such as the construction of a wetland plant community to mitigate increased urban storm-water run-off.
Role of planting:	Revegetation (planting) is the major component in a fabrication program.
Goal vegetation community:	The re-establishing planted community should be similar to a naturally occurring plant community of the same type (e.g. a constructed freshwater wetland should resemble a natural system in terms of structure, composition and diversity).

Note: Table adapted from Gold Coast City Council's 'Guideline for the preparation of a Rehabilitation Plan'

METHODOLOGY – REHABILITATION DESIGN

This documentation has been compiled through processes outlined in the SEQ Restoration Framework, site analysis and previous rehabilitation project experience. The rehabilitation design – comprising distinct management zones – provides assessment managers, clients and contractors a clear methodology to assist the recovery of an ecosystem that has been degraded, damaged or destroyed.

Rehabilitation zones were identified through detailed site analysis and are described below.

REHABILITATION ZONE 1 – ASSISTED NATURAL

Existing native trees, shrubs and groundcovers to be protected and retained. Weed management in accordance with the SEQ Restoration Framework to remove self-seeding weed species and encourage natural regeneration. Appropriate weed management methodology within this zone to minimise any native vegetation damage losses.

Infill planting to occur at highly disturbed areas ie. where large weed infestations have been treated leaving soil exposed or where native vegetation / regeneration in a stratum is absent / limited. Species selected to be according to site conditions and mapped / pre-clear regional ecosystem at the location. All species to be local provenance from mapped RE or existing at the location.

Refer to page 3 for rehabilitation planting species.

REHABILITATION ZONE 2 - RECONSTRUCTION

Weed management in accordance with rehabilitation zone 1.

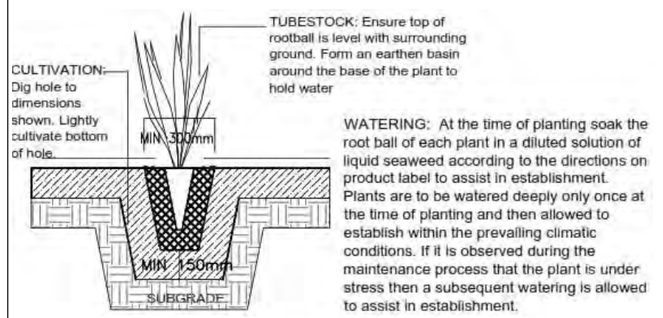
All bare denuded areas to be appropriately cultivated and ripped as required. Reconstruction of the natural environment to be undertaken via tubestock installation including a diversity of tree, shrub and groundcover species to match the pre-clear regional ecosystem of RE12.9-10.7.

Refer to the page 3 for rehabilitation planting species.

SITE PREPARATION

Areas designated for revegetation have undergone various stages of disturbance whether it be affected by introduced species, weed management or historical cattle grazing practices.

Once planting locations have been determined each planting location is to be spot sprayed should weed growth be present prior to soil cultivation (knockdown, non residual herbicide = Glyphosate or equivalent used at minimum rate of 2L per hectare of spot spraying). However, if individual weeds have been identified throughput the existing established native vegetation (rehabilitation zone 1), then manual removal should be applied and then infill planting undertaken as per the species planting palette.



EXISTING SITE CONDITIONS WITHIN THE OFFSET AREA

INSTALLATION METHODOLOGY

The following outlines the preferred installation methodology for revegetation works within the offset area. 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.

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.
- 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 depauperate, hydrophobic etc.) and above areas of potential frequent inundation and water flow, topsoil may be used, or the ground mechanically ripped where access is feasible.
- Pre-water plant hole, if soil is dry, to decrease root stress upon planting and assess the infiltration of water through the soil.
- Incorporate into the planting substrate the appropriate quantity of prepared water crystals or other suitable hydrating product such as Hortex 'Rainsaver' or 'Moisturaid'.
- Place plant into hole and backfill ensuring that the plant is upright and the stem is not covered in any less than 10mm or any more than 20mm of planting medium.
- Plants are to be watered thoroughly immediately after planting (ensure deep irrigation) and thereafter as required 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, slow-release fertiliser is recommended, and is to be administered appropriately during planting.

WEED MANAGEMENT

The purpose of the weed management is to enhance the existing native vegetation through the removal of invasive weeds and then follow up the weed removal with selective infill planting.

The weed management will target the *Latana camara* infestations within the offset area. Weed management will provide the basis of aiding rehabilitation within the offset area. Where significant disturbances occur within rehabilitation zone 1, infill planting will be utilised to aid stabilisation and native vegetation success.

Weed management is to occur in accordance with Section 5.2 of the Offset Area Management Plan (OAMP). In summary, weed management should be generally undertaken in the following manner:

- Stick rake, grubbing, ploughing or slashing major accessible areas of Lantana where not on a slope greater than 15% or where no existing native values occur.
- Apply broadscale herbicide and spot spray during high germination summer periods (Nov-March). Utilise organic based Lantana targeted herbicides which minimise impacts on native vegetation regenerating within and surrounding Lantana patches.

Weed management is to be undertaken as required throughout the 20 year offset period to ensure that the offset area completion criteria is achieved.

EXISTING WEED INFESTATIONS ON THE OFFSET AREA

HISTORICALLY CLEARED OPEN PADDOCK VEGETATION

PLANTING PALETTES

REHABILITATION ZONE 1 - ASSISTED NATURAL REGENERATION

Notes:
- Retain existing native canopy, sub-canopy and shrub species.
- Infill planting on each stratum where necessary.
- Infill planting species selected from RE12.8.17 technical description.

SCIENTIFIC NAME	COMMON NAME	PLANT FORM	KOALA IMPORTANCE (LOCALLY IMPORTANT KOALA TREE OR ANCILLARY TREE (ANU 2021))
TREES			
Angophora subvelutina	Rough-barked Apple	T1 / T2	Ancillary Tree
Eucalyptus crebra	Narrow-leaved Ironbark	T1	Locally Important Koala Tree
Eucalyptus melliodora	Yellow-box Gum	T1	Locally Important Koala Tree
Eucalyptus tereticornis	Queensland Blue Gum	T1	Locally Important Koala Tree
Eucalyptus melanophloia	Silver-leaved Ironbark	T1	Locally Important Koala Tree
Corymbia intermedia	Pink Bloodwood	T1 / T2	Ancillary Tree
Corymbia tessellaris	Moreton Bay Ash	T1 / T2	Ancillary Tree
SHRUBS			
Jacksonia scoparia	Dogwood	Shrub	-
Acacia salicina	Sally Wattle	Shrub	-
Acacia maidenii	Maiden's Wattle	Shrub	-
Cassinia quinquerfaria	Wild Rosemary	Shrub	-
Exocarpos cupressiformis	Native Cherry	Shrub	-
GROUND COVERS			
Cymbopogon refractus	Barbed-wire Grass	Ground cover	-
Poa sieberiana	Blue Tussock Grass	Ground cover	-
Dichanthium sericeum	Queensland Blue Grass	Ground cover	-
Aristida vagans	Three-awn Spear Grass	Ground cover	-
Bothriochloia decipiens	Pitted Blue Grass	Ground cover	-
Heteropogon contortus	Black Spear Grass	Ground cover	-
Eragrostis brownii	Brown's Love Grass	Ground cover	-
Lepidosperma laterale	Variable Sword Sedge	Ground cover	-
Themeda triandra	Kangaroo Grass	Ground cover	-
Panicum effusum	Hairy Panic	Ground cover	-
Aristida gracilipes	Aristida	Ground cover	-
Sporobolus spp.	Sporobolus	Ground cover	-

REHABILITATION ZONE 2 - RECONSTRUCTION

Notes:
- Ensure existing fire breaks and fire management lines are retained.
- Distribute plants in groups on-site in random arrangements.
- Infill planting species selected from RE12.8.17 technical description.

SCIENTIFIC NAME	COMMON NAME	PLANT FORM	KOALA IMPORTANCE (LOCALLY IMPORTANT KOALA TREE OR ANCILLARY TREE (ANU 2021))
TREES			
Angophora subvelutina	Rough-barked Apple	T1 / T2	Ancillary Tree
Eucalyptus crebra	Narrow-leaved Ironbark	T1	Locally Important Koala Tree
Eucalyptus melliodora	Yellow-box Gum	T1	Locally Important Koala Tree
Eucalyptus tereticornis	Queensland Blue Gum	T1	Locally Important Koala Tree
Eucalyptus melanophloia	Silver-leaved Ironbark	T1	Locally Important Koala Tree
Corymbia intermedia	Pink Bloodwood	T1 / T2	Ancillary Tree
Corymbia tessellaris	Moreton Bay Ash	T1 / T2	Ancillary Tree
SHRUBS			
Jacksonia scoparia	Dogwood	Shrub	-
Acacia salicina	Sally Wattle	Shrub	-
Acacia maidenii	Maiden's Wattle	Shrub	-
Cassinia quinquerfaria	Wild Rosemary	Shrub	-
Exocarpos cupressiformis	Native Cherry	Shrub	-
GROUND COVERS			
Cymbopogon refractus	Barbed-wire Grass	Ground cover	-
Poa sieberiana	Blue Tussock Grass	Ground cover	-
Dichanthium sericeum	Queensland Blue Grass	Ground cover	-
Aristida vagans	Three-awn Spear Grass	Ground cover	-
Bothriochloia decipiens	Pitted Blue Grass	Ground cover	-
Heteropogon contortus	Black Spear Grass	Ground cover	-
Eragrostis brownii	Brown's Love Grass	Ground cover	-
Lepidosperma laterale	Variable Sword Sedge	Ground cover	-
Themeda triandra	Kangaroo Grass	Ground cover	-
Panicum effusum	Hairy Panic	Ground cover	-
Aristida gracilipes	Aristida	Ground cover	-
Sporobolus spp.	Sporobolus	Ground cover	-

Attachment B

VDEC Application Forms

Queensland Government

Department of Resources
ABN 59 020 847 551

Request for a declared area

ss19E-19L Vegetation Management Act 1999

Use this form to request an area of land to be declared an area of high nature conservation value or an area vulnerable to land degradation. For guidance on declared areas see the Guide to declared areas at www.qld.gov.au (search 'vegetation management').

To apply for an area to be legally secured as an exchange area, complete the Application to legally secure an exchange area at www.qld.gov.au (search 'vegetation management'). For guidance on legally securing an exchange area see the General guide to accepted development vegetation clearing codes at www.qld.gov.au (search 'vegetation management').

1. Owner's (applicant's) details

Owner, of land includes -

(a) for freehold land - all registered owners; or
(b) for a lease, license or permit under the *Land Act 1994* – all lessees, licensees or permittees; or
(c) for indigenous land - the holder of title to the land; or
(d) for any tenure under any other Act - the holder of the tenure.

First name:		Middle name:	Surname:
Company name:	Montauban Pty Ltd		
If a corporation then enter one of the following:	(•) ACN ( ) ARBN		010 745 310
Main phone:	[redacted]	Other phone:	
Email:	[redacted]		
Address line 1:	[redacted]		
Address line 2:			
Town/Suburb:	[redacted]	State: [redacted]	Postcode: [redacted]
Preferred method of contact	( ) Phone (•) Email ( ) Letter		

The nominated contact person does not need to be the owner. All verbal and written correspondence (including the issue of notices) will be sent to the nominated contact person.

Name of nominated contact person (if applicable):	Carl Sillett		
Company name:	Montauban Pty Ltd		
If a corporation then enter one of the following:	(•) ACN ( ) ARBN		010 745 310
Main phone:	[redacted]	Other phone:	
Email address:	[redacted]		
Address line 1:	[redacted]		
Address line 2:			
Town/Suburb:	[redacted]	State [redacted]	Postcode [redacted]
Preferred method of contact	( ) Phone (•) Email ( ) Letter		

I accept that I will act as the nominated contact person on behalf of the owner(s) referred to in Section 1.

Signature of nominated contact person	Carl Sillett
Date:	

2. Property description

This is the property on which the declared area is proposed. The declared area management plan should indicate the specific location of the proposed declared area on the property.

Extra pages may be attached to list additional lots.

Lot number	Plan number	Area in hectares	Tenure
115	SP167206	33.03	Freehold

3. Registered interest holder consent

A registered interest is one registered under the *Land Act 1994* or the *Land Title Act 1994*.

Registered interests include but are not limited to mortgages, leases, subleases, covenants, profit a prendres, easements and building management statements.

A declaration may not be made unless the holder of a registered interest (other than the owner) in the proposed declaration area has consented in writing to the making of the declaration.

Note: Registered interest holder consent is not required to lodge this request for a declared area but is required prior to the making of a declaration.

Acknowledgement and waiver by all registered interest holders.

READ BEFORE SIGNING THIS SECTION

By signing this section, those signing are taken to:

- acknowledge that a declaration resulting from this request may have legal and financial implications for your interest in the property, and you agree that in no event shall the Department of Resources be liable for any special, indirect or consequential damages or any damages whatsoever rising out of or in connection with this request or any subsequent declaration in accordance with this request.
- consent to the making of a declaration as proposed in this request and supporting material.

Extra pages may be attached to list additional lots and/or registered interest holders and provide their consent to the making of the declaration.

Parcel (Lot & plan)	Type of registered interest	Registered interest holder's name	Contact details	Signature
115 SP167206	Mortgage	Rabobank Austrlia Limited	Malcolm Porter	

4. Type of declaration

Specify the type of declaration that is requested, and the relevant criteria for the declaration. One or more of the criteria may be applicable to the area being sought for declaration.

Note: The owner must provide an explanation of how the declared area meets the criteria selected in this section. This explanation must be provided in the documents accompanying the request.

◯ **Area of high nature conservation value**

- ☐ A wildlife refugium
- ☐ A centre of endemism
- ☐ An area containing a vegetation clump or corridor that contributes to the maintenance of biodiversity
- ☐ An area that makes a significant contribution to the conservation of biodiversity
- ☐ An area that contributes to the conservation value of a wetland, lake or spring
- ☑ Another area that contributes to the conservation of the environment

OR

◯ **An area vulnerable to land degradation**

- ☐ Soil erosion
- ☐ Rising water tables
- ☐ The expression of salinity, whether inside or outside the area
- ☐ Mass movement by gravity of soil or rock
- ☐ Stream bank instability
- ☐ A process that results in declining water quality

4.1 Purpose of request

◯ Environmental Offset (Vegetation Management)	◯ Carbon Offset
◯ Environmental Offset (Queensland Government - Other)	◯ Better Environmental Outcome (BEO)
◉ Environmental Offset (Commonwealth)	◯ Other Conservation Purpose
◯ Environmental Offset (Local Government)	◯ Enforceable Undertaking

Note: if the purpose of the declaration is to legally secure an exchange area, complete the Application to legally secure an exchange area at www.qld.gov.au (search 'vegetation management').

4.2 Associated development approval

If the declaration is linked to a development approval under the Planning Act (for example, if it required to meet a project condition to legally secure an offset area), please provide details of the development approval below:

Development approval reference number:	EPBC 2021/9005

If the declaration is linked to an approval under another Act please provide details of the approval below:

Other Approval reference number:	
Responsible agency:	Dept of Climate Change, Energy, Environment and Water

5. Management plan

A management plan must be provided with this request for a declared area. The management plan must contain all the components identified in this section. The management plan is to refer to the area identified in Section 2 of this form. The management plan may also include any other information the applicant considers will assist in the determination of the request.

For more information on the management plan, consult the Guide to declared areas, available on www.qld.gov.au (search 'vegetation management').

Management plan checklist

- ☑ Property owner's contact details and signature
- ☑ Includes description of the area subject to the declared area
- ☑ Includes map showing the location and extent of the declared area (or enough information for chief executive to map the stated area):
  - ◉ A map that defines the boundaries of the proposed declared area and a description of the boundaries of the area referenced by Map Grid of Australia 2020 (MGA2020) coordinates and zone references for the area
  - ○ A map showing the proposed declared area with five or more GPS points that correspond to identifiable fixed features; and the Map Grid of Australia 2020 (MGA2020) coordinates and zone references for each point, acquired by GPS or similar system of satellites that receives and processing information; and a description of the feature that each point represents
  - ○ A dataset, which can be used in a Geographic Information System showing the proposed declared area
- ☑ States the owner's management intent, and management outcomes proposed by the owner, for the conservation of the high nature conservation value of the area or the prevention of land degradation in the area
- ☑ States the activities the owner intends to carry out, or refrain from carrying out, to achieve the stated management outcomes
- ☑ States the restrictions, if any, to be imposed on the use of, or access to, the area by other persons to achieve the stated management outcomes
- ☑ If the declared area is to legally secure an environmental offset and the Department of Resources is not the administering agency, includes confirmation that the administering agency has / has not approved the declared area management plan that complies with the VMA.

A declared area management plan template / guidance is available at www.qld.gov.au (search 'vegetation management').

6. Signature of owner (applicant) and all registered owners

Where the owner is a company, execution by the company must be provided in accordance with the requirements of the ***Corporations Act 2001 (Commonwealth)***, section 127.

A company:

- may execute a document without using a common seal if the document is signed by two (2) directors of the company or a director and a company secretary; or for a proprietary company that has a sole director who is also the sole company secretary - that director; or
- with a company seal may execute a document if the seal is fixed to the document and the fixing of the seal is witnessed by two (2) directors of the company or a director and a company secretary; or for a proprietary company that has a sole director who is also the sole company secretary - that director.

READ BEFORE SIGNING THIS SECTION

Acknowledgement and waiver by the owner (applicant) and all registered owners.

Before consent to or lodging this request for a declared area, it is recommended that all registered owners of the property seek their own independent legal and financial advice regarding the effect of this request, and the legal and financial impacts of any subsequent declaration.

By signing this section, those signing are taken to:

- acknowledge that the declared area resulting from this request may have legal and financial implications for your interest in the property, and you agree that in no event shall the Department of Resources be liable for any damages whatsoever rising out of or in connection with this request or any subsequent declaration; and
- consent to the lodgment of the request; and
- agree that all information entered and provided in this request, including any maps, lists or other documents additionally supplied, is correct and accurate; and
- authorise the nominated contact person to act as such on your behalf; and
- authorise all verbal correspondence relating to this request to be to the nominated contact person; and
- authorise all written correspondence (including the issuing of notices) relating to this request to be sent to the postal address for the nominated contact person; and
- request that the chief executive agree to make a declaration as proposed in this request.

If there are more owners, extra pages containing the additional signature(s) may be attached.

Lot	Plan number	Owner's name	If a corporation record one of the following:		Owner's signature	Date	Company seal *(if applicable)*
115	SP167206	Montauban Pty Ltd	ACN	010 745 310		20/10/22	
						20/10/22	

Privacy statement: The Department of Resources is collecting the information in this form and any attachments to process your request that the chief executive declare a stated area of land under the *Vegetation Management Act 1999*. The consideration of your request may involve consultation, and if so, details of your request and any attachments may be disclosed to third parties. These details will not otherwise be disclosed outside the Department of Resources unless required or authorized by law.

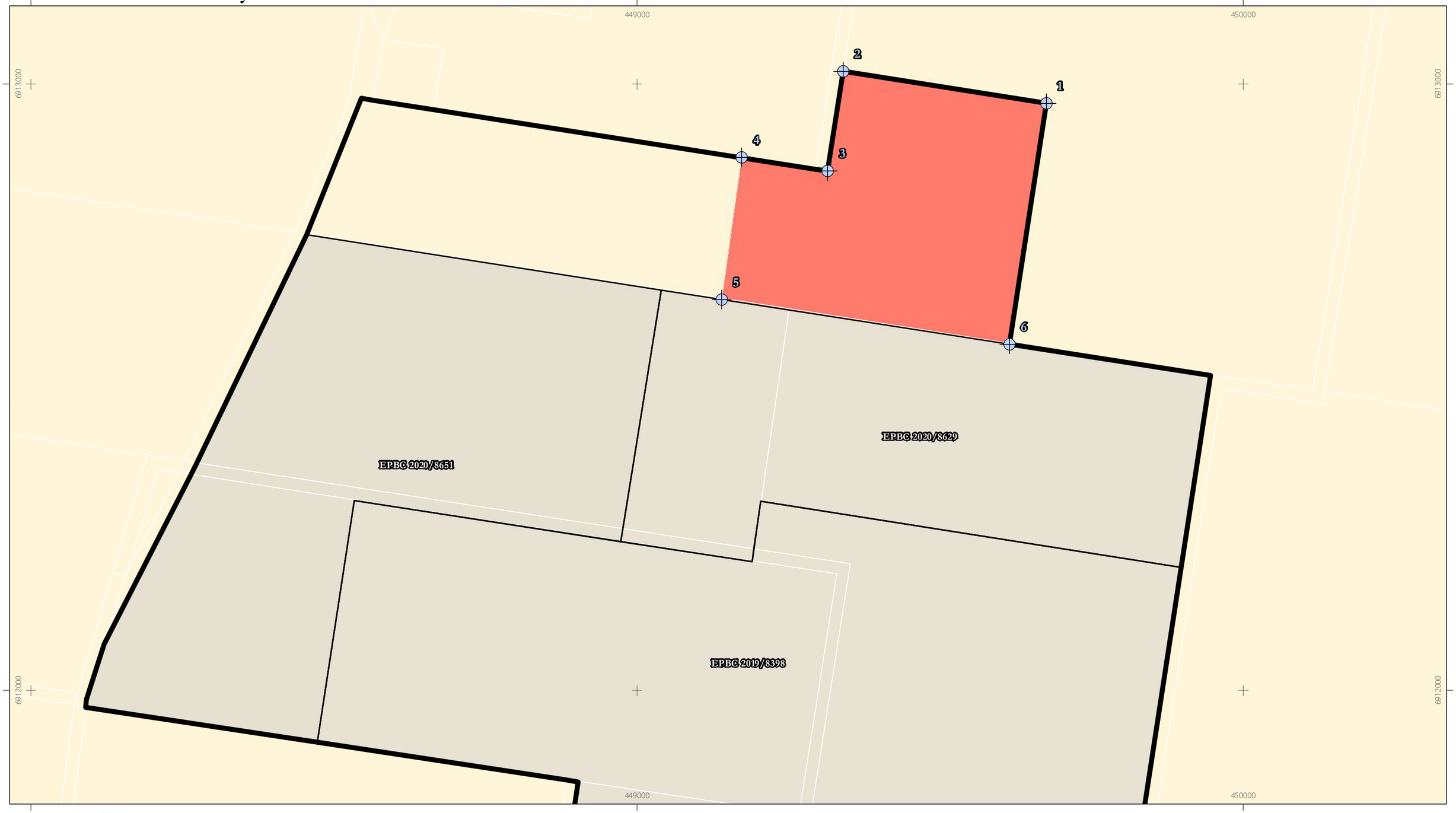
Office use only

Name:	Position:	Date received:
Signature:	Date:	

Attachment C

Rosevale Property
DECLARED AREA PLAN

Plan 1 Voluntary Declaration Area



Montauban Environmental Offsets

N
W E
S

0 25 50 100 150 Meters

1:6,000

Cordinate System: GDA2020 MGA Zone 56

DISCLAIMER:
THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. RESPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY CANNOT BE ACCEPTED.

Location/Adress:Aratula, QLD

Date: 17/10/2022

Plan Name: Plan 1 VDEC V1

References:

Legend

- Offset DCDB
- Qld DCDB
- Surrounding Approvals
- Voluntary Declaration (VDec) Area
- Reference Point

Id	Eastings (m)	Northings (m)
1	449674.7	6912968.3
2	449339.8	6913020.5
3	449314.3	6912856.4
4	449172.6	6912878.5
5	449139.4	6912644.8
6	449614.2	6912570.7

Appendix C

Action Commencement Letter

Saunders Havill Group Pty Ltd
ABN 24 144 972 949

9 Thompson Street
Bowen Hills QLD 4006

1300 123 SHG

www.saundershavill.com

31 January 2023

EPBC Monitoring
Department of Climate Change, Energy, the Environment and Water
GPO Box 858
Canberra ACT 2601

Via email: EPBCmonitoring@dcceew.gov.au

To whom it may concern.

RE: NOTIFICATION OF COMMENCEMENT OF THE ACTION BARRAMS ROAD RESIDENTIAL DEVELOPMENT, QLD (EPBC 2021/9005)

On behalf of APD Projects Pty Ltd, as the approval holder of *Barrams Road Residential Development, Qld (EPBC 2021/9005)* and in accordance with Condition 20 of the approval, please accept this letter as formal notification that the action commenced on Monday 30 January 2023.

We note that the timeframe to report commencement of the action is 5 business days from the commencement of the action. Thus, this notification has been provided to the Department within the timeframe stipulated within Condition 20 of the approval.

Please don't hesitate to contact me on (07) 3251 9432 should you have any immediate questions regarding this correspondence or the project.

Yours sincerely,
Saunders Havill Group

Laura Thorley
Senior Environmental Scientist

Appendix D

Pre-start Package Checklist – Phase 1

Barrams Road

Environmental Pre-Start Checklist

Project Area: Phase 1 (outside waterway)		**Date:** 13/06/2023			
Contractor: CCA Winslow		Vegetation clearing extent for Phase 1 (outside waterway)			
Date work is to start: 13 June 2023					
Date work is to cease: 14 July 2023		**Compliance**			
#	**Control Measure**	**Yes**	**No**	**N/A**	**Details**
1	Has a copy of the EPBC Act approval been included in the package?	☒	☐	☐	Refer Attachment 1 for EPBC Act approval.
2	Has a Vegetation Clearing and Fauna Management Plan (VCFMP) been prepared to meet EPBC Act requirements?	☒	☐	☐	Refer Attachment 2 for VCFMP.
3	Has a Protected Plants flora survey been undertaken for the clearing impact area and exemption / permit to clear obtained from DES?	☒	☐	☐	Refer Attachment 3 for Flora Survey Report and Exemption.
4	Has a copy of the Nature Conservation (Koala) Conservation Plan information Sheet been attached for review and application?	☒	☐	☐	Refer Attachment 4 for Information Sheet - Nature Conservation (Koala) Conservation Plan.
5	Have clearing extents been marked out and fenced (delineating areas to be cleared vs retained)? (N.B. Demarcation fencing is to be installed before the time of the official pre-start).	☒	☐	☐	The clearing extents were verified by the Environmental Coordinator on 08th June 2023.
6	Have demarcation extents been signed off by the Environmental Coordinator?	☒	☐	☐	Refer Attachment 5 for Environmental Coordinator inspection & Sign Off.
7	Has a qualified AQF Level 5 Arborist been appointed?	☒	☐	☐	Tree Science is the appointed Arborist for the project. Refer Attachment 6 for Phase 1 trees specified for Arborist supervision during removal. Arborist to supervise all works

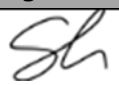
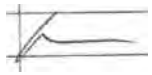
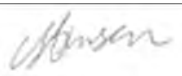
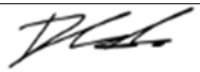
					behind and reinstatement of the tree protection fencing where necessary to safely remove the specified trees.
8	Has a DES licensed Fauna Spotter Catcher been appointed to be present during all clearing activities?	☒	☐	☐	See Attachment 7 for appointed Fauna Spotter Catcher details.
9	Has the appointed Fauna Spotter Catcher completed pre-clearance surveys and reports? (N.B. these must include EPBC requirements and specifications)	☒	☐	☐	Refer Attachments 8 & 9 for Fauna Spotter Catcher Pre-clearance Reports (WPMP + WHIMP).
10	If the appointed Fauna Spotter Catcher identified any sensitive areas of consideration in clearing methods, please provide a summary. (N.B. fauna exclusion fencing must be erected around construction areas where necessary)	☐	☐	☒	Refer Attachments 8 & 9 for Fauna Spotter Catcher Pre-clearance Reports (WPMP + WHIMP).
11	Has an Erosion and Sediment Control Plan (ESCP certified by a RPEQ or accredited CPESC professional been prepared?	☒	☐	☐	Refer Attachment 10 for ESCP.
12	Have all contractors, subcontractors and associated personnel been instructed on environmental procedures and controls?	☒	☐	☐	Pre-start meeting was held with all signatory parties (or their contract representatives) on 12th June 2023.
13	Has a pre-start been completed with all relevant parties?	☒	☐	☐	Pre-start meeting was held with all signatory parties (or their contract representatives) on 12th June 2023.
Additional requirements for crossings within riparian corridors and / or waterways					
14	Will works involve clearing within a Fisheries mapped waterway for waterway barrier works? If so, are works compliant with applicable accepted development requirements and / or permits?	☐	☐	☒	The Phase 1 works will not involve temporary waterway barrier works (WWBW).

15	Will works involve clearing within a watercourse defined under the Water Act 2000? If so, are works compliant with applicable exemptions and / or permits?	☐	☐	☒	The Phase 1 works will not involve clearing within a watercourse.

NOTE: if the answer to any question above is 'NO' then the clearing activity will not proceed.

Compliance Awareness

Signing below demonstrates acknowledgement of the environmental pre-start procedures and requirements listed in the checklist above and associated attachments.

Name	Company	Position	Signature	Date
Sarah Gould	Barrams Land Partners Pty Ltd	Client Representative		13/06/2023
Peter Reberger	CCA Winslow	Site Contractor / Clearing Contractor		12/06/23
Elliot Wigram	Keystone Fauna Management	Fauna Spotter Catcher		13/06/2023
Christopher Stimson	Arcadis	Project Engineer		12/06/2023
Daniel Chaille (RPEQ) on behalf of David Sexton	Engeny	Design and Construction Certifier (waterway)		12/06/2023
	Tree Science	Arborist		
Andrew Davies	Saunders Havill Group	Environmental Coordinator		12/06/2023

Barrams Road

Environmental Pre-Start Checklist

NOTE: if the answer to any question above is 'NO' then the clearing activity will not proceed.

Compliance Awareness

Signing below demonstrates acknowledgement of the environmental pre-start procedures and requirements listed in the checklist above and associated attachments.

Name	Company	Position	Signature	Date
	Barrams Land Partners Pty Ltd	Client Representative		
	CCA Winslow	Site Contractor / Clearing Contractor		
	Keystone Fauna Management	Fauna Spotter Catcher		
	Arcadis	Project Engineer		
	Engeny	Design and Construction Certifier (waterway)		
	Tree Science	Arborist		13/6/23
Andrew Davies	Saunders Havill Group	Environmental Coordinator		12/06/2023

Appendix E

Wildlife Protection Management Plan (WPMP) and Wildlife Habitat and Impact Mitigation Plan (WHIMP)

Native Fauna and Habitat Survey

Barrams Road, South Ripley
(Amendment 1)

Part 1: Wildlife Protection and Management Plan

Prepared by:

KEYSTONE
FAUNA MANAGEMENT

This report must be read in conjunction with *Part 2: Wildlife and Habitat Impact Mitigation Plan*

September 21st 2023

Document status					
Review No.	Fauna Spotter/s	Date	Author/s	Status	Date
1	Stephane Batista	30/05/2023	Elliot Wigram	Complete	01/06/2023
2	-	-	Elliot Wigram	Complete	9/06/2023
3	-	-	Elliot Wigram	Complete	12/06/2023
4	-	-	Elliot Wigram	Complete	13/06/2023
5	Stephane Batista	12/06/2023	Elliot Wigram	Complete	15/06/2023
6	Elliot Wigram	21/09/2023	Elliot Wigram	Complete	21/09/2023

Direct all correspondence to:

Keystone Fauna Management
Ph: +61405573384
Email: elliot@keystonefauna.com.au

All fauna management activities were performed under the authority of rehabilitation permit WA0028209 issued to Keystone Fauna Management by the Department of Environment and Science (DES)

1. Summary

Keystone Fauna Management has been engaged by Winslow to undertake a Wildlife Protection & Management Plan survey within the disturbance limits of proposed development works at the eastern end of Barrams Road in South Ripley.

This survey assessed the habitat values of the area with consideration for the suitability for endangered, vulnerable and near threatened (EVNT) species. Active and/or potential fauna breeding places were identified and management measures recommended.

All fauna management activities were performed under the authority of rehabilitation permit WA0028209, issued to Keystone Fauna Management by the Department of Environment and Science (DES).

2. Introduction

2.1 Project scope

The project involves land clearance including the removal of native vegetation to allow for further infrastructure development.

2.2 Site description

The site consists of an eroded creek line running along the northern boundary of previous clearing works. Ground cover consists predominantly of overgrown grassland, scattered timber, dense low vegetation, moist areas and scattered rocks.

2.3 Survey objectives

As part of the environmental compliance of the project Keystone Fauna Management was engaged to undertake an assessment of habitat values including the identification of active and/or potential breeding places for native fauna.

The survey targets were:

- The identification and clear delineation of potential breeding places for native fauna
- The assessment of habitat suitability for faunal groups
- Targeted assessment of suitability for endangered, vulnerable or near threatened (EVNT) species.
- The formulation of management measures for identified active and/or potential native breeding places

3. Survey Methodologies

3.1 Desktop review

Prior to in situ field survey a desktop fauna assessment of the site location was undertaken. Resources included:

- A search of the Federal Department of the Environments Species of National Significance database
- A search of the Federal Department of the Environments EPBC Act lists databases for threatened fauna and migratory species
- A search of The Queensland Governments Threatened Species Lists
- Queensland Globe online search tool
- A review of field guides and other relevant literature

The resulting data was then ground-truthed via field survey.

3.2 In situ field survey

On the 30th of May 2023 a field survey of the site was undertaken by fauna spotter/catcher Stephane Batista. An additional section on the sites northern boundary due for clearing was surveyed by fauna spotter/catcher Elliot Wigram on the 21st of September 2023. All previously surveyed areas had by this stage been cleared and mulched.

Field survey methodologies include

Terrestrial

- Targeted searches for indications of current or recent occupancy of potential breeding places including; rocks and rock piles, hollow logs, bark exfoliations, scattered timber and timber piles, burrows, soil cracks and termite mounds, ground nests, dense shrubs, leaf litter and grasses.

- The identification, recording and clear delineation of all active and/or potential breeding places.
- The clear delineation of all habitat features to be retained.

Arboreal

- Visual searches for indications of current or recent occupancy of potential breeding places including; nests, hollows, exfoliating bark, fissures, dreys and arboreal termitaria.
- The identification and delineation of koala food trees.
- The identification, recording and clear delineation of all active and/or potential breeding places.
- The clear delineation of all standing trees to be retained as terrestrial habitat.

Aquatic

- Targeted searches for indications of occupancy of water systems.
- The identification, recording and clear delineation of all active and/or potential breeding places.

During the field survey consideration was given to habitat connectivity and the specific requirements of significant species. Fauna mitigation initiatives were implemented where practicable.

3.3 Limitations

All inference as to the vertebrate fauna assemblage of this site is concluded from a combination of desktop survey followed by two days in situ ground truthing. With a limited timeframe in which the field survey was to be carried out abiotic variation in factors including time periods, time of year or temperature could not be controlled for. Further, with no trapping component the consultant is relying on targeted searches combined with opportunistic discoveries (scats, prints, scratchings, food scraps etc.) to verify presence or absence of a particular species.

4. EVNT Species Review

The Queensland Governments Wildlife Online database (QGWOD) was reviewed prior to in situ survey. As per the extract, since 1980, seven (7) rare or threatened species have been recorded within 5kms of site. This was

subsequently ground-truthed and the likelihood of each species presence within the disturbance limits was determined.

The results are as follows:

4.1 Mammals

As per the QGWOD two (2) mammal species with state or commonwealth conservation significance have been recorded since 1980 within 5km of the survey area

- 0 species are deemed as likely to occur
- 2 species are deemed as possible to occur
- 0 species are deemed as unlikely to occur

Common/Scientific Name	NCA Status	EPBC Status	Notes
Koala *Phascolarctos cinereus*	E	E	Possible – Refer to koala notes below (55 records)
Central greater glider *Petauroides armillatus*	E	E	Possible - Typically occurs in wet or damp sclerophyll forest (6 record)

4.1.1 Koala specifics

The site is located in Koala District A. The disturbance area is mapped as predominantly core koala high value bushland habitat. Koala priority area is found in close proximity to the east of site and strong habitat linkages connecting site to priority area exist. The Atlas of Living Australia shows historic koala records in the bushland to the east of site. The site has a high availability of established koala food trees above 10dbh and backs on to a large swath of high value koala woodland. These factors combined mean the presence of koala onsite is possible.

4.2 Reptiles

As per the QGWOD no reptile species with state or commonwealth conservation significance have been recorded since 1980 within 5km of the survey area

- 0 species are deemed as likely to occur
- 0 species are deemed as possible to occur
- 0 species are deemed as unlikely to occur

Common/Scientific Name	NCA Status	EPBC Status	Notes

-	-	-	-

4.3 Amphibians

As per the QGWOD no amphibian species with state or commonwealth conservation significance have been recorded since 1980 within 5km of the survey area

- 0 species are deemed as likely to occur
- 0 species are deemed as possible to occur
- 0 species are deemed as unlikely to occur

Common/Scientific Name	NCA Status	EPBC Status	Notes
-	-	-	-

4.4 Birds

As per the QGWOD five (5) bird species with state or commonwealth conservation significance have been recorded since 1980 within 5km of the survey area

- 0 species are deemed as likely to occur
- 3 species are deemed as possible to occur
- 2 species are deemed as unlikely to occur

Common/Scientific Name	NCA Status	EPBC Status	Notes
Australian Painted Snipe *Rostratula australis*	E	E	Unlikely – Found in shallow marshland with exposed wet mud and dense low fringing vegetation (7 records)
Glossy black-cockatoo (eastern) *Calyptorhynchus lathami lathami*	V	V	Possible – Found in open forest particularly if *Casuarina* or *Allocasuarina* is present (2 records)
Powerful Owl *Ninox strenua*	V	-	Possible - Found in association with established eucalyptus forest (9 records)
White-throated needletail *Hirundapus caudacutus*	V	V	Unlikely – Seasonal migrant. Seen around SEQLD until April (8 records)
Swift parrot *Lathamu discolor*	E	CE	Unlikely - Seasonal migrant likely at this time of year. heading to breeding areas in Tasmania and surrounds (1 record)

5. Field Survey results

5.1 Native fauna record

Native Fauna Confirmed During Survey	
Direct evidence of species of state or commonwealth conservation significance	▪ No evidence found
Indirect evidence of species of state or commonwealth conservation significance	▪ Nesting hollows in soil banks conducive to those made by rainbow bee-eaters (*Merops ornatus*)
Other Native Species	▪ Eastern grey kangaroo (*Macropus giganteus*) ▪ Pied butcherbird (*Cracticus nigrogularis*) ▪ Grey fantail (*Rhipidura fuliginosa*) ▪ Torresian crow (*Corvus orru*)
Potentially Present Native Fauna Unconfirmed During Survey	
Species of state or commonwealth conservation significance	▪ Refer to the EVNT species review
Other Native Species	▪ Snakes including venomous and non-venomous species ▪ Lizards including skink, gecko, dragon and monitor species ▪ Bird species ▪ Frog species ▪ Terrestrial and arboreal mammals

5.2 Potential breeding places and significant habitat features

Status	GPS	Description	Photo

Appears Inactive	-27.6921944 152.8305899	Potentially hollow bearing tree containing a stick nest/platform.	
Appears Inactive	-27.6922586 152.8306486	Large burrow system	
Appears Inactive	-27.6922271 152.8305943	Rotted log with heavy bark exfoliations	
Appears Inactive	-27.6922348 152.8306375	Hollow logs	

Appears Inactive	-27.6916835 152.8296890	Wood/mulch pile	
Appears Inactive	-27.6917563 152.8296904	Hollow bearing tree	
Appears Inactive	-27.6908760 152.8285531	Tim roofing panels	
Appears Inactive	-27.6907213 152.8285820	Wood pile	

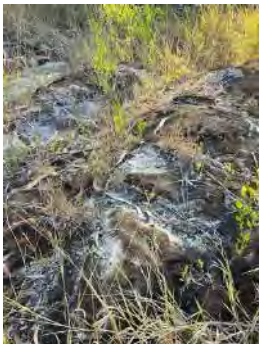
5.3 Habitat features unsuitable for individual delineation

Status	GPS	Description	Photo

Inactive	Site wide	Kangaroo scats	
Inactive	Site wide	Kangaroo prints	
Inactive	Site wide	Bird prints	
Inactive	Site wide	Bandicoot diggings	

Appears inactive	Site wide	Long, dense grasses	
Appears inactive	Site wide	Geofabrics	
Activity level unknown	Site wide	Drainage line holding water	
Appears Inactive	Site wide	Arboreal termite mounds	

Appears inactive	Site wide	Mulch piles	
Appears inactive	Site wide	Termite mounds	
Appears inactive	Site wide	Scattered/ground timber	
Appears inactive	Site wide	Dense shrubs/tangles	

Appears inactive	Site wide	Root/soil tangles	
Appears inactive	Site wide	Soft/friable soils	
Appears inactive	Site wide	Rocky areas	
Activity level unknown	Site wide	Heavy leaf litter	

Appears inactive	Site wide	Ground burrows	
Appears inactive	Eroded areas	Cracks in soil banks	
Appears inactive	Site wide	Exfoliating bark	
Appears inactive	Eroded areas	Nesting bird hollows. Likely made by pardalote or rainbow bee eater.	

Inactive	Site wide	Animal scratches	

6. Addendum

Figure 1: Locations of specific marked habitat features

Legend

Places: My Places

- Hollow bearing tree & stick nest
- Large burrow system
- Rotted log with heavy bark exfoliations
- Hollow logs
- Wood/mulch pile
- Hollow bearing tree
- Tim roofing panels
- Wood pile

Road Crossing

- Bridge
- Tunnel

Road

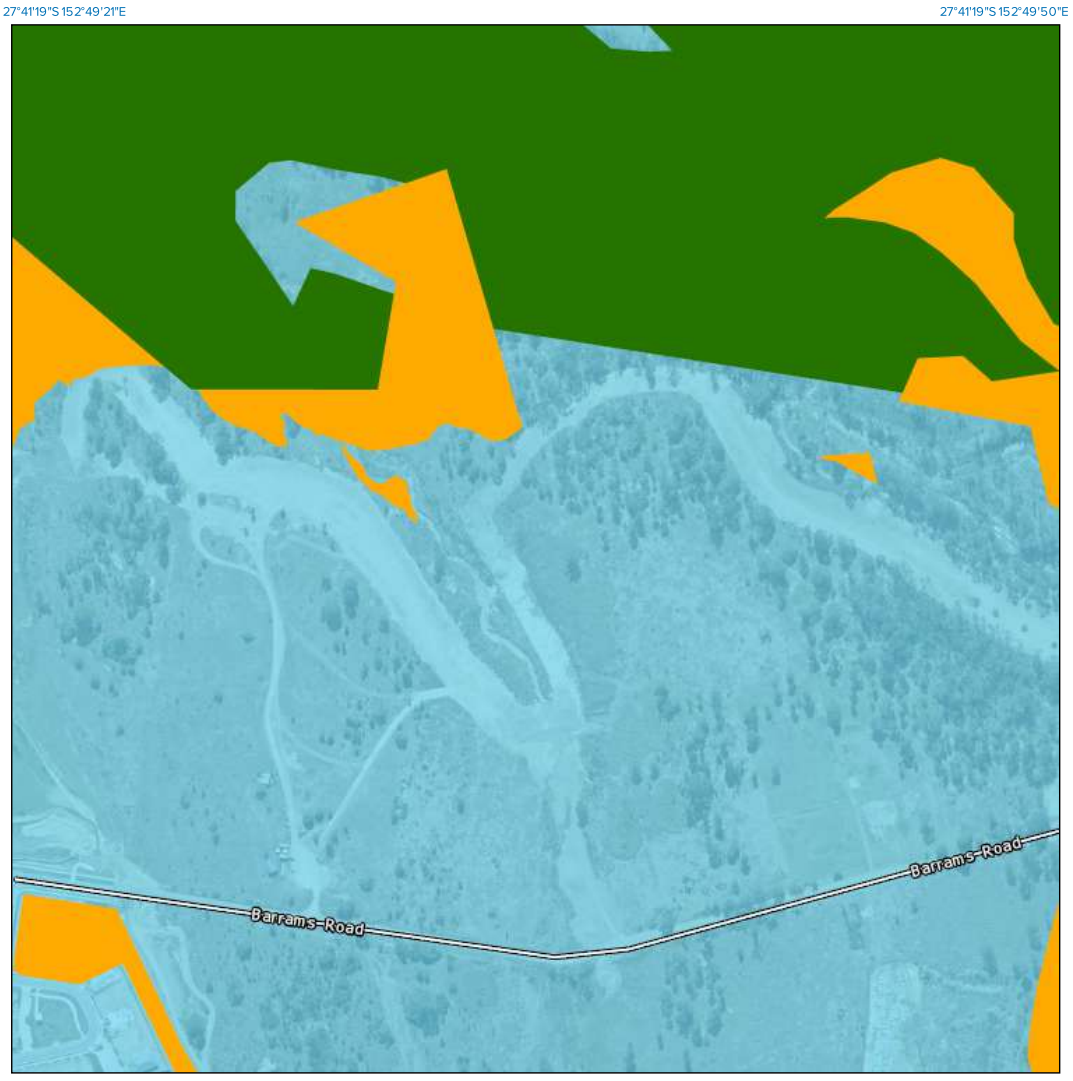
- Highway
- Main
- Local
- Private

Railway

Cities and Towns

Attribution

Figure 2: Mapped koala habitat values



A product of Queensland Globe

Legend located on next page

N

0 100 metres

Scale: 1:4513

Printed at: A4

Print date: 9/6/2023

Not suitable for accurate measurement.

Projection: Web Mercator EPSG 102100 (3857)

For more information, visit https://qldglobe.information.qld.gov.au/help-info/Contact-us.html

Queensland Government
Department of Resources

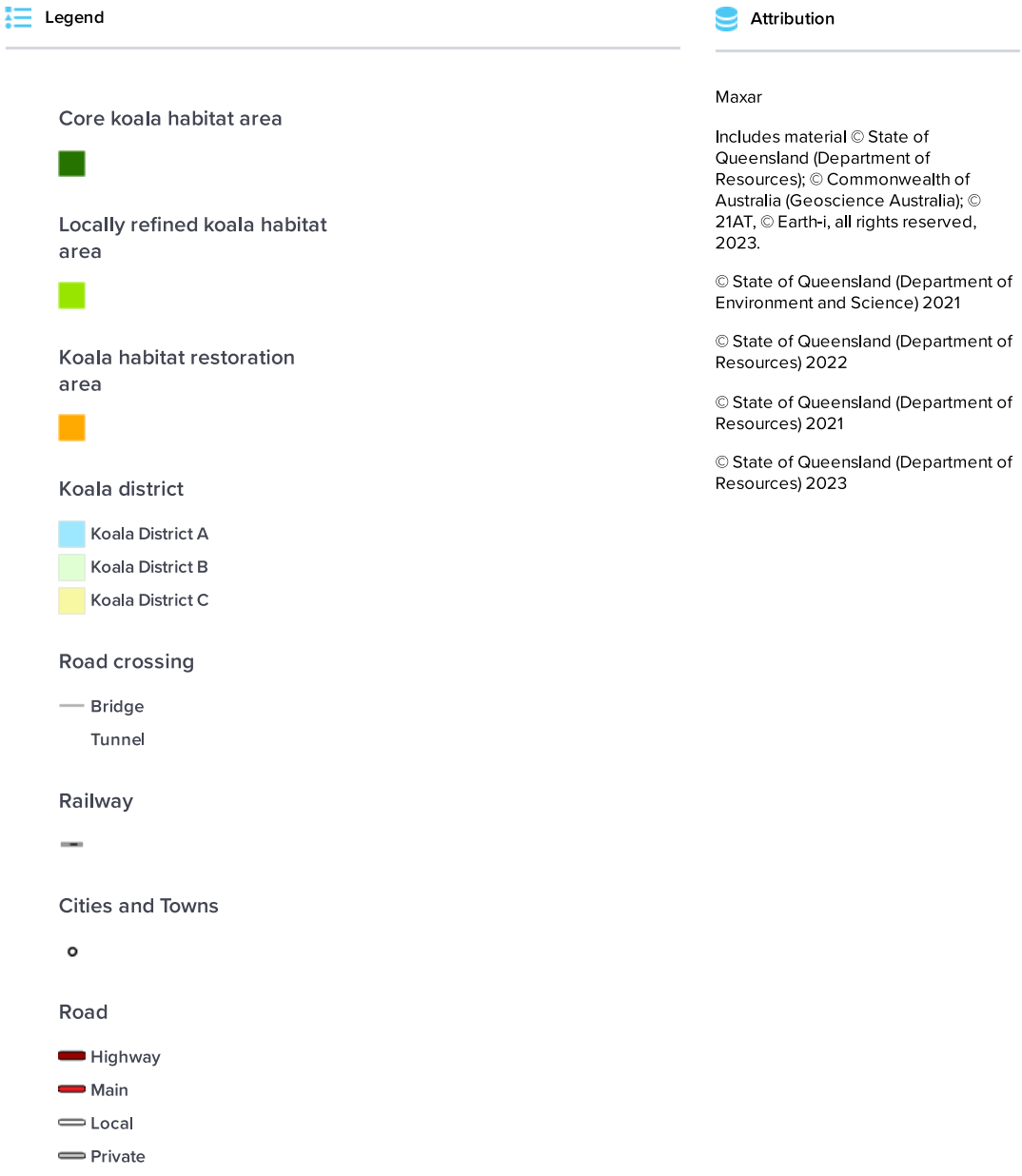

Legend
Core koala habitat area
Locally refined koala habitat area
Koala habitat restoration area
Koala district
Koala District A
Koala District B
Koala District C
Road crossing
Bridge
Tunnel
Railway
Cities and Towns
Road
Highway
Main
Local
Private
Attribution
Maxar
Includes material © State of Queensland (Department of Resources); © Commonwealth of Australia (Geoscience Australia); © 21AT, © Earth-i, all rights reserved, 2023.
© State of Queensland (Department of Environment and Science) 2021
© State of Queensland (Department of Resources) 2022
© State of Queensland (Department of Resources) 2021
© State of Queensland (Department of Resources) 2023

Figure 3: EPBC Protected matters Report

Australian Government
Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 13-Jun-2023

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	6
Listed Threatened Species:	50
Listed Migratory Species:	16

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	22
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	2
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	7
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands) [Resource Information]

Ramsar Site Name	Proximity	Buffer Status
Moreton bay	30 - 40km upstream from Ramsar site	In feature area

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community may occur within area	In feature area
Grey box-grey gum wet forest of subtropical eastern Australia	Endangered	Community likely to occur within area	In buffer area only
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occur within area	In feature area
Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Community may occur within area	In feature area
Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions	Endangered	Community likely to occur within area	In feature area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may occur within area	In feature area

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Foraging, feeding or related behaviour may occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area	In feature area
Cyclopsitta diophthalma coxeni Coxen's Fig-Parrot [59714]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Erythrotriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat likely to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat may occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat may occur within area	In feature area
Turnix melanogaster Black-breasted Button-quail [923]	Vulnerable	Species or species habitat likely to occur within area	In feature area
FISH			
Maccullochella mariensis Mary River Cod [83806]	Endangered	Translocated population known to occur within area	In buffer area only
Neoceratodus forsteri Australian Lungfish, Queensland Lungfish [67620]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
FROG			
Mixophyes fleayi Fleay's Frog [25960]	Endangered	Species or species habitat may occur within area	In buffer area only
INSECT			
Argynnis hyperbius inconstans Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dasyurus hallucatus			
Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat may occur within area	In feature area
Dasyurus maculatus maculatus (SE mainland population)			
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat likely to occur within area	In feature area
Macroderma gigas			
Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In feature area
Petauroides volans			
Greater Glider (southern and central) [254]	Endangered	Species or species habitat likely to occur within area	In feature area
Petaurus australis australis			
Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Petrogale penicillata			
Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In feature area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)			
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
Potorous tridactylus tridactylus			
Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat may occur within area	In feature area
Pteropus poliocephalus			
Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
PLANT			
Arthraxon hispidus			
Hairy-joint Grass [9338]	Vulnerable	Species or species habitat may occur within area	In feature area
Bosistoa transversa			
Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Cupaniopsis shirleyana Wedge-leaf Tuckeroo [3205]	Vulnerable	Species or species habitat may occur within area	In feature area
Dichanthium setosum bluegrass [14159]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Fontainea venosa [24040]	Vulnerable	Species or species habitat may occur within area	In feature area
Macadamia integrifolia Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Macadamia ternifolia Small-fruited Queensland Nut, Gympie Nut [7214]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Macadamia tetraphylla Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia, Rough-leaved Queensland Nut [6581]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Notelaea ipsviciensis Cooneana Olive [81858]	Critically Endangered	Species or species habitat may occur within area	In feature area
Notelaea lloydii Lloyd's Olive [15002]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Picris evae Hawkweed [10839]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Planchonella eerwah Shiny-leaved Condoo, Black Plum, Wild Apple [17340]	Endangered	Species or species habitat may occur within area	In feature area
Plectranthus omissus [55729]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat may occur within area	In feature area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat may occur within area	In feature area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area	In feature area
REPTILE			
Delma torquata Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Furina dunmalli Dunmall's Snake [59254]	Vulnerable	Species or species habitat may occur within area	In feature area
Hemiaspis damelii Grey Snake [1179]	Endangered	Species or species habitat likely to occur within area	In feature area

Listed Migratory Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
Symposiachrus trivirgatus as Monarcha trivirgatus Spectacled Monarch [83946]		Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Anseranas semipalmata Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Symposiachrus trivirgatus as Monarcha trivirgatus Spectacled Monarch [83946]		Species or species habitat known to occur within area overfly marine area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Ipswich Pteropus	Conservation Park	QLD	In buffer area only
Mount Crosby Weir	Nature Refuge	QLD	In buffer area only

EPBC Act Referrals				[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Chuwar Project mine rehabilitation activities including vegetation clearance and dewatering	2012/6574	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Abermain to Lockrose High Voltage Distribution Line	2010/5616	Not Controlled Action	Completed	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Removal of Grey-headed Flying-fox Habitat	2005/2137	Not Controlled Action	Completed	In feature area
Springdale to Blackwall Transmission Line Project	2010/5615	Not Controlled Action	Completed	In buffer area only
Western Corridor Recycled Water Project - Bundamba to Caboonbah Pipeline	2006/3188	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
Construction & Operation 275/330kV Transmission Line	2006/2820	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Bioregional Assessments			
SubRegion	BioRegion	Website	Buffer Status
Clarence-Moreton	Clarence-Moreton	BA website	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact us page.

Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

Figure 4: Queensland Government WildNet Species List

Queensland Government

WildNet species list

Search Criteria: Species List for a Specified Point
Species: Animals
Type: All
Queensland status: All
Records: All
Date: Since 1980
Latitude: -27.6933
Longitude: 152.8253
Distance: 5
Email: ewigram@gmail.com
Date submitted: Monday 12 Jun 2023 13:59:59
Date extracted: Monday 12 Jun 2023 14:00:04

The number of records retrieved = 347

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians	Bufonidae	*Rhinella marina*	cane toad	Y			17
animals	amphibians	Hylidae	*Litoria balatus*	slender bleating treefrog		C		3
animals	amphibians	Hylidae	*Litoria caerulea*	common green treefrog		C		6
animals	amphibians	Hylidae	*Litoria fallax*	eastern sedgefrog		C		5
animals	amphibians	Hylidae	*Litoria gracilenta*	graceful treefrog		C		3
animals	amphibians	Hylidae	*Litoria latopalmata*	broad palmed rocketfrog		C		5
animals	amphibians	Hylidae	*Litoria nasuta*	striped rocketfrog		C		2
animals	amphibians	Hylidae	*Litoria rubella*	ruddy treefrog		C		4
animals	amphibians	Hylidae	*Litoria wilcoxii*	eastern stony creek frog		C		2
animals	amphibians	Limnodynastidae	*Limnodynastes peronii*	striped marshfrog		C		8
animals	amphibians	Limnodynastidae	*Limnodynastes terraereginae*	scarlet sided pobblebonk		C		8
animals	amphibians	Limnodynastidae	*Platyplectrum ornatum*	ornate burrowing frog		C		8
animals	amphibians	Myobatrachidae	*Crinia parinsignifera*	beeping froglet		C		11
animals	amphibians	Myobatrachidae	*Pseudophryne coriacea*	red backed broodfrog		C		1
animals	amphibians	Myobatrachidae	*Pseudophryne raveni*	copper backed broodfrog		C		7
animals	amphibians	Myobatrachidae	*Uperoleia fusca*	dusky gungan		C		3
animals	amphibians	Myobatrachidae	*Uperoleia rugosa*	chubby gungan		C		1
animals	birds	Acanthizidae	*Acanthiza chrysorrhoa*	yellow-rumped thornbill		C		4
animals	birds	Acanthizidae	*Acanthiza lineata*	striated thornbill		C		5
animals	birds	Acanthizidae	*Acanthiza nana*	yellow thornbill		C		3
animals	birds	Acanthizidae	*Acanthiza pusilla*	brown thornbill		C		9
animals	birds	Acanthizidae	*Acanthiza reguloides*	buff-rumped thornbill		C		6
animals	birds	Acanthizidae	*Gerygone mouki*	brown gerygone		C		1
animals	birds	Acanthizidae	*Gerygone olivacea*	white-throated gerygone		C		31
animals	birds	Acanthizidae	*Pyrrholaemus sagittatus*	speckled warbler		C		20
animals	birds	Acanthizidae	*Sericornis frontalis*	white-browed scrubwren		C		29
animals	birds	Acanthizidae	*Smicrornis brevirostris*	weebill		C		16
animals	birds	Accipitridae	*Accipiter cirrocephalus*	collared sparrowhawk		C		1
animals	birds	Accipitridae	*Accipiter fasciatus*	brown goshawk		C		12
animals	birds	Accipitridae	*Accipiter novaehollandiae*	grey goshawk		C		1
animals	birds	Accipitridae	*Aquila audax*	wedge-tailed eagle		C		32
animals	birds	Accipitridae	*Aviceda subcristata*	Pacific baza		C		5
animals	birds	Accipitridae	*Circus approximans*	swamp harrier		C		4
animals	birds	Accipitridae	*Elanus axillaris*	black-shouldered kite		C		13
animals	birds	Accipitridae	*Haliaeetus leucogaster*	white-bellied sea-eagle		C		24
animals	birds	Accipitridae	*Haliastur indus*	brahminy kite		C		2
animals	birds	Accipitridae	*Haliastur sphenurus*	whistling kite		C		6
animals	birds	Accipitridae	*Lophoictinia isura*	square-tailed kite		C		1
animals	birds	Accipitridae	*Milvus migrans*	black kite		C		1
animals	birds	Acrocephalidae	*Acrocephalus australis*	Australian reed-warbler		C		9
animals	birds	Aegothelidae	*Aegotheles cristatus*	Australian owlet-nightjar		C		10
animals	birds	Alcedinidae	*Ceyx azureus*	azure kingfisher		C		9
animals	birds	Alcedinidae	*Dacelo novaeguineae*	laughing kookaburra		C		61
animals	birds	Alcedinidae	*Todiramphus macleayii*	forest kingfisher		C		8
animals	birds	Alcedinidae	*Todiramphus sanctus*	sacred kingfisher		C		20
animals	birds	Anatidae	*Anas castanea*	chestnut teal		C		9

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Anatidae	*Anas gracilis*	grey teal		C		27
animals	birds	Anatidae	*Anas platyrhynchos*	northern mallard	Y			1
animals	birds	Anatidae	*Anas superciliosa*	Pacific black duck		C		40
animals	birds	Anatidae	*Aythya australis*	hardhead		C		30
animals	birds	Anatidae	*Chenonetta jubata*	Australian wood duck		C		46
animals	birds	Anatidae	*Cygnus atratus*	black swan		C		25
animals	birds	Anatidae	*Dendrocygna arcuata*	wandering whistling-duck		C		3
animals	birds	Anatidae	*Dendrocygna eytoni*	plumed whistling-duck		C		8
animals	birds	Anatidae	*Malacorhynchus membranaceus*	pink-eared duck		C		6
animals	birds	Anatidae	*Spatula rhynchotis*	Australasian shoveler		C		10
animals	birds	Anatidae	*Stictonetta naevosa*	freckled duck		C		1
animals	birds	Anatidae	*Tadorna tadornoides*	Australian shelduck		C		1
animals	birds	Anhingidae	*Anhinga novaehollandiae*	Australasian darter		C		18
animals	birds	Anseranatidae	*Anseranas semipalmata*	magpie goose		C		5
animals	birds	Apodidae	*Hirundapus caudacutus*	white-throated needletail		V	V	7
animals	birds	Ardeidae	*Ardea alba modesta*	eastern great egret		C		13
animals	birds	Ardeidae	*Ardea intermedia*	intermediate egret		C		11
animals	birds	Ardeidae	*Ardea pacifica*	white-necked heron		C		10
animals	birds	Ardeidae	*Bubulcus ibis*	cattle egret		C		27
animals	birds	Ardeidae	*Egretta garzetta*	little egret		C		3
animals	birds	Ardeidae	*Egretta novaehollandiae*	white-faced heron		C		30
animals	birds	Ardeidae	*Nycticorax caledonicus*	nankeen night-heron		C		1
animals	birds	Artamidae	*Artamus cyanopterus*	dusky woodswallow		C		4
animals	birds	Artamidae	*Artamus leucorynchus*	white-breasted woodswallow		C		6
animals	birds	Artamidae	*Artamus superciliosus*	white-browed woodswallow		C		1
animals	birds	Artamidae	*Cracticus nigrogularis*	pied butcherbird		C		60
animals	birds	Artamidae	*Cracticus sp.*			C		3
animals	birds	Artamidae	*Cracticus torquatus*	grey butcherbird		C		36
animals	birds	Artamidae	*Gymnorhina tibicen*	Australian magpie		C		70
animals	birds	Artamidae	*Strepera graculina*	pied currawong		C		29
animals	birds	Burhinidae	*Burhinus grallarius*	bush stone-curlew		C		1
animals	birds	Cacatuidae	*Cacatua galerita*	sulphur-crested cockatoo		C		24
animals	birds	Cacatuidae	*Cacatua sanguinea*	little corella		C		5
animals	birds	Cacatuidae	*Cacatua tenuirostris*	long-billed corella	Y	C		1
animals	birds	Cacatuidae	*Calyptorhynchus banksii*	red-tailed black-cockatoo		C		3
animals	birds	Cacatuidae	*Eolophus roseicapilla*	galah		C		25
animals	birds	Cacatuidae	*Nymphicus hollandicus*	cockatiel		C		1
animals	birds	Campephagidae	*Coracina novaehollandiae*	black-faced cuckoo-shrike		C		46
animals	birds	Campephagidae	*Coracina papuensis*	white-bellied cuckoo-shrike		C		4
animals	birds	Campephagidae	*Edolisoma tenuirostre*	common cicadabird		C		20
animals	birds	Campephagidae	*Lalage leucomela*	varied triller		C		8
animals	birds	Campephagidae	*Lalage tricolor*	white-winged triller		C		2
animals	birds	Charadriidae	*Elseyornis melanops*	black-fronted dotterel		C		16
animals	birds	Charadriidae	*Erythrogonys cinctus*	red-kneed dotterel		C		5
animals	birds	Charadriidae	*Vanellus miles*	masked lapwing		C		9
animals	birds	Charadriidae	*Vanellus miles novaehollandiae*	masked lapwing (southern subspecies)		C		35

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Ciconiidae	*Ephippiorhynchus asiaticus*	black-necked stork		C		13
animals	birds	Cinclosomatidae	*Cinclosoma punctatum*	spotted quail-thrush		C		5
animals	birds	Cisticolidae	*Cisticola exilis*	golden-headed cisticola		C		37
animals	birds	Climacteridae	*Cormobates leucophaea*	white-throated treecreeper		C		6
animals	birds	Climacteridae	*Cormobates leucophaea metastasis*	white-throated treecreeper (southern)		C		28
animals	birds	Columbidae	*Chalcophaps longirostris*	Pacific emerald dove		C		3
animals	birds	Columbidae	*Columba livia*	rock dove	Y			8
animals	birds	Columbidae	*Geopelia cuneata*	diamond dove		C		1
animals	birds	Columbidae	*Geopelia humeralis*	bar-shouldered dove		C		26
animals	birds	Columbidae	*Geopelia placida*	peaceful dove		C		24
animals	birds	Columbidae	*Lopholaimus antarcticus*	topknot pigeon		C		4
animals	birds	Columbidae	*Macropygia phasianella*	brown cuckoo-dove		C		15
animals	birds	Columbidae	*Ocyphaps lophotes*	crested pigeon		C		36
animals	birds	Columbidae	*Phaps chalcoptera*	common bronzewing		C		15
animals	birds	Columbidae	*Spilopelia chinensis*	spotted dove	Y			14
animals	birds	Coraciidae	*Eurystomus orientalis*	dollarbird		C		21
animals	birds	Corvidae	*Corvus orru*	Torresian crow		C		95
animals	birds	Cuculidae	*Cacomantis flabelliformis*	fan-tailed cuckoo		C		27
animals	birds	Cuculidae	*Cacomantis pallidus*	pallid cuckoo		C		1
animals	birds	Cuculidae	*Cacomantis variolosus*	brush cuckoo		C		8
animals	birds	Cuculidae	*Centropus phasianinus*	pheasant coucal		C		16
animals	birds	Cuculidae	*Chalcites basalis*	Horsfield's bronze-cuckoo		C		8
animals	birds	Cuculidae	*Chalcites lucidus*	shining bronze-cuckoo		C		6
animals	birds	Cuculidae	*Cuculus optatus*	oriental cuckoo		SL		3
animals	birds	Cuculidae	*Eudynamys orientalis*	eastern koel		C		12
animals	birds	Cuculidae	*Scythrops novaehollandiae*	channel-billed cuckoo		C		18
animals	birds	Dicaeidae	*Dicaeum hirundinaceum*	mistletoebird		C		31
animals	birds	Dicruridae	*Dicrurus bracteatus*	spangled drongo		C		22
animals	birds	Estrildidae	*Lonchura castaneothorax*	chestnut-breasted mannikin		C		11
animals	birds	Estrildidae	*Lonchura punctulata*	nutmeg mannikin	Y			1
animals	birds	Estrildidae	*Neochmia temporalis*	red-browed finch		C		22
animals	birds	Estrildidae	*Taeniopygia bichenovii*	double-barred finch		C		32
animals	birds	Estrildidae	*Taeniopygia guttata*	zebra finch		C		1
animals	birds	Eurostopodidae	*Eurostopodus mystacalis*	white-throated nightjar		C		6
animals	birds	Falconidae	*Falco berigora*	brown falcon		C		3
animals	birds	Falconidae	*Falco cenchroides*	nankeen kestrel		C		23
animals	birds	Falconidae	*Falco longipennis*	Australian hobby		C		4
animals	birds	Falconidae	*Falco peregrinus macropus*	Australian peregrine falcon		C		13
animals	birds	Hirundinidae	*Cheramoeca leucosterna*	white-backed swallow		C		6
animals	birds	Hirundinidae	*Hirundo neoxena*	welcome swallow		C		34
animals	birds	Hirundinidae	*Petrochelidon ariel*	fairy martin		C		14
animals	birds	Hirundinidae	*Petrochelidon nigricans*	tree martin		C		11
animals	birds	Jacanidae	*Irediparra gallinacea*	comb-crested jacana		C		10
animals	birds	Laridae	*Chlidonias hybrida*	whiskered tern		C		2
animals	birds	Laridae	*Chroicocephalus novaehollandiae*	silver gull		C		1
animals	birds	Locustellidae	*Cincloramphus cruralis*	brown songlark		C		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Locustellidae	*Cincloramphus timoriensis*	tawny grassbird		C		12
animals	birds	Locustellidae	*Poodytes gramineus*	little grassbird		C		5
animals	birds	Maluridae	*Malurus cyaneus*	superb fairy-wren		C		32
animals	birds	Maluridae	*Malurus lamberti*	variegated fairy-wren		C		32
animals	birds	Maluridae	*Malurus melanocephalus*	red-backed fairy-wren		C		47
animals	birds	Megapodiidae	*Alectura lathami*	Australian brush-turkey		C		4
animals	birds	Meliphagidae	*Acanthorhynchus tenuirostris*	eastern spinebill		C		12
animals	birds	Meliphagidae	*Anthochaera chrysoptera*	little wattlebird		C		6
animals	birds	Meliphagidae	*Caligavis chrysops*	yellow-faced honeyeater		C		43
animals	birds	Meliphagidae	*Entomyzon cyanotis*	blue-faced honeyeater		C		11
animals	birds	Meliphagidae	*Lichenostomus melanops*	yellow-tufted honeyeater		C		1
animals	birds	Meliphagidae	*Lichmera indistincta*	brown honeyeater		C		46
animals	birds	Meliphagidae	*Manorina melanocephala*	noisy miner		C		60
animals	birds	Meliphagidae	*Meliphaga lewinii*	Lewin's honeyeater		C		26
animals	birds	Meliphagidae	*Melithreptus albogularis*	white-throated honeyeater		C		30
animals	birds	Meliphagidae	*Melithreptus gularis*	black-chinned honeyeater		C		7
animals	birds	Meliphagidae	*Melithreptus lunatus*	white-naped honeyeater		C		4
animals	birds	Meliphagidae	*Myzomela sanguinolenta*	scarlet honeyeater		C		43
animals	birds	Meliphagidae	*Philemon citreogularis*	little friarbird		C		18
animals	birds	Meliphagidae	*Philemon corniculatus*	noisy friarbird		C		45
animals	birds	Meliphagidae	*Plectorhyncha lanceolata*	striped honeyeater		C		7
animals	birds	Meliphagidae	*Ptilotula fusca*	fuscous honeyeater		C		11
animals	birds	Meropidae	*Merops ornatus*	rainbow bee-eater		C		39
animals	birds	Monarchidae	*Grallina cyanoleuca*	magpie-lark		C		50
animals	birds	Monarchidae	*Monarcha melanopsis*	black-faced monarch		SL		11
animals	birds	Monarchidae	*Myiagra inquieta*	restless flycatcher		C		2
animals	birds	Monarchidae	*Myiagra rubecula*	leaden flycatcher		C		20
animals	birds	Monarchidae	*Symposiachrus trivirgatus*	spectacled monarch		SL		6
animals	birds	Motacillidae	*Anthus novaeseelandiae*	Australasian pipit		C		7
animals	birds	Neosittidae	*Daphoenositta chrysoptera*	varied sittella		C		25
animals	birds	Oriolidae	*Oriolus sagittatus*	olive-backed oriole		C		22
animals	birds	Oriolidae	*Sphecotheres vieilloti*	Australasian figbird		C		13
animals	birds	Pachycephalidae	*Colluricincla harmonica*	grey shrike-thrush		C		40
animals	birds	Pachycephalidae	*Colluricincla megarhyncha*	little shrike-thrush		C		10
animals	birds	Pachycephalidae	*Pachycephala pectoralis*	golden whistler		C		31
animals	birds	Pachycephalidae	*Pachycephala pectoralis youngi*	golden whistler (south-eastern Australia)		C		1
animals	birds	Pachycephalidae	*Pachycephala rufiventris*	rufous whistler		C		41
animals	birds	Pardalotidae	*Pardalotus punctatus*	spotted pardalote		C		23
animals	birds	Pardalotidae	*Pardalotus striatus*	striated pardalote		C		63
animals	birds	Passeridae	*Passer domesticus*	house sparrow	Y			3
animals	birds	Pelecanidae	*Pelecanus conspicillatus*	Australian pelican		C		21
animals	birds	Petroicidae	*Eopsaltria australis*	eastern yellow robin		C		37
animals	birds	Petroicidae	*Microeca fascinans*	jacky winter		C		8
animals	birds	Petroicidae	*Petroica rosea*	rose robin		C		21
animals	birds	Phaethontidae	*Phaethon lepturus*	white-tailed tropicbird		SL		1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Phalacrocoracidae	*Microcarbo melanoleucos*	little pied cormorant		C		28
animals	birds	Phalacrocoracidae	*Phalacrocorax carbo*	great cormorant		C		10
animals	birds	Phalacrocoracidae	*Phalacrocorax sulcirostris*	little black cormorant		C		23
animals	birds	Phalacrocoracidae	*Phalacrocorax varius*	pied cormorant		C		11
animals	birds	Phasianidae	*Coturnix pectoralis*	stubble quail		C		2
animals	birds	Phasianidae	*Synoicus ypsilophorus*	brown quail		C		13
animals	birds	Podargidae	*Podargus strigoides*	tawny frogmouth		C		18
animals	birds	Podicipedidae	*Podiceps cristatus*	great crested grebe		C		9
animals	birds	Podicipedidae	*Poliocephalus poliocephalus*	hoary-headed grebe		C		1
animals	birds	Podicipedidae	*Tachybaptus novaehollandiae*	Australasian grebe		C		29
animals	birds	Pomatostomidae	*Pomatostomus temporalis*	grey-crowned babbler		C		10
animals	birds	Psittaculidae	*Alisterus scapularis*	Australian king-parrot		C		6
animals	birds	Psittaculidae	*Barnardius zonarius*	Australian ringneck		C		4
animals	birds	Psittaculidae	*Melopsittacus undulatus*	budgerigar		C		1
animals	birds	Psittaculidae	*Parvipsitta pusilla*	little lorikeet		C		25
animals	birds	Psittaculidae	*Platycercus adscitus*	pale-headed rosella		C		42
animals	birds	Psittaculidae	*Platycercus adscitus palliceps*	pale-headed rosella (southern form)		C		1
animals	birds	Psittaculidae	*Platycercus eximius*	eastern rosella		C		1
animals	birds	Psittaculidae	*Trichoglossus chlorolepidotus*	scaly-breasted lorikeet		C		47
animals	birds	Psittaculidae	*Trichoglossus moluccanus*	rainbow lorikeet		C		50
animals	birds	Psophodidae	*Psophodes olivaceus*	eastern whipbird		C		30
animals	birds	Ptilonorhynchidae	*Chlamydera maculata*	spotted bowerbird		C		3
animals	birds	Ptilonorhynchidae	*Sericulus chrysocephalus*	regent bowerbird		C		3
animals	birds	Rallidae	*Amaurornis moluccana*	pale-vented bush-hen		C		1
animals	birds	Rallidae	*Fulica atra*	Eurasian coot		C		26
animals	birds	Rallidae	*Gallinula tenebrosa*	dusky moorhen		C		28
animals	birds	Rallidae	*Gallirallus philippensis*	buff-banded rail		C		6
animals	birds	Rallidae	*Lewinia pectoralis*	Lewin's rail		C		4
animals	birds	Rallidae	*Porphyrio melanotus*	purple swamphen		C		19
animals	birds	Rallidae	*Porzana fluminea*	Australian spotted crake		C		6
animals	birds	Rallidae	*Zapornia pusilla*	Baillon's crake		C		13
animals	birds	Rallidae	*Zapornia tabuensis*	spotless crake		C		6
animals	birds	Recurvirostridae	*Himantopus leucocephalus*	pied stilt		C		26
animals	birds	Rhipiduridae	*Rhipidura albiscapa*	grey fantail		C		42
animals	birds	Rhipiduridae	*Rhipidura leucophrys*	willie wagtail		C		50
animals	birds	Rhipiduridae	*Rhipidura rufifrons*	rufous fantail		SL		13
animals	birds	Rostratulidae	*Rostratula australis*	Australian painted-snipe		E	E	7
animals	birds	Scolopacidae	*Actitis hypoleucos*	common sandpiper		SL		9
animals	birds	Scolopacidae	*Calidris acuminata*	sharp-tailed sandpiper		SL		2
animals	birds	Scolopacidae	*Calidris melanotos*	pectoral sandpiper		SL		1
animals	birds	Scolopacidae	*Gallinago hardwickii*	Latham's snipe		SL		9
animals	birds	Scolopacidae	*Limosa limosa*	black-tailed godwit		SL		4
animals	birds	Scolopacidae	*Tringa nebularia*	common greenshank		SL		2
animals	birds	Scolopacidae	*Tringa stagnatilis*	marsh sandpiper		SL		1
animals	birds	Strigidae	*Ninox boobook*	southern boobook		C		13
animals	birds	Strigidae	*Ninox strenua*	powerful owl		V		9

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Sturnidae	*Acridotheres tristis*	common myna	Y			15
animals	birds	Sturnidae	*Sturnus vulgaris*	common starling	Y			22
animals	birds	Threskiornithidae	*Platalea flavipes*	yellow-billed spoonbill		C		10
animals	birds	Threskiornithidae	*Platalea regia*	royal spoonbill		C		14
animals	birds	Threskiornithidae	*Plegadis falcinellus*	glossy ibis		SL		5
animals	birds	Threskiornithidae	*Threskiornis molucca*	Australian white ibis		C		12
animals	birds	Threskiornithidae	*Threskiornis spinicollis*	straw-necked ibis		C		23
animals	birds	Turnicidae	*Turnix maculosus*	red-backed button-quail		C		2
animals	birds	Turnicidae	*Turnix varius*	painted button-quail		C		6
animals	birds	Tytonidae	*Tyto javanica*	eastern barn owl		C		1
animals	birds	Zosteropidae	*Zosterops lateralis*	silvereye		C		50
animals	insects	Lycaenidae	*Psychonotis caelius taygetus*	small green-banded blue				1
animals	insects	Nymphalidae	*Acraea andromacha andromacha*	glasswing				3
animals	insects	Nymphalidae	*Charaxes sempronius sempronius*	tailed emperor				1
animals	insects	Nymphalidae	*Danaus petilia*	lesser wanderer				4
animals	insects	Nymphalidae	*Danaus plexippus*	monarch	Y			5
animals	insects	Nymphalidae	*Danaus sp.*					1
animals	insects	Nymphalidae	*Euploea corinna*	common crow				3
animals	insects	Nymphalidae	*Junonia villida villida*	meadow argus				1
animals	insects	Nymphalidae	*Melanitis leda bankia*	evening brown				3
animals	insects	Papilionidae	*Graphium choredon*	blue triangle				3
animals	insects	Papilionidae	*Papilio aegeus aegeus*	orchard swallowtail (Australian subspecies)				1
animals	insects	Pieridae	*Catopsilia pomona*	lemon migrant				1
animals	insects	Pieridae	*Cepora perimale scyllara*	caper gull (Australian subspecies)				1
animals	insects	Pieridae	*Delias argenthona argenthona*	scarlet jezebel				1
animals	insects	Pieridae	*Eurema hecabe*	large grass-yellow				1
animals	insects	Pieridae	*Eurema smilax*	small grass-yellow				1
animals	mammals	Acrobatidae	*Acrobates pygmaeus*	feathertail glider		C		1
animals	mammals	Canidae	*Canis familiaris (dingo)*	dingo				1
animals	mammals	Canidae	*Vulpes vulpes*	red fox	Y			6
animals	mammals	Dasyuridae	*Antechinus flavipes flavipes*	yellow-footed antechinus (south-east Queensland)		C		1
animals	mammals	Dasyuridae	*Phascogale tapoatafa tapoatafa*	brush-tailed phascogale		C		1
animals	mammals	Dasyuridae	*Sminthopsis murina*	common dunnart		C		1
animals	mammals	Emballonuridae	*Saccolaimus flaviventris*	yellow-bellied sheathtail bat		C		1
animals	mammals	Felidae	*Felis catus*	cat	Y			1
animals	mammals	Leporidae	*Lepus europaeus*	European brown hare	Y			5
animals	mammals	Macropodidae	*Macropus giganteus*	eastern grey kangaroo		C		12
animals	mammals	Macropodidae	*Macropus sp.*			C		1
animals	mammals	Macropodidae	*Notamacropus dorsalis*	black-striped wallaby		C		1
animals	mammals	Macropodidae	*Notamacropus parryi*	whiptail wallaby		C		4
animals	mammals	Macropodidae	*Notamacropus rufogriseus*	red-necked wallaby		C		13
animals	mammals	Macropodidae	*Osphranter robustus*	common wallaroo		C		1
animals	mammals	Macropodidae	*Wallabia bicolor*	swamp wallaby		C		3
animals	mammals	Miniopteridae	*Miniopterus schreibersii oceanensis*	eastern bent-wing bat		C		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	mammals	Molossidae	*Austronomus australis*	white-striped freetail bat		C		7
animals	mammals	Molossidae	*Mormopterus lumsdenae*	northern free-tailed bat		C		1
animals	mammals	Molossidae	*Mormopterus sp.*			C		1
animals	mammals	Muridae	*Rattus fuscipes*	bush rat		C		1
animals	mammals	Muridae	*Rattus rattus*	black rat	Y			2
animals	mammals	Peramelidae	*Isoodon macrourus*	northern brown bandicoot		C		3
animals	mammals	Petauridae	*Petaurus breviceps sensu lato*	sugar glider		C		8
animals	mammals	Petauridae	*Petaurus norfolcensis*	squirrel glider		C		5
animals	mammals	Petauridae	*Petaurus sp.*			C		1
animals	mammals	Phalangeridae	*Trichosurus vulpecula*	common brushtail possum		C		18
animals	mammals	Phascolarctidae	*Phascolarctos cinereus*	koala		E	E	47
animals	mammals	Potoroidae	*Aepyprymnus rufescens*	rufous bettong		C		1
animals	mammals	Pseudocheiridae	*Petauroides armillatus*	central greater glider		E	E	6
animals	mammals	Pseudocheiridae	*Pseudocheirus peregrinus*	common ringtail possum		C		2
animals	mammals	Suidae	*Sus scrofa*	pig	Y			2
animals	mammals	Tachyglossidae	*Tachyglossus aculeatus*	short-beaked echidna		SL		5
animals	mammals	Vespertilionidae	*Chalinolobus gouldii*	Gould's wattled bat		C		2
animals	mammals	Vespertilionidae	*Chalinolobus morio*	chocolate wattled bat		C		1
animals	mammals	Vespertilionidae	*Nyctophilus gouldi*	Gould's long-eared bat		C		1
animals	mammals	Vespertilionidae	*Scotorepens greyii*	little broad-nosed bat		C		1
animals	mammals	Vespertilionidae	*Scotorepens sp. (Parnaby)*	central-eastern broad-nosed bat		C		1
animals	mammals	Vespertilionidae	*Vespadelus troughtoni*	eastern cave bat		C		1
animals	ray-finned fishes	Ambassidae	*Ambassis agassizii*	Agassiz's glassfish				1
animals	ray-finned fishes	Anguillidae	*Anguilla australis*	southern shortfin eel				3
animals	ray-finned fishes	Anguillidae	*Anguilla reinhardtii*	longfin eel				2
animals	ray-finned fishes	Cichlidae	*Oreochromis mossambica*	Mozambique mouthbrooder	Y			1
animals	ray-finned fishes	Eleotridae	*Hypseleotris compressa*	empire gudgeon				1
animals	ray-finned fishes	Eleotridae	*Hypseleotris galii*	firetail gudgeon				1
animals	ray-finned fishes	Eleotridae	*Hypseleotris sp.*					1
animals	ray-finned fishes	Plotosidae	*Tandanus tandanus*	freshwater catfish				1
animals	ray-finned fishes	Poeciliidae	*Gambusia holbrooki*	mosquitofish	Y			2
animals	ray-finned fishes	Poeciliidae	*Xiphophorus hellerii*	swordtail	Y			1
animals	reptiles	Agamidae	*Diporiphora australis*	tommy roundhead		C		2
animals	reptiles	Agamidae	*Intellagama lesueurii*	eastern water dragon		C		3
animals	reptiles	Agamidae	*Pogona barbata*	bearded dragon		C		11
animals	reptiles	Boidae	*Morelia spilota*	carpet python		C		1
animals	reptiles	Chelidae	*Chelodina expansa*	broad-shelled river turtle		C		1
animals	reptiles	Chelidae	*Chelodina longicollis*	eastern snake-necked turtle		C		2
animals	reptiles	Chelidae	*Emydura macquarii macquarii*	Murray turtle		C		1
animals	reptiles	Colubridae	*Dendrelaphis punctulatus*	green tree snake		C		4
animals	reptiles	Colubridae	*Tropidonophis mairii*	freshwater snake		C		2
animals	reptiles	Diplodactylidae	*Oedura tryoni*	southern spotted velvet gecko		C		3
animals	reptiles	Elapidae	*Brachyurophis australis*	coral snake		C		1
animals	reptiles	Elapidae	*Cacophis harriettae*	white-crowned snake		C		2
animals	reptiles	Elapidae	*Cryptophis nigrescens*	eastern small-eyed snake		C		3
animals	reptiles	Elapidae	*Demansia psammophis*	yellow-faced whipsnake		C		3

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	reptiles	Elapidae	*Furina diadema*	red-naped snake		C		4
animals	reptiles	Elapidae	*Pseudechis guttatus*	spotted black snake		C		1
animals	reptiles	Elapidae	*Pseudechis porphyriacus*	red-bellied black snake		C		7
animals	reptiles	Elapidae	*Pseudonaja textilis*	eastern brown snake		C		5
animals	reptiles	Elapidae	*Vermicella annulata*	bandy-bandy		C		1
animals	reptiles	Gekkonidae	*Gehyra dubia*	dubious dtella		C		1
animals	reptiles	Gekkonidae	*Hemidactylus frenatus*	house gecko	Y			2
animals	reptiles	Pygopodidae	*Delma plebeia*	common delma		C		2
animals	reptiles	Pygopodidae	*Lialis burtonis*	Burton's legless lizard		C		3
animals	reptiles	Scincidae	*Anomalopus verreauxii*	three-clawed worm-skink		C		1
animals	reptiles	Scincidae	*Calyptotis scutirostrum*	scute-snouted calyptotis		C		3
animals	reptiles	Scincidae	*Carlia munda*	shaded-litter rainbow-skink		C		1
animals	reptiles	Scincidae	*Carlia pectoralis*	open-litter rainbow skink		C		1
animals	reptiles	Scincidae	*Carlia pectoralis sensu lato*			C		1
animals	reptiles	Scincidae	*Carlia schmeltzii*	robust rainbow-skink		C		1
animals	reptiles	Scincidae	*Carlia vivax*	tussock rainbow-skink		C		9
animals	reptiles	Scincidae	*Concinnia martini*	dark bar-sided skink		C		1
animals	reptiles	Scincidae	*Concinnia tenuis*	bar-sided skink		C		1
animals	reptiles	Scincidae	*Cryptoblepharus pulcher pulcher*	elegant snake-eyed skink		C		14
animals	reptiles	Scincidae	*Ctenotus spaldingi*	straight-browed ctenotus		C		2
animals	reptiles	Scincidae	*Ctenotus taeniolatus*	copper-tailed skink		C		2
animals	reptiles	Scincidae	*Lampropholis amicula*	friendly sunskink		C		3
animals	reptiles	Scincidae	*Lampropholis delicata*	dark-flecked garden sunskink		C		5
animals	reptiles	Scincidae	*Lygisaurus foliorum*	tree-base litter-skink		C		3
animals	reptiles	Scincidae	*Tiliqua scincoides scincoides*	eastern bluetongue		C		2
animals	reptiles	Typhlopidae	*Anilios nigrescens*	blackish blind snake		C		1
animals	reptiles	Varanidae	*Varanus varius*	lace monitor		C		4
animals	uncertain	Indeterminate	*Indeterminate*	Unknown or Code Pending				2

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992.*
The codes are Extinct (EX), Extinct in the Wild (PE), Critically Endangered (CR), Endangered (E), Vulnerable (V), Near Threatened (NT), Special Least Concern (SL) and Least Concern (C).

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999.*
The values of EPBC are Extinct (EX), Extinct in the Wild (XW), Critically Endangered (CE), Endangered (E), Vulnerable (V) and Conservation Dependent (CD).

Records - The first number indicates the total number of records of the taxon (wildlife records and species listings for selected areas).
This number is output as 99999 if it equals or exceeds this value. A second number located after a / indicates the number of specimen records for the taxon.
This number is output as 999 if it equals or exceeds this value.

Native Fauna and Habitat Survey

Barrams Road, South Ripley
(Amendment 1)

Part 2: Wildlife and Habitat Impact Mitigation Plan

Prepared by:

KEYSTONE
FAUNA MANAGEMENT

This report must be read in conjunction with *Part 1: Wildlife Protection and Management Plan*

September 21st 2023

Document status					
Review No.	Fauna Spotter/s	Date	Author/s	Status	Date
1	Stephane Batista	30/05/2023	Elliot Wigram	Complete	01/06/2023
2	-	-	Elliot Wigram	Complete	9/06/2023
3	Elliot Wigram	21/09/2023	Elliot Wigram	Complete	21/09/2023

Direct all correspondence to:

Keystone Fauna Management
Ph: +61405573384
Email: elliot@keystonefauna.com.au

All fauna management activities were performed under the authority of rehabilitation permit WA0028209 issued to Keystone Fauna Management by the Department of Environment and Science (DES)

1. Summary

Keystone Fauna Management has been engaged by Winslow to undertake a Wildlife Habitat Impact Management Plan survey within the disturbance limits of proposed development works at the eastern end of Barrams Road in South Ripley.

This survey assessed the habitat values of the area with consideration for the suitability for endangered, vulnerable and near threatened (EVNT) species. Active and/or potential fauna breeding places were identified and management measures recommended.

All fauna management activities were performed under the authority of rehabilitation permit WA0028209, issued to Keystone Fauna Management by the Department of Environment and Science (DES).

2. Introduction

2.1 Project scope

The project involves land clearance including the removal of native vegetation to allow for further infrastructure development.

2.2 Site description

The site consists of an eroded creek line running along the northern boundary of previous clearing works. Ground cover consists predominantly of overgrown grassland, scattered timber, dense low vegetation, moist areas and scattered rocks.

3. Management Recommendations

3.1 Fauna spotter/catcher

All identified fauna habitats due for removal should be inspected by a fauna spotter prior to clearing and all vegetation disturbance should happen under the supervision of the fauna spotter. The fauna spotter must operate under a current rehabilitation permit issued by the Department of Environment and Science.

3.2 General land clearing supervision

The fauna spotter catcher must work alongside the plant operator undertaking the clearing works to ensure vegetation disturbance is undertaken in a methodical, systematic way facilitating the best possible fauna management.

Communication between the fauna spotter catcher and the plant operator must involve the use of UHF radios, direct communication and visual communications where appropriate.

The fauna spotter catcher must directly supervise the felling and/or disturbance of all delineated habitat values. If no resident wildlife can be confirmed, habitat features must be removed in a manner to cause minimal impact to features that could potentially conceal undetected fauna.

Once a potential microhabitat feature has been disturbed the fauna spotter catcher must inspect all features for the presence of previously undetected fauna.

Clearing priorities must be structured in such a way that they encourage displaced wildlife in a northerly direction away from development works and into retained vegetation.

3.3 Sequential clearing

All land clearing must be undertaken in accordance with the sequential clearing conditions specified in the Nature Conservation (Koala) Conservation Plan 2017. These conditions are detailed below:

- Clearing of the koala habitat trees is carried out in a way that ensures koalas on the area being cleared (the clearing site) have enough time to move out of the clearing site without human intervention, including, in particular, for clearing sites with an area of more than 3ha, by
    - carrying out the clearing in stages; and
    - ensuring not more than the following is cleared in any 1 stage

        - for a clearing site with an area of 6ha or less—50% of the site's area;
        - for a clearing site with an area of more than 6ha—3ha or 3% of the site's area, whichever is the greater; and
    - ensuring that between each stage and the next there is at least 1 period of 12 hours starting at 6p.m. on a day and ending at 6a.m. on the following day during which no trees are cleared on the site;
    - clearing of the koala habitat trees is carried out in a way that ensures, while the clearing is carried out, appropriate habitat links are maintained within clearing site and between the site and its adjacent area, to allow koalas living on the site to move out of the site;
    - no koala habitat tree in which a koala is present, and no koala habitat tree with a crown overlapping a tree in which a koala is present, is cleared.

3.4 Koala specific management

The fauna spotter must undertake a visual inspection for koalas prior to works each day and be present onsite during the felling of all standing vegetation. The fauna spotter must as a minimum:

- Hold a tertiary qualification in biology or zoology, have relevant experience in conducting fauna surveys, or be demonstrably experienced in the identification and location of koalas in their natural habitat.
- Be present prior to and during all felling operations.
- Identify any tree onsite in which a koala is present or that has crown overlapping a tree in which a koala is present.
- Clearly delineate with flagging tape or similar any tree in which a koala is present and delineate with suitable flagging tape the exclusion zone around the tree. This exclusion zone must encompass all trees with the potential to impact the tree in which the koala is present.
- Ensure all clearing of koala habitat trees is carried out in such a way that ensures, while the clearing is carried out, appropriate habitat links are maintained within the clearing site and between site and its adjacent area, to allow koalas living on the site to move out of site.
- If a koala is sighted the koala spotter must advise all relevant site personal including the person/s undertaking the felling operations and the site supervisor/s of the exact location of the koala.
- In the event, any koala – including outside of the clearing limits - shows signs of distress, all nearby clearing works must cease until the koala has left the area of its own volition.

3.5 Microhabitat specific management

All microhabitat features should be assessed directly prior and post disturbance by the fauna spotter/catcher.

- **Nests** - Nests found to be active should where possible be left undisturbed. If disturbance is unavoidable the nest should be removed under the supervision of the fauna spotter/catcher either by utilization of an EWP, by a professional tree climber or through recognised soft felling techniques. Any recovered eggs, chicks or dependent young must be assessed by the fauna spotter/catcher and the appropriate action taken.
- **Hollow Bearing Trees** - Hollow bearing trees should be felled as close to sunset as practicable to limit the amount of daylight hours' resident fauna may be without shelter. Hollows found to be active should where possible be left undisturbed. If disturbance is unavoidable the resident animal/s should be given as much time as possible to self-relocate. If fauna fails to self-relocate within a reasonable timeframe the animal/s should be removed by the fauna spotter/catcher either by utilisation of an EWP or recovered following recognised soft felling techniques. Any recovered eggs, chicks or other dependent young must be assessed by the fauna spotter/catcher and the appropriate action taken. Significant trees must be clearly demarcated using either green marking paint or green ribbon.
- **Terrestrial Habitat Features** - Should be assessed directly prior and post disturbance by a qualified fauna spotter/catcher endorsed under a current rehabilitation permit issued by the DES. Significant features should be clearly demarcated using either green marking paint or green ribbon.
- **Ephemeral Water Bodies** - Standing water bodies and ephemeral drainage lines and catchments were present within the disturbance boundaries at the time of survey. If dewatering is required water bodies should be assessed directly prior and post disturbance by a qualified fauna spotter/catcher endorsed under a current rehabilitation permit issued by the DES. Any native aquatic vertebrates present including native tadpoles should be relocated by the fauna spotter/catcher to appropriate adjacent water bodies. Species-specific requirements and the carrying capacities and species compositions of water bodies to facilitate relocations must be considered. If dewatering of ephemeral water bodies is required the following methodology should be followed;
    - Dewatering should be undertaken using a diesel pump with appropriate spill prevention measures.
    - Water should be pumped to one or more nearby ephemeral water catchments outside of the proposed development site. These catchments can be used to help facilitate relocations of displaced native wildlife.
    - Fauna spotters and other personnel working in areas inhabited by amphibian species must adhere to specific government hygiene protocols
    - The pump must be screened with appropriately sized mesh to prevent resident animal being sucked up – this can be achieved using a frame covered in wind break material or similar.
    - Prior to commencement of dewatering, as many aquatic organisms as possible shall be removed and relocated to the receiving site. A fine, soft meshed scoop net should be used to aid removal.

- Invasive introduced species must not be returned to the water. Instead they must be euthanized using an approved method
- Water shall be lowered to 75%, 50% and 25% capacity with additional aquatic wildlife removed at each stage.
- Once dewatered, the substrate shall be inspected by the fauna spotter and any remaining wildlife removed
- An excavator or similar must remove the wet muddy substrate under the supervision of the fauna spotter
- Excavated wet material shall be windrowed at a depth not exceeding 300mm. These windrows must be regularly assessed by the fauna spotter and any contained fauna relocated appropriate

3.6 Management of recovered fauna

Recovered fauna must be assessed by the fauna spotter/catcher who will then determine the management measures to be taken.

- Non-dependent fauna that are injury free must be released at suitable release sites with consideration given to species-specific requirements.
- Dependent fauna that are injury free or have only superficial injuries must be taken to a certified carer for rehabilitation and later release.
- Fauna with more substantial injuries must be taken to a veterinarian for further assessment.
- Fauna with extreme injuries must be humanely euthanized.

Relocation of animals must take place as soon as is practicable and be considerate of all species-specific requirements.

All interactions with endangered, vulnerable, near-threatened (EVNT) listed fauna must be reported to the department of environment and science (DES) within 24hrs. In the event an animal cannot be identified by the fauna spotter catcher DES must be notified within 24hrs.

3.7 Compensatory habitat

If suitable timber can be retained during clearing works, this can be reinstated as terrestrial habitat outside of the disturbance area.

4. Injured/dependent fauna contingency plan

In the event sick, injured or orphaned native animals are recovered all actions taken shall be in accordance with the Code of Practice: Care of Sick, Injured or Orphaned Protected Animals in Queensland. Specific management actions as per this code of practice are detailed below:

4.1 Underpinning principles

- **Duty of care:** A person in charge of an animal during its rescue, care, rehabilitation or release has a statutory duty of care to appropriately provide for the animal's welfare.
- **Avoid harm:** In rescuing, caring for, and returning native animals to the wild, there is a risk of adverse animal welfare and ecological outcomes. Even well intentioned care or treatments may prolong or worsen an animal's suffering, and inappropriate release of animals may have significant detrimental effects on local ecosystems and wildlife communities. At all stages of the rehabilitation process the potential for adverse animal welfare and ecological outcomes must be considered and avoided.
- **Avoid risks to human health and safety:** In rescuing, caring for, and returning native animals to the wild, there are generic, situation-specific and species-specific risks to persons involved that must be considered and minimised.
- **Relieve suffering:** a main objective of wildlife rescue and rehabilitation is to relieve suffering in sick, injured or orphaned wildlife; it is **not** to protect and preserve life at all costs. The rehabilitation and release of wildlife to the wild is the primary objective, but it must **not** be pursued to preserve the life of an animal at all costs or to achieve broader conservation outcomes where the animal is subject to unjustifiable and unreasonable suffering.
- **Fair, reasonable and appropriate measures:** in deciding what is fair, reasonable and appropriate, regard must be had to the environment and circumstances of the animal and the steps a reasonable person would reasonably be expected to have taken under the circumstances.

4.2 Injury assessment

The below details how to best determine the severity of an injury under field conditions and the appropriate response for each of three designations; mild, serious and critical.

Mild

When the animal's injuries or illness appear to cause little discomfort, pain or loss of function, and are not life-threatening or likely to become life-threatening without immediate treatment.

An animal that is affected by a mild injury or illness, or that is likely to be suffering only mild discomfort or pain, must be provided with appropriate veterinary care as soon as is practicable.

Serious

When the animal is affected by serious injuries or illness that might reasonably be expected to cause moderate pain, but are not immediately life-threatening; and the animal is not showing obvious signs of distress or pain, or significantly reduced mental activity.

An animal that is affected by a serious injury or illness, or that is likely to be suffering from moderate pain, must be provided with appropriate pain relief and veterinary care as soon as is practicable.

Critical

When the animal is affected by: major traumatic injuries, difficult breathing, major bleeding, serious head injury, or disembowelment; or is showing any signs of severe pain or discomfort; or has obvious injuries or illness that might cause the death of the animal; or is rescued or found in circumstances which might reasonably be expected to have caused such injuries or illness, even if they are not apparent (for example: dog attack); or the animal is moribund.

An animal that is affected by a critical injury or illness must be provided with appropriate veterinary care. This includes the provision of appropriate and ongoing pain relief and monitoring by a suitably experienced and qualified person; or prompt referral to a person or organisation able to provide that care; or euthanasia as soon as possible using an approved method.

4.3 First aid

Wildlife with injuries not suitably severe as to require euthanasia should be provided with professional veterinary care as a matter of urgency. It is the job of the fauna spotter to keep the injured animal safe and as comfortable as possible until veterinary help has been procured.

In the event an animal has a significant bleed the fauna spotter should ensure the wound is clean and apply direct pressure to the wound. Where possible the wound should be wrapped with a bandage.

In most instances the animal should be housed in a darkened animal crate with towels and/or blankets to provide comfort until veterinary care has been sourced.

4.4 Euthanasia

Injured wildlife must be immediately assessed by the fauna spotter and where required euthanasia must be employed.

Section 12 of the Code of Practice: Care of Sick, Injured or Orphaned Protected Animals in Queensland details when euthanasia should be used. This code should guide the fauna spotter when making decisions around euthanasia in the field.

The below is an excerpt of this code:

Objective

- To support the timely euthanasia of sick, injured or orphaned wildlife through identifying when euthanasia is appropriate.
- Euthanasia is a large part of wildlife rehabilitation and an important welfare tool. It should not be seen as a failure on the rehabilitator's behalf, nor should it be avoided at **all** costs.

- **Standards**
  - All wildlife rehabilitators, whether individually licensed or operating under a group licence, must be able to provide for the euthanasia of wildlife when required.
  - Wildlife must be euthanased without exception when:
    - it is necessary to alleviate significant pain or suffering when such pain and suffering is not able to be managed by a veterinarian
    - further treatment is **not** practical or recovery is **not** expected such that the animal can be successfully rehabilitated to the wild
    - resources are **not** available to provide appropriate care or an acceptable quality of life throughout the likely rehabilitation period.
  - Animals with a poor prognosis for survival and that are suffering must be euthanased rather than left to die from the injury or illness. Failure to take appropriate steps to arrange the prompt euthanasia of these animals is a breach of the *Animal Care and Protection Act 2001*.
  - Unless DES has granted permission for the animal to enter the Queensland Species Management Plan (QSMP) or unless otherwise advised by the DES Director Wildlife Management, an animal must be euthanased when:

- an orphaned animal is not viable or is unlikely to be rehabilitated
- there is no suitable release location
- the ability to reproduce is lost due to an injury, disease or surgical procedure
- the ability to move freely or normally (i.e. run, climb, crawl, hop, fly or swim) is permanently impaired due to, for example, a missing or impaired limb, wing, foot or tail, such that it will significantly impair the animal's ability to survive in the wild
- the ability to sense environment (i.e. see, hear, smell, taste or feel) is permanently impaired due to a missing or injured organ such as an eye, ear or nose, such that it will significantly impair the animal's ability to survive in the wild
- the ability to catch, find or handle food is permanently impaired
- its advanced age renders it unlikely to survive in the wild.

- **Guidelines**
  - Wildlife should be euthanased when suffering from injuries or illness that require a long and complicated rehabilitation process and when such wildlife provide little contribution to the conservation of the species.
  - Non-releasable wildlife should be euthanased (as per section 12) or referred for placement through the QSMP. For further information on non-releasable wildlife or the QSMP, contact your local DES office.

4.5 Local veterinary clinic

Ripley Veterinary Hospital: 15/20 Main Street, Ripley - (07) 3816 4717

5. Wildlife care and housing

Dependent or injured wildlife requiring placement with a carer or vet and wildlife requiring holding for nocturnal release must be held using the following methods:

Birds

- Eggs must be kept warm and egg orientation must be maintained whenever possible.
- Chicks must be kept warm and in a darkened area away from loud noises or unfamiliar odors.

- Adults must be kept in a darkened suitably sized animal crate in a quiet area.
- If holding for more than a few hours water should be provided.

Reptiles

- Eggs must be kept warm and egg orientation must be maintained whenever possible.
- Sub-adults and adults must be kept in a temperate place in a breathable catch bag or container.
- Turtles must be kept in a suitably large tub filled with water.
- Housing of venomous animals must be clearly marked and the dangers communicated to other works.
- If holding for more than a few hours water should be provided.

Amphibians

- Sub-adults and adults must be kept in a moist catch bag or wet container away from direct sun.

Mammals

- Unfurred animals must be kept warm without over-heating and placed with a carer as soon as possible.
- Sub-adults and adults must be kept in a temperate place in a breathable catch bag or animal crate.
- If holding for more than a few hours water should be provided

6. Addendum

Figure 1: Wildlife identification information

Identification of wildlife

Identifying wildlife should be done using field guides and dichotomous keys. Examples of specific identifiers include:

Amphibians:

- Identifiers for adults and late stage metamorphs:
  - Call
  - Location – geographically and habitat type
  - Size including limb lengths
  - Shape
  - Movement
  - Eye and pupil size, position colour and shape
  - Toe pads size/shape/creased/truncated
  - Metatarsal tubercle present/absent/coloured
  - Webbing present/absent/coverage
  - Is thumb opposable
  - Tusks on lower jaw present/absent
  - Patterns, stripes textures or colour flushes on flanks, thighs, throat, belly ect
  - Tympanum visible?

Reptiles:

- Snake Identifiers:
  - Size/shape/pattern
  - Location – both geographically and habitat type
  - Movement
  - Dorsal scale count
  - Ventral scale number
  - Anal scale single or divided
  - Subcaudal scale single/divided and number
  - Head scale size or number (i.e parietals, supraoculars, prefrontals, frontals, nasal, rostral, internasals, preoculars, upper labials, postoculars, temporals)

- Skink Identifiers
  - Size/shape/pattern/texture
  - Location – both geographically and habitat type

- Movement
- Head scale size, shape and number (i.e. temporals, supercilliaries, preocular, loreal, nasal, rostral, mental, lower and upper labials, interparietal, frontoparietal, supraoculars, prefrontal, frontonasal, frontal, parietal, nuchals)
- Visibility/size and shape of tympanum as well as presence/position and number of lobes
- Are scales keeled
- Snout-vent length (SVL)
- Number and type of scales under fingers and toes
- Lower eyelid fixed/movable and scaly/moveable enclosing a transparent disk
- Color flushes

- Gecko Identifiers
  - Size/shape/pattern/texture/colour
  - Snout-vent length (SVL)
  - Location – both geographically and habitat type
  - Movement
  - Adhesive toe pads present/absent, large/small, divided?
  - Tail shape/length/tapering?
  - Scales smooth and flat or rough
  - Claws present/absent
  - Subdigital lamellae present/absent, single/paired
  - Tubercles or spines presence/absence, number, position
  - Rostral scale position/size/shape/notched
  - Basal webbing

- Dragon Identifiers
  - Size/shape/colour/pattern
  - Location – both geographically and habitat type
  - Snout-vent length (SVL)
  - Movement
  - Spines/spinose scales/crest on neck, back or tail
  - Dewlap presence/absence and size
  - Beard or Frill present/absent
  - Keeled/smooth scales
  - Scale size and organization
  - Mouth lining colouration
  - Tympanum size/shape/visibility
  - Tubercles present/absent
  - Pore position/number

- Turtle Identifiers
  - Marine
    - Size/shape/colour/pattern
    - Geographic location
    - Carapace ridged/not ridged
    - Claws on flippers/no claws
    - Number of pairs of coastal scutes
    - Prefrontal scales number, overlapping?
  - Aquatic
    - Size/shape/colour/pattern
    - Geographic location
    - Nuchal scale present/absent
    - Number of marginal and coastal scutes
    - Position, size and shape of gular, intergular, pectorial scutes
    - Claw number
    - Spikes/bumps present absent
    - Neck length/type (folds or retracts)

- Flap-footed Lizard Identifiers
  - Size/shape/pattern/colouration
  - Ear opening visibility
  - Labial scale fused with nasal scale/shape/size/number
  - Scale shape/size/number/organization/keeled vs smooth
  - Limb flaps visibility/size/development
  - Ventral scale/preanal scale/upper labial/supranasal scale size/position/number

- Monitor Identifiers
  - Size/shape/colouration/pattern
  - Location – both geographically and habitat type
  - Scales keeled/smooth, shape
  - Spines presence/absence

- Crocodile Identifiers
  - Location – both geographically and habitat type
  - Size/shape
  - Nuchal shield number/size/position

Mammals:

- Rodent Identifiers:

- Size/shape/colouration
- Location – both geographically and habitat type
- Tail length, shape, bushiness, prehensile, scales, tufted, hair length, colour
- Hindfoot webbed, claw type/size, pad size/type/number, toe length, size
- Ear size, shape
- Incisors notched, curve type

- Small Polyprotodont Marsupial Identifiers:
  - Size/shape/colouration/pattern
  - Location – both geographic and habitat type
  - Hindfoot size, pad size/type/number, toe size/number/fused
  - Forefoot digit number
  - Tail length, shape, crested, hair length/colour/thickness
  - Incisor number
  - Ear shape/size

- Small Possums/glider Identifiers:
  - Size/shape/colouration/pattern
  - Location – both geographically and habitat type
  - Tail level/thickness/coverage of furring
  - Snout elongation, patterning, size
  - Premolar size, shape
  - Pad size, shape, type, number
  - Claw type, size
  - Gliding membrane present/absent, size, shape, connection points

- Macropod and rat kangaroo Identifiers:
  - Size/shape/colour/pattern
  - Location – both geographically and habitat type
  - Claws on forefeet lengths, arrangements
  - Tail length, shape, prehensile, used to support weight
  - Hindfoot toe number, fused
  - Rhinarium furred/sparsely furred/unfurred
  - Head and muzzle shape

- Bat Identifiers:
  - Size/shape/colouration
  - Location – both geographically and habitat type
  - Weight
  - Fur length/consistency
  - Forearm length

- Ear length/type
- Tragus length
- Foot and claw length
- Tibia length
- Fifth and third metacarpal length
- P1, P2, P3 length
- Tail length
- Head and head and body length
- Wingspan
- Horseshoe width
- Teeth including outer canine width

Birds:

- Bird Identifiers:
  - Size, shape, silhouette, colours, patterns
  - Location – both geographically and habitat type and time of activity
  - Calls/song
  - Flying style and gait
  - Legs and feet – prominence and type
  - Behaviour
  - Plumage type, signal markings and feather groups
  - Beak size, shape, type
  - How and where is it perching
  - Is it solitary or part of a group
  - Feeding/drinking style and location

Figure 2: Wildlife handling information

Handling of wildlife

Handling of animals should be kept to a minimum to avoid injury or stress. Examples of handling techniques for animal types include:

Amphibians:

- Capture, handling and release procedure should follow the EHP Interim hygiene protocol for handling amphibians
- Adults and late stage metamorphs
  - Should be caught with a gloved cupped hand (or bag) and grasped gently around the waist
- Tadpoles
  - Should be caught with soft nets or scoops. Identification can be made easier by placing them in a container or clear plastic bag filled with water

Reptiles:

- Snakes
  - Venomous
    - Capture should be with a hoop bag and depending on situation either a snake hook or snake grabs. If snake grabs are utilised grab the snake with a moderate pressure approximately one third of the way down the body to avoid internal injuries to the snake while maintaining control over the head and fangs. Please note a hook should always be the first choice with grabs only being used in rare situations posing particular risk.
  - Non-venomous
    - Dependent on size and temperament of individual either gently handle snake allowing it to move through your hands freely or in some cases head grabbing may be the best technique. For particularly large, aggressive individuals a hoop bag and snake hook can be used.
- Skinks, geckos, small dragons, flap-footed lizards
  - Scoop them into cupped hands and/or hold them gently by the body being careful to support the tail. Do not grab geckos, skinks or flap-footed lizards by tail.
- Monitors and large dragons
  - Hold behind the head and at the base of the tail with the legs, feet and claws facing away from you and the tail tucked behind you.
- Turtles
  - Capture by grabbing both sides of the carapace with hands positioned between the front and hind feet.
  - Handle smaller aquatic individuals by grasping their back end with your thumb on top and your fingers underneath.

Mammals:

- Small mammals
  - Can be held behind the neck or cupped in hand/s
- Macropods
  - Restrain by grasping the base of the tail and transferring to a large catch bag as soon as possible. The animals head should be covered ASAP to reduce stress and the chance of capture myopathy. This process is made easier if you have two or more people involved.
- Possums, bandicoots and large dasyurids
  - Can be grasped by the base of the tail and behind the head. In the case of bandicoots hold the rump as opposed to the tail which is quite delicate.
- Echidnas
  - If animal has dug in place hands underneath front legs and it will curl into a ball and can be lifted. To unfurl to assess condition/injuries ect hold hind legs and elevate
- Gliders
  - Large species can be grasped behind the head and by the feet and base of the tail. Small individuals can be grasped behind the head and the rump/feet.
- Wombats
  - Pick up from under armpits facing away from you.
- Bats (should only be handled by lyssavirus vaccinated individuals wearing appropriate PPE)
  - Micro bats
    - Held in the palm of your hand securing the head with the thumb and forefinger either by pinching the back of the neck or placing the thumb up under the chin
  - Fruit bats
    - Wrap in a small towel/cloth and grip around the back of the head. To help calm the bat and make this process easier a small cloth or scrunched catch bag can be given to the bat first to grip before attempting to wrap in towel and restrain.

Birds:

- Small birds
  - Very small birds can be cupped in hand or held in one hand with head between second and third fingers, the body and wings held with the thumb and other fingers
- Medium sized birds
  - Hold the bird in two hands over the body with the wings held against the body.
- Large birds
  - Hold the bird under your arm against your torso facing behind you. Your hand should be under the bird with your other hand across the back restricting movement.
- Raptors (throwing a towel over the bird prior to handling makes these techniques safer and easier)
  - Small to medium

- Grasp around the shoulders from behind with both hands then slide one hand down to control the feet and talons.

- Large
  - Get the bird to grasp a piece of cloth or similar then as with the smaller raptors grasp around the shoulders and then restrain the feet and talons. Often this can require or be made far safer and easier on you and the bird with two people.

Appendix F

Keystone Fauna Management – Pre- and Post-clearance Reports

Native Fauna and Habitat Survey

Barrams Road, South Ripley
(Amendment 1)

Prepared by:

KEYSTONE
FAUNA MANAGEMENT

September 21st 2023

Document status					
Review No.	Fauna Spotter/s	Date	Author/s	Status	Date
1	Stephane Batista	30/05/2023	Elliot Wigram	Complete	01/06/2023
2	Elliot Wigram	21/09/2023	Elliot Wigram	Complete	21/09/2023

Direct all correspondence to:

Keystone Fauna Management
Ph: +61405573384
Email: elliot@keystonefauna.com.au

All fauna management activities were performed under the authority of rehabilitation permit WA0028209 issued to Keystone Fauna Management by the Department of Environment and Science (DES)

1. Summary

Keystone Fauna Management has been engaged by Winslow to undertake a pre-clearance fauna management survey within the disturbance limits of proposed development works at the eastern end of Barrams Road in South Ripley.

This survey assessed the habitat values of the area with consideration for the suitability for endangered, vulnerable and near threatened (EVNT) species. Active and/or potential fauna breeding places were identified and management measures recommended.

All fauna management activities were performed under the authority of rehabilitation permit WA0028209, issued to Keystone Fauna Management by the Department of Environment and Science (DES).

2. Introduction

2.1 Project scope

The project involves land clearance including the removal of native vegetation to allow for further infrastructure development.

2.2 Site description

The site consists of an eroded creek line running along the northern boundary of previous clearing works. Ground cover consists predominantly of overgrown grassland, scattered timber, dense low vegetation, moist areas and scattered rocks.

2.3 Survey objectives

As part of the environmental compliance of the project Keystone Fauna Management was engaged to undertake an assessment of habitat values including the identification of active and/or potential breeding places for native fauna.

The survey targets were:

- The identification and clear delineation of potential breeding places for native fauna
- The assessment of habitat suitability for faunal groups
- Targeted assessment of suitability for endangered, vulnerable or near threatened (EVNT) species.
- The formulation of management measures for identified active and/or potential native breeding places

3. Survey Methodologies

3.1 Desktop review

Prior to in situ field survey a desktop fauna assessment of the site location was undertaken. Resources included:

- A search of the Federal Department of the Environments Species of National Significance database
- A search of the Federal Department of the Environments EPBC Act lists databases for threatened fauna and migratory species
- A search of The Queensland Governments Threatened Species Lists
- Queensland Globe online search tool
- A review of field guides and other relevant literature

The resulting data was then ground-truthed via field survey.

3.2 In situ field survey

On the 30th of May 2023 a field survey of the site was undertaken by fauna spotter/catcher Stephane Batista. An additional section on the sites northern boundary due for clearing was surveyed by fauna spotter/catcher Elliot Wigram on the 21st of September 2023. All previously surveyed areas had by this stage been cleared and mulched.

Field survey methodologies include

Terrestrial

- Targeted searches for indications of current or recent occupancy of potential breeding places including; rocks and rock piles, hollow logs, bark exfoliations, scattered timber and timber piles, burrows, soil cracks and termite mounds, ground nests, dense shrubs, leaf litter and grasses.

- The identification, recording and clear delineation of all active and/or potential breeding places.
- The clear delineation of all habitat features to be retained.

Arboreal

- Visual searches for indications of current or recent occupancy of potential breeding places including; nests, hollows, exfoliating bark, fissures, dreys and arboreal termitaria.
- The identification and delineation of koala food trees.
- The identification, recording and clear delineation of all active and/or potential breeding places.
- The clear delineation of all standing trees to be retained as terrestrial habitat.

Aquatic

- Targeted searches for indications of occupancy of water systems.
- The identification, recording and clear delineation of all active and/or potential breeding places.

During the field survey consideration was given to habitat connectivity and the specific requirements of significant species. Fauna mitigation initiatives were implemented where practicable.

3.3 Limitations

All inference as to the vertebrate fauna assemblage of this site is concluded from a combination of desktop survey followed by two days in situ ground truthing. With a limited timeframe in which the field survey was to be carried out abiotic variation in factors including time periods, time of year or temperature could not be controlled for. Further, with no trapping component the consultant is relying on targeted searches combined with opportunistic discoveries (scats, prints, scratchings, food scraps etc.) to verify presence or absence of a particular species.

4. EVNT Species Review

The Queensland Governments Wildlife Online database (QGWOD) was reviewed prior to in situ survey. As per the extract, since 1980, seven (7) rare or threatened species have been recorded within 5kms of site. This was

subsequently ground-truthed and the likelihood of each species presence within the disturbance limits was determined.

The results are as follows:

4.1 Mammals

As per the QGWOD two (2) mammal species with state or commonwealth conservation significance have been recorded since 1980 within 5km of the survey area

- 0 species are deemed as likely to occur
- 2 species are deemed as possible to occur
- 0 species are deemed as unlikely to occur

Common/Scientific Name	NCA Status	EPBC Status	Notes
Koala *Phascolarctos cinereus*	E	E	Possible – Refer to koala notes below (55 records)
Central greater glider *Petauroides armillatus*	E	E	Possible - Typically occurs in wet or damp sclerophyll forest (6 record)

4.1.1 Koala specifics

The site is located in Koala District A. The disturbance area is mapped as predominantly core koala high value bushland habitat. Koala priority area is found in close proximity to the east of site and strong habitat linkages connecting site to priority area exist. The Atlas of Living Australia shows historic koala records in the bushland to the east of site. The site has a high availability of established koala food trees above 10dbh and backs on to a large swath of high value koala woodland. These factors combined mean the presence of koala onsite is possible.

4.2 Reptiles

As per the QGWOD no reptile species with state or commonwealth conservation significance have been recorded since 1980 within 5km of the survey area

- 0 species are deemed as likely to occur
- 0 species are deemed as possible to occur
- 0 species are deemed as unlikely to occur

Common/Scientific Name	NCA Status	EPBC Status	Notes

-	-	-	-

4.3 Amphibians

As per the QGWOD no amphibian species with state or commonwealth conservation significance have been recorded since 1980 within 5km of the survey area

- 0 species are deemed as likely to occur
- 0 species are deemed as possible to occur
- 0 species are deemed as unlikely to occur

Common/Scientific Name	NCA Status	EPBC Status	Notes
-	-	-	-

4.4 Birds

As per the QGWOD five (5) bird species with state or commonwealth conservation significance have been recorded since 1980 within 5km of the survey area

- 0 species are deemed as likely to occur
- 3 species are deemed as possible to occur
- 2 species are deemed as unlikely to occur

Common/Scientific Name	NCA Status	EPBC Status	Notes
Australian Painted Snipe *Rostratula australis*	E	E	Unlikely – Found in shallow marshland with exposed wet mud and dense low fringing vegetation (7 records)
Glossy black-cockatoo (eastern) *Calyptorhynchus lathami lathami*	V	V	Possible – Found in open forest particularly if C*asuarina* or *Allocasuarina* is present (2 records)
Powerful Owl *Ninox strenua*	V	-	Possible - Found in association with established eucalyptus forest (9 records)
White-throated needletail *Hirundapus caudacutus*	V	V	Unlikely – Seasonal migrant. Seen around SEQLD until April (8 records)
Swift parrot *Lathamu discolor*	E	CE	Unlikely - Seasonal migrant likely at this time of year. heading to breeding areas in Tasmania and surrounds (1 record)

5. Field Survey results

5.1 Native fauna record

Native Fauna Confirmed During Survey	
Direct evidence of species of state or commonwealth conservation significance	▪ No evidence found
Indirect evidence of species of state or commonwealth conservation significance	▪ Nesting hollows in soil banks conducive to those made by rainbow bee-eaters (*Merops ornatus*)
Other Native Species	▪ Eastern grey kangaroo (*Macropus giganteus*) ▪ Pied butcherbird (*Cracticus nigrogularis*) ▪ Grey fantail (*Rhipidura fuliginosa*) ▪ Torresian crow (*Corvus orru*)
Potentially Present Native Fauna Unconfirmed During Survey	
Species of state or commonwealth conservation significance	▪ Refer to the EVNT species review
Other Native Species	▪ Snakes including venomous and non-venomous species ▪ Lizards including skink, gecko, dragon and monitor species ▪ Bird species ▪ Frog species ▪ Terrestrial and arboreal mammals

5.2 Potential breeding places and significant habitat features

Status	GPS	Description	Photo

Appears Inactive	-27.6921944 152.8305899	Potentially hollow bearing tree containing a stick nest/platform.	
Appears Inactive	-27.6922586 152.8306486	Large burrow system	
Appears Inactive	-27.6922271 152.8305943	Rotted log with heavy bark exfoliations	
Appears Inactive	-27.6922348 152.8306375	Hollow logs	

Appears Inactive	-27.6916835 152.8296890	Wood/mulch pile	
Appears Inactive	-27.6917563 152.8296904	Hollow bearing tree	
Appears Inactive	-27.6908760 152.8285531	Tim roofing panels	
Appears Inactive	-27.6907213 152.8285820	Wood pile	

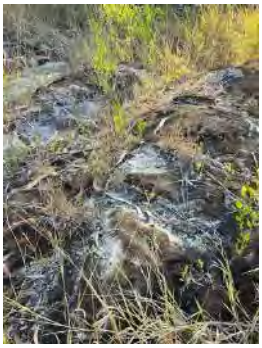
5.3 Habitat features unsuitable for individual delineation

Status	GPS	Description	Photo

Inactive	Site wide	Kangaroo scats	
Inactive	Site wide	Kangaroo prints	
Inactive	Site wide	Bird prints	
Inactive	Site wide	Bandicoot diggings	

Appears inactive	Site wide	Long, dense grasses	
Appears inactive	Site wide	Geofabrics	
Activity level unknown	Site wide	Drainage line holding water	
Appears Inactive	Site wide	Arboreal termite mounds	

Appears inactive	Site wide	Mulch piles	
Appears inactive	Site wide	Termite mounds	
Appears inactive	Site wide	Scattered/ground timber	
Appears inactive	Site wide	Dense shrubs/tangles	

Appears inactive	Site wide	Root/soil tangles	
Appears inactive	Site wide	Soft/friable soils	
Appears inactive	Site wide	Rocky areas	
Activity level unknown	Site wide	Heavy leaf litter	

Appears inactive	Site wide	Ground burrows	
Appears inactive	Eroded areas	Cracks in soil banks	
Appears inactive	Site wide	Exfoliating bark	
Appears inactive	Eroded areas	Nesting bird hollows. Likely made by pardalote or rainbow bee eater.	

Inactive	Site wide	Animal scratches	

6. Management Recommendations

6.1 Nests

Should be assessed directly prior and post disturbance by a qualified fauna spotter/catcher endorsed under a current rehabilitation permit issued by the DES. Nests found to be active should where possible be left undisturbed. If disturbance is unavoidable the nest should be removed under the supervision of the fauna spotter/catcher. If the nest is at high elevation it should be removed either via utilization of an EWP or through recognised soft felling techniques. Any recovered eggs, chicks or dependent young must be assessed by the fauna spotter/catcher and the appropriate action taken.

6.2 Terrestrial habitat features

Should be assessed directly prior and post disturbance by a qualified fauna spotter/catcher endorsed under a current rehabilitation permit issued by the DES. Significant features should be clearly demarcated using either green marking paint or green ribbon.

6.3 Hollow bearing trees

Should be assessed directly prior and post disturbance by a qualified fauna spotter/catcher endorsed under a current rehabilitation permit issued by the DES. Hollows found to be active should where possible be left undisturbed. If disturbance is unavoidable the resident animal/s should be given as much time as possible to self-relocate. If fauna fails to self-relocate within a reasonable timeframe the animal/s will be removed by the fauna spotter/catcher either by utilisation of an EWP or recovered following recognised soft felling techniques. Any recovered eggs, chicks or other dependent young must be assessed by the fauna spotter/catcher and the appropriate action taken. Significant trees should be clearly demarcated using either green marking paint or green ribbon.

6.4 Ephemeral water bodies

Ephemeral drainage lines and catchments holding water were prevalent throughout the disturbance boundaries at the time of survey. If dewatering is required water bodies should be assessed directly prior and post disturbance by a qualified fauna spotter/catcher endorsed under a current rehabilitation permit issued by the DES. Any native aquatic vertebrates present including native tadpoles should be relocated by the fauna spotter/catcher to appropriate adjacent water bodies. Species-specific requirements and the carrying capacities and species compositions of water bodies to facilitate relocations must be considered. If dewatering of ephemeral water bodies is required the following methodology should be followed;

- Dewatering should be undertaken using a diesel pump with appropriate spill prevention measures.
- Water should be pumped to one or more nearby ephemeral water catchments outside of the proposed development site. These catchments can be used to help facilitate relocations of displaced native wildlife.
- Fauna Spotters and other personnel working in areas inhabited by amphibian species must adhere to specific government hygiene protocols
- The pump must be screened with appropriately sized mesh to prevent resident animal being sucked up – this can be achieved using a frame covered in wind break material or similar.
- Prior to commencement of dewatering, as many aquatic organisms as possible shall be removed and relocated to the receiving site. A fine, soft meshed scoop net should be used to aid removal.
- Invasive introduced species must not be returned to the water. Instead they must be euthanized using an approved method
- Water shall be lowered to 75%, 50% and 25% capacity with additional aquatic wildlife removed at each stage.
- Once dewatered, the substrate shall be inspected by the fauna spotter and any remaining wildlife removed
- An excavator or similar must remove the wet muddy substrate under the supervision of the fauna spotter
- Excavated material shall be windrowed at a depth not exceeding 300mm. These windrows must be regularly assessed by the fauna spotter and any contained fauna relocated appropriate

6.5 Management of recovered fauna

Recovered fauna will be assessed by the fauna spotter/catcher who will then determine the management measures to be taken. Non-dependent fauna that are injury free will be released into suitable nearby habitat with consideration given to species-specific requirements. Dependent fauna that are injury free or have only superficial injuries will be taken to a certified carer for rehabilitation and later release. Fauna with more substantial injuries will be taken to a veterinarian for further assessment. Fauna with extreme injuries will be humanely euthanized.

6.6 Land-clearing staging and particulars

No more than 3ha can be cleared in any 24-hour period as per the nature conservation (koala) conservation plan 2017. Clearing methodologies should be formulated to encourage displaced wildlife away from all development works to the south and into retained vegetation to the north.

6.7 Compensatory habitat

If suitable timber can be retained during clearing works, this can be reinstated as terrestrial habitat outside of the disturbance area.

6.8 Local veterinary clinic

Ripley Veterinary Hospital: 15/20 Main Street, Ripley - (07) 3816 4717

Appendix G

Montauban Environmental Offset Area Annual Report – Year 1

ROSEVALE OFFSET AREA ANNUAL REPORT

(EPBC2021/9005)

RESIDENTIAL DEVELOPMENT – BARRAMS ROAD, RIPLEY

JANUARY 2024 – YEAR 1

Montauban Environmental Offsets

INTRODUCTION

This document is the Offset Area Annual Report (OAAR) for Montauban Environmental Offsets (MEO) Rosevale Offset Area 1 (ROA 1), located at Tarome Road, Tarome in South East Queensland. This has been specifically prepared for EPBC approval 2021/9005, located at Barrams Road, Ripley Valley Priority Development Area. The reporting period covers 2 November 2022 to 1 November 2023 (Year 1). The offset to be provided at ROA 1 is for impacts on habitat defined as critical for the koala species.

The site was legally secured via a Voluntary Declaration administered under the Queensland *Vegetation Management Act 1999* on 23 November 2022. The chief Executive of the Department of Resources (DOR) declared the offset area in a Declared Area Map (DAM 2022/003052) as an area of high nature conservation value in accordance with section 19F of the VMA. The Voluntary Declaration package administered by DOR is provided at. Refer to **Appendix A** for documentation.

Primary works at this stage of the offset have been the completion of baseline surveys for pest animal and weed species. Table 1 provides an ongoing review against the approved management actions of the Rosevale Offset Management Plan Version 3.1, dated 28 July 2022.

ROSEVALE OFFSET AREA 1 MANAGEMENT ACTIONS

There are five (5) management actions identified as relevant and necessary for the ROA 1 to achieve outcomes which will benefit MNES and in particular, the Koala. The management actions focus on the recreation of habitat for the Koala, while also reducing threats to the Koala. Although there may be overlap between some of the management actions, all management actions are considered to contribute to the improvement of Koala habitat on ROA 1.

Actions to be completed in accordance with the OMP include:

- **Management Action 1:** Feral Animal Control (primarily targeting wild dogs)
- **Management Action 2:** Weeds of National Significance Control (reduction and management)
- **Management Action 3:** Livestock Control
- **Management Action 4:** Access and Trespass Management
- **Management Action 5:** MNES Habitat Restoration

A summary table of the management measures and commitments is included in **Table 1** below.

Table 1: Summary of Management Actions and Commitments

	Completion Criteria	**Comment**	**Evidence**
Management Action 1 – Feral Animal Control			
Year 1	Complete detailed baseline / seasonal feral animal management survey(s)	Baseline seasonal pest animal abundance surveys completed by Saunders Havill Group;	Refer to **Appendix B** and **Plan 1** for survey details and results.
	Consult Scenic Rim Regional Council and / or the Regional Pest Management Representative	Scenic Rim Council contacted to discuss feral pest plans on 16 November 2023. Department of Agriculture and Fisheries wild dog co-ordinator Greg Mifsud contacted in November 2023. Site visit expected in January 2024.	Email to Scenic Rim Council (**Appendix B**).

	Completion Criteria	Comment	Evidence
	Develop a Pest Management Implementation Strategy	Pest management actions to be developed by offset provider.	Refer to **Appendix C** for Pest Management Implementation Strategy.
Year 5	Replicate the Year 1 detailed baseline / seasonal pest management survey(s) to demonstrate less than 5% of the Year 1 baseline survey results.	Not applicable during this reporting period	N/A
Year 10, 15 & 20	Repeat the baseline surveys in year 10, 15 and year 20 to demonstrate a maintenance of year 5 statistically reduced vertebrate pest species incidence and or occurrence below the 5%-year 1 baseline survey results.	Not applicable during this reporting period	N/A
Adaptive Management	If greater than 5% of the baseline pest survey results remain in the Year 5 survey and reporting, Year 10 survey results to demonstrate that the less than 5% of the baseline survey has been achieved.	Not applicable during this reporting period	N/A
Management Action 2 - Weeds of National Significance Control			
Year 1	Complete detailed baseline / weed extent surveys utilising an antenna based GPS system	Weed mapping assessments completed by Saunders Havill on 5th May 2023.	Refer to **Appendix D** and **Plan 2** for details of weed survey results.

	Completion Criteria	Comment	Evidence
Year 5	Replicate Detailed Weed Extent Re-Survey through the ROA 1 – Include plans and calculations in the Year 5 OAAR demonstrating less than 5% of the ROA 1 area to contains weed infestations.	Not applicable during this reporting period	N/A
Year 10	Replicate Detailed Weed Extent Re-Survey through the ROA 1 – Include plans and calculations in the Year 10 OAAR demonstrating less than 5% of the ROA 1 area to contains weed infestations	Not applicable during this reporting period	N/A
Year 15 & 20	Repeat of Baseline surveys in year 15 and year 20 to demonstrate a maintenance of year 10 significant reductions to the extent of Lantana spp. below 5% of the ROA 1 area to contains weed infestations	Not applicable during this reporting period	N/A
Management Action 3 – Livestock Control			
Year 2	Complete all fencing as per the Indicative ROA 1 Fencing Plan	Not applicable during this reporting period	N/A
Other	Annual inspection of the fencing integrity and stock breaches	Boundary fencing inspections occurred on a regular basis by farm employees.	Refer to **Appendix E.**
Management Action 4 - Access and Trespass Control			
Year 1	Inspection and rectification of all perimeter fencing	Inspection of offset perimeter fencing was conducted. No replacement immediately required.	Refer to **Appendix F.**
	Notification of offset areas, purpose and outcomes to all adjoining land holders	Guy Douglas (managing director) notified the only adjoining neighbour, Shane Ryan via telephone call and email.	Refer to **Appendix F** for e-mail correspondence.
Other	Access gates and signage to be installed where ROA 1 fencing crosses tracks required to be maintained for access	Signage installed notifying of offset area.	Refer to **Appendix F** for photos of offset area signage.
Management Action 5 – MNES Habitat Restoration			
Year 1	Finalise locations, sequence and timing for revegetation program	Per offset management plan. Initial works will be focussed on weed management within remnant and regrowth areas.	
	Cultivate and prepare ROA 1 (17.0ha) area in preparation for year 2 planting	Initial works will be focussed on weed management within remnant and regrowth areas.	

	Completion Criteria	Comment	Evidence
		Heavy machinery to be utilised in January 23 to remove dead plantation trees, rip the soil and prepare for planting	
	Create ROA 1 water source for revegetation establishment (purpose located dam or broadscale irrigation)	The water source to be utilised for revegetation is a dam located within the offset area.	Refer to **Appendix G** for photo evidence of water source.
	Establish photo monitoring points and protocols for the ROA 1	Photo monitoring points established by Saunders Havill Group.	A total of seven (7) photo monitoring locations were established by Saunders Havill Group on 15 May 2023. Refer to **Appendix G** and **Plan 3** for evidence.
Year 2	Complete ROA 1 MNES habitat restoration (17.0ha)	Not applicable during this reporting period	N/A
Year 5	Replicate transects surveys completed in accordance with the Modified Habitat Quality Assessment (Koala) tool, species stocking rate surveys and photo point monitoring	Not applicable during this reporting period	N/A
	For the ROA 1, achieve a MHQA score of 3/10		
Year 10	Replicate transects surveys completed in accordance with the Modified Habitat Quality Assessment (Koala) tool, species stocking rate surveys and photo point monitoring	Not applicable during this reporting period	N/A
	For the ROA 1, achieve a MHQA score of 4/10		
Year 15	Replicate transects surveys completed in accordance with the Modified Habitat Quality Assessment (Koala) tool, species stocking rate surveys and photo point monitoring	Not applicable during this reporting period	N/A
	For the ROA 1, achieve a MHQA score of 6/10		

	Completion Criteria	Comment	Evidence
Year 20	Replicate transects surveys completed in accordance with the Modified Habitat Quality Assessment (Koala) tool, species stocking rate surveys and photo point monitoring	Not applicable during this reporting period	N/A
	For the ROA 1, maintain a MHQA score of 7/10		
Other			
Annually & Year 5, 10, 15 & 20	Complete Offset Area Annual Reports, with major milestone reporting completed in Year 5, Year 10, Year 15 and Year 20.	Annual report requires baseline data.	This report constitutes the first Offset Area Annual Report.

APPENDIX A VOLUNTARY DECLARATION

Declaration notice – approval

Vegetation Management Act 1999 Sections 19E to 19G

Queensland Government

Department of Resources

1. Details of request

   1.1. **Proponent's name:** Montauban Pty Ltd

   1.2. **Date request received:** 31 October 2022

   1.3. **Request:** declare stated land as an area of high nature conservation value

   1.4. **Property description:** Lot 115 on SP167206 - Scenic Rim Regional Council

   1.5. **Land tenure:** Freehold

   1.6. **Decision reference:** 2022/003052

2. Declaration information

   2.1. **Declaration made:**

   The Chief Executive of the Department of Resources declares the area identified on Declared Area Map DAM 2022/003052 as an area of high nature conservation value in accordance with section 19F of the *Vegetation Management Act 1999*.

   The chief executive considers the declared area to meet the following criteria under section 19G of the *Vegetation Management Act 1999*—

   The declared area is an area of high nature conservation value under section 19G(1)(b), as the area is: *another area that contributes to the conservation of the environment.*

   The documents outlined in 2.2 form part of this declaration.

   2.2. **Declaration documents:**

   The following documents are part of this declaration, and must be read in conjunction with this notice:

   - Declared area map (DAM 2022/003052)
   - Rosevale Property - Declared area management plan, DAMP 01, October 2022, prepared by Montauban Environmental Offsets

   2.3. **Property Map of Assessable Vegetation**

   In accordance with s20B of the *Vegetation Management Act 1999*, Property Map of Assessable Vegetation PMAV 2022/003053 has been prepared for the declared area.

   2.4. **Date of declaration:** 23 November 2022

3. Delegated officer's signature

Michael Gordon

Senior Natural Resource Management Officer (VM1)

APPENDIX B MANAGEMENT ACTION 1 – FERAL ANIMAL CONTROL

Baseline feral animal management surveys were conducted by Saunders Havill Group (SHG) across the offset site during three periods in 2023 (**Plan 1 – Baseline Pest Camera Monitoring**). Fauna surveys were conducted throughout the offset site to determine the presence/absence of species as well as to understand the relative abundance of terrestrial fauna species, particularly wild dogs, and other pest species throughout the offset site.

CAMERA TRAP SURVEYS FOR FERAL ANIMAL BASELINE DATA METHODOLOGY

Motion sensor cameras were deployed across the entire proposed offset area for determining base line data, within the approved offset area within Lot 115 on SP167206 and more recently on the eastern side of the existing chicken sheds adjacent to property boundaries and existing tracks. The varying survey periods and camera deployment was to determine the baseline survey results with reference to the *Terrestrial Vertebrate Fauna Survey Guidelines for Queensland June 2022 (V 4.0)* for completing terrestrial fauna surveys. Motion sensor cameras were attached 30 – 50 cm from the ground on a tree or post, directed downward towards a bait station attached to a tree or post 1.5 – 2m from the camera and in the centre of the camera frame (**Photo set 1**). **Table 2** outlines the camera trap survey periods and details of baits utilised across the offset site.

Site Camera Deployment 1

Six cameras were deployed across the entire proposed offset area to determine base line data. Each trap site considered the pre-clear regional ecosystem communities as well as current on-site conditions, including density of vegetation and habitat features. Motion cameras were deployed between the 20th April through to the 4th May, 2023, totally fifteen (15) days of assessment. All motion cameras were deployed with non-meat-based baits including peanut better and oats for general results (**Table 2**).

Site Camera Deployment 2

Four camera traps were deployed within the approved offset are within part of Lot 115 on SP167206, Montuaban Offset. Each trap site considered the pre-clear regional ecosystem communities as well as current on-site conditions, including density of vegetation and habitat features. All cameras were deployed from the 15th May, 2023 through to 11th August, 2023 (total eighty-nine days). Cameras were then moved to areas surrounding the Approved Offset area, south and east of the existing chicken shed from the 11th August, 2023 through to 2nd November, 2023 (Eighty-three days).

All cameras throughout the initial deployment survey period were baited with meat-based bait (chicken necks). These were placed in cleared areas adjacent to slashed vehicle tracks to detect any movement of wild dogs and increase the general detection of fauna movement and abundance. The placement of cameras throughout the second deployment also considered site conditions including habitat features, proximity to water, density of vegetation and opportunity for fauna movement. No wild dogs were recorded throughout this survey period.

Site Camera Deployment 3

Four camera traps were deployed within the approved offset are within part of Lot 115 on SP167206, Montuaban Offset. Each trap site considered the pre-clear regional ecosystem communities as well as current on-site conditions, including density of vegetation and habitat features. No bait was used at the motion camera sites. All cameras were deployed from the 15th May, 2023 through to 11th August, 2023 (total eighty-nine days). Cameras were then moved to areas surrounding the Approved Offset area, south and east of the existing chicken shed from the 11th August, 2023 through to 2nd November, 2023 (Eighty-three days).

Photo set 1: Motion sensor camera set up at Rosevale Offset Area.

Table 2: Summary of survey periods for motion sensor camera deployment across the offset site.

Site Camera Deployment	Number of Cameras Deployed	Camera Deployment	Camera Pick-up	Baits Utilised	Total Days Recording	Total Dogs Recorded
1.	6	20th April, 2023	4th May, 2023	Peanut butter & oats	15	4
2.	4	15th May, 2023	11th August, 2023	Chicken necks	89	0
3.	4	11th August, 2023	2nd November, 2023	No-baits	83	5

As stated in Section 4.6 of *Terrestrial Vertebrate Fauna Survey Guidelines for Queensland June 2022 (V 4.0)* the patterns of faunal activities and estimates of relative abundance, or presence-absence of species, varies temporally in response to the time of day (day versus night), seasonal changes (Spring versus winter) as well as between years (drought versus wet). It is noted that in South-east Queensland, the optimal time and conditions for vertebrate surveys are in Spring (mid-September – mid-December) as temperatures begin to warm up and particularly after the first storms when animal activity peaks. The second most suitable survey period is in Autumn (late February – April) when high summer temperatures begin to drop and before the onset of colder overnight temperatures. Cameras were deployed generally in accordance with these guidelines, however, for significantly longer periods of time to optimise data collection and results.

Section 5.2 of *Terrestrial Vertebrate Fauna Survey Guidelines for Queensland June 2022 (V 4.0)* refers to bait type and the use of peanut butter and oats as a good general-purpose bait for the survey of small to medium sized

mammals, although the use of other baits or additives can increase detection rates of some target species. It is also considered that habitat with dense vegetation may render some survey techniques, particularly those that rely on search effort, less effective due to reduced visibility.

The guidelines for Generic Survey Methods for a Site (Section 8 of the Guidelines) recommend a minimum camera trapping is for one camera per site for four nights, particularly for recording presence / absence and relative abundance, partly for reptiles, and small terrestrial mammals and more suitable to medium to large terrestrial mammals. Between April 2023 – November 2023, data was recorded for a total of one hundred and eight-seven (187) nights, well above the minimum amount recommended.

BASELINE SURVEY RESULTS

Table 3 includes a summary of the species identified during the camera trap survey periods. The results varied across the site with common species including *Trichosurus vulpecula* (Common Brushtail Possum), *Phascogale tapoatafa* (Brush-tailed Phascogale), and *Macropus rufogrisues* (Red-necked Wallaby) recorded in most of the results in each camera during camera deployment period 1. Up to ten (10) *Sus scrofa* (Feral Pig) were also recorded at Camera 3, which was deployed adjacent to an existing dam. Four (4) *Canis familiaris dingo* (Wild Dogs) were detected on Camera 4. No wild dogs were recorded during camera deployment period 2. Five (5) wild dogs were detected during camera deployment period 3 (**Table 3**).

Table 3: Species recorded on motion cameras.

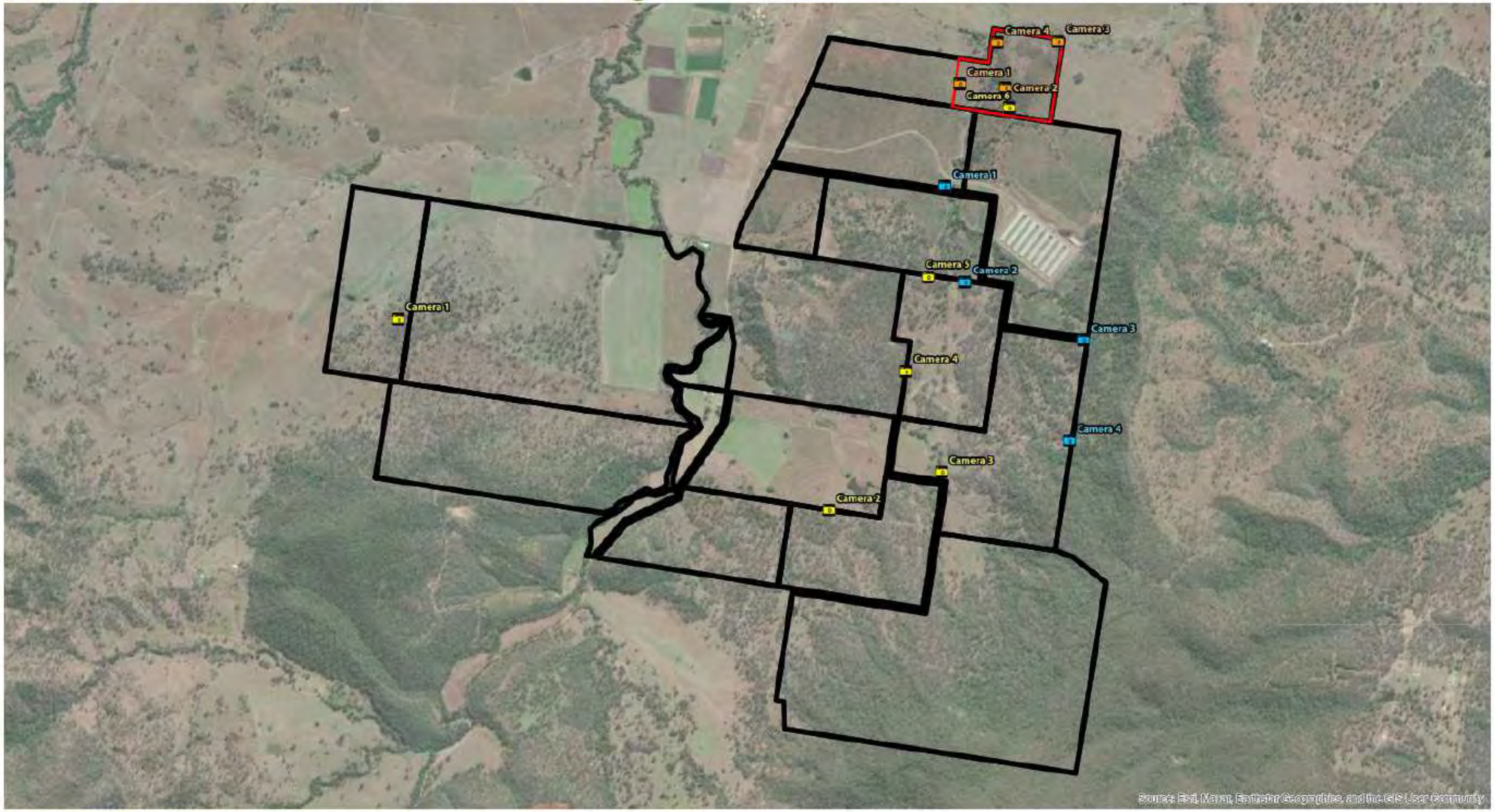
Species	**Common Name**	**Camera Deployment 1**	**Camera Deployment 2**	**Camera Deployment 3**
Anas superciliosa	Pacific Black Duck	✓		
Chenonetta jubata	Australian Wood Duck	✓		
Egretta novaehollandie	White-faced Herron	✓		
Ardea ibis	Cattle Egret	✓		
Ardea intermedia	Intermediate Egret	✓		
Gallinula tenebrosa	Dusky Moorhen	✓		
Vanellus miles	Masked Lapwing	✓	✓	
Centropus phasianinus	Pheasant Coucal	✓		
Gymnorhina tibicen	Australian Magpie	✓	✓	✓
Corvus orru	Torresian Crow	✓	✓	✓
Strepera graculina	Pied Currawong	✓	✓	
Tachyglossus aculeatus	Echidna	✓	✓	
Phascogale tapoatafa	Brush-tailed Phascogale	✓		
Isoodon macrourus	Northern Brown Bandicoot	✓	✓	
Trichosurus vulpecula	Common Brushtail Possum	✓	✓	✓
Macropus rufogriseus	Red-necked Wallaby	✓	✓	✓
Macropus parryi	Whiptail Possum	✓	✓	✓
Macropus giganteus	Grey Kangaroo	✓	✓	✓
Sus scrofa	Feral Pig	✓		
Canis familiaris dingo	Wild Dog	✓		✓
Bos taurus	Cattle	✓		✓

Feral Animal Relative Abundance Index

The motion sensor camera detection survey (recorded number of occurrences over days of camera deployment) was utilised to provide relative abundance over the 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 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 entire area and are repeatable for future monitoring requirements.

Based on the total survey period nine (9) dogs were detected via motion camera at various locations throughout the site (**Table 2**). A total of fourteen (14) cameras were deployed throughout this period which equates to a total of seven hundred and seventy-eight (778) camera nights. The baseline RAI of wild dogs on site is therefore **1.16.**

1. Baseline Pest Camera Monitoring



Montauban Environmental Offsets

1:16,000

N W E S

Legend

Offset Site DCDB

Barrans Rd Offset Boundary

Monitoring Period 1 Camera

Monitoring Period 2 Camera

Monitoring Period 3 Camera

EMAIL CORRESPONDANCE WITH SCENIC RIM REGIONAL COUNCIL

From: Scott Osman <Scott.O@scenicrim.qld.gov.au>
Sent: Thursday, November 16, 2023 2:11 PM
To: Holly Mclaurin <holly@acsengineers.com.au>
Cc: Susan Shay <susan@acsengineers.com.au>
Subject: RE: [#210095] Pest Management Plan Enquiry

Hi Holly,

I will follow up for you and get someone to contact you.

Thanks,

Scott Osman
Manager
Maintenance & Operations | Asset & Environmental Sustainability
Scenic Rim Regional Council
PO Box 25 | 82 Brisbane Street | Beaudesert Qld 4285
P 07 5540 5111 | F 07 5540 5103
mail@scenicrim.qld.gov.au | www.scenicrim.qld.gov.au

Follow Council on social media

From: Holly Mclaurin <holly@acsengineers.com.au>
Sent: Thursday, November 16, 2023 1:40 PM
To: Scott Osman <Scott.O@scenicrim.qld.gov.au>
Cc: Susan Shay <susan@acsengineers.com.au>
Subject: [#210095] Pest Management Plan Enquiry

Good afternoon Scott,

I am just enquiring about whether Council have a pest management plan that can be adopted by landholders to utilise on private property?

Kind Regards,

Holly Mclaurin
Undergraduate Engineer

t: 07 5541 3500 | m: 0449 629 980
e: holly@acsengineers.com.au | w: www.acsengineers.com.au
a: Shop 6B, 7 Church Street, BOONAH, 4310

ACS Engineers
CIVIL | ENVIRONMENTAL | PROJECT MANAGEMENT

APPENDIX C PEST MANAGEMENT IMPLEMENTATION STRATEGY

1. Initial Assessment and Data Collection

1.1 Baseline Data

Baseline data identified wild dogs (*Canis familiaris*) and feral pigs (*Sus scrofa*) as pests present on the property therefore require management actions.

2. Goal Establishment

2.1 Define Objectives

The objectives of the Pest Management Implementation Strategy are to reduce the population of wild dogs, foxes and feral pigs, minimising damage to vegetation, and safeguarding native species.

3. Methodology

3.1 Feral pigs:

- Montauban will set up a series of pig traps that will be baited on a quarterly basis depending on activity noted on ground and via trail cams set up in strategic locations.
- Strategic 1080 baiting will occur annually or as required per above monitoring.

3.2 Wild dogs and foxes:

- Montauban will monitor via strategically set up trail cameras together with on ground inspections.
- A thorough 1080 baiting program will be conducted annually or as required per monitoring above.

APPENDIX D MANAGEMENT ACTION 2 - WEEDS OF NATIONAL SIGNIFICANCE CONTROL

Baseline weed extent mapping assessments were undertaken across the Rosevale Offset Property on 20th, 24th, 27th April and 5th May 2023 utilising an antenna-based GPS system (**Plan 2 – Baseline Weed Mapping**).

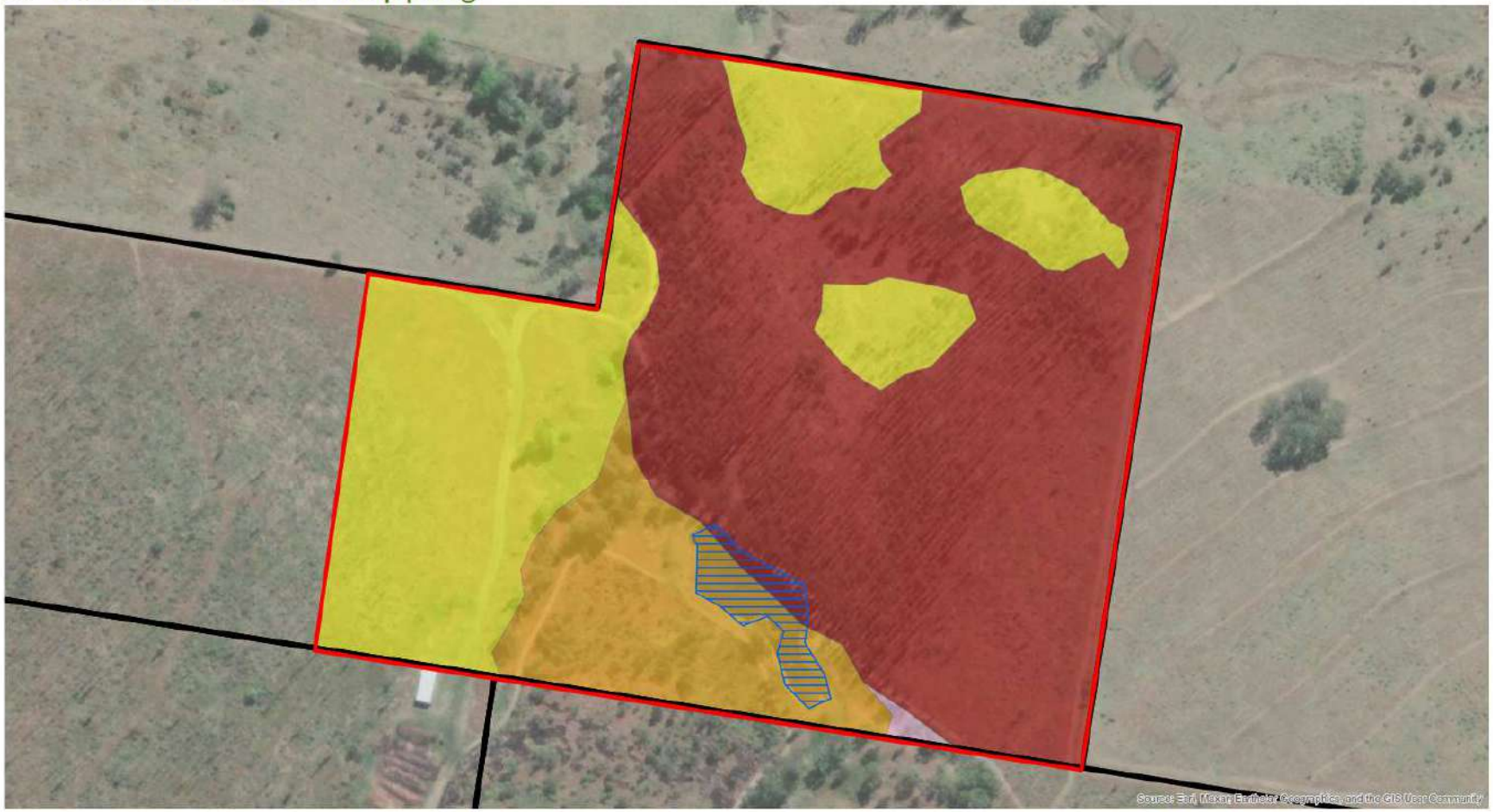
BASELINE WEED MAPPING

Plan 2 shows the results of baseline weeds of national significance (WONS), in particular, *Lantana camara* (Lantana) densities. Results indicate large areas of the offset site have a high density of WONS at approximately 85%, while an area in the southern extent contains medium WONS density. In the northern portion of the offset site, areas of open paddock are dominated by *Chloris gayana* (Rhodes Grass) with patches of *Lantana camara* (Lantana) (**Table 4**).

Table 4: WONS (*Lantana camara*) Baseline Weed Densities

WONS Density	Area (hectares)	Description
85%	9.47	Plantation of eucalypt species, stag trees with understorey dominated by *Lantana camara*.
45%	2.26	Scattered *Eucalyptus tereticornis* (Forest Red Gum) and *Eucalyptus grandis* (Flooded Gum) with regrowth and patches of *Lantana camara*.
60-80%	0.06	Moderate to high *Lantana camara* coverage with scattered eucalypt trees.
5%	5.21	Paddock dominated by *Chloris gayana* (Rhodes grass) with scattered *Lantana camara*, no canopy cover.

2. Baseline Weed Mapping



Montauban Environmental Offsets

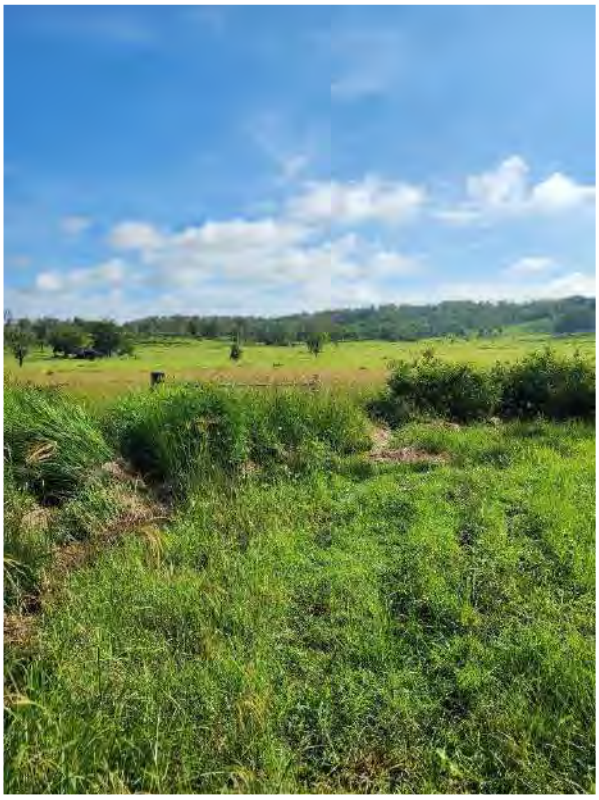
1:2,360

Coordinate System: GDA2020 MGA Zone 56

Legend

- Offset Site DCDB
- Barrams Rd Offset Boundary
- Rhodes Grass Paddock with 5% Lantana Coverage [5.21 ha]
- 45% Lantana Coverage with Scattered Eucalyptus Species [2.26 ha]
- 60-80% Lantana Coverage [0.06 ha]
- 85% Lantana Coverage [9.47]
- Existing Dam

APPENDIX E MANAGEMENT ACTION 3 – LIVESTOCK CONTROL



APPENDIX F MANAGEMENT ACTION 4 - ACCESS AND TRESPASS CONTROL

EMAIL CORRESPONDENCE

From: Douglas Guy <Guy@montaubanpoultry.com.au>
Sent: Tuesday, 14 November 2023 6:53 PM
To: sandjryan@bigpond.com
Cc: Carl Sillett
Subject: Environmental Offset

Dear Shane

Following on from our conversation today, this letter is to formally notify you that an environmental offset will be managed on 17ha of the adjoining lot 115 SP167206.

The purpose of the offset is to provide habitat for endangered koalas via a mix of planting and regrowth of native species.

Yours sincerely,

Guy Douglas
Managing Director

MONTAUBAN
POULTRY

Montauban Poultry Pty Ltd
111-153 Days Road | Redland Bay | Brisbane QLD 4165
M 0407653287 | Email Guy@montaubanpoultry.com.au

EVIDENCE OF OFFSET SIGNAGE

Signage has been installed within ROA 1 to notify of the offset area (**Photo set 2**).

Photo set 2: Offset signage for Rosevale Offset Area.

APPENDIX G MANAGEMENT ACTION 5 – MNES HABITAT RESTORATION

During Year 1 several actions are required to demonstrate evidence of Management Action 5 – MNES Habitat Restoration including:

- Finalise locations, sequence and timing for revegetation program
- Cultivate and prepare ROA 1 (17.0ha) area in preparation for year 2 planting
- Create ROA 1 water source for revegetation establishment (purpose located dam or broadscale irrigation)
- Establish photo monitoring points and protocols for the ROA 1

WATER SOURCE FOR REVEGETATION ESTABLISHMENT

A dam top be utilised as a water source for revegetation establishment is located in the southern extent of the ROA 1 offset area (**Photo set 3**).

Photo set 3: Dam located in the southern extent of the ROA 1 offset area to be used for revegetation establishment.

PHOTO MONITORING POINTS

Seven (7) photo monitoring points were established within the offset area to monitor vegetation state and weed extent (**Table 5**). Refer to **Plan 3 – Photo Monitoring Locations** for locations of photo points.

Table 5: Seven (7) photo monitoring points within the Rosevale ROA1 offset site.

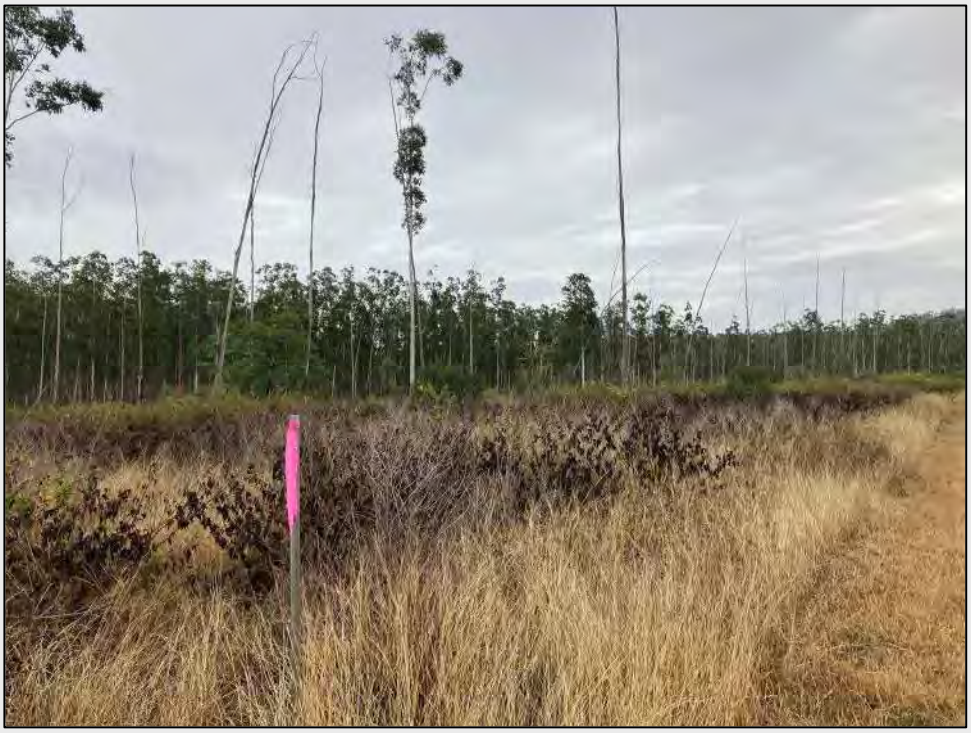
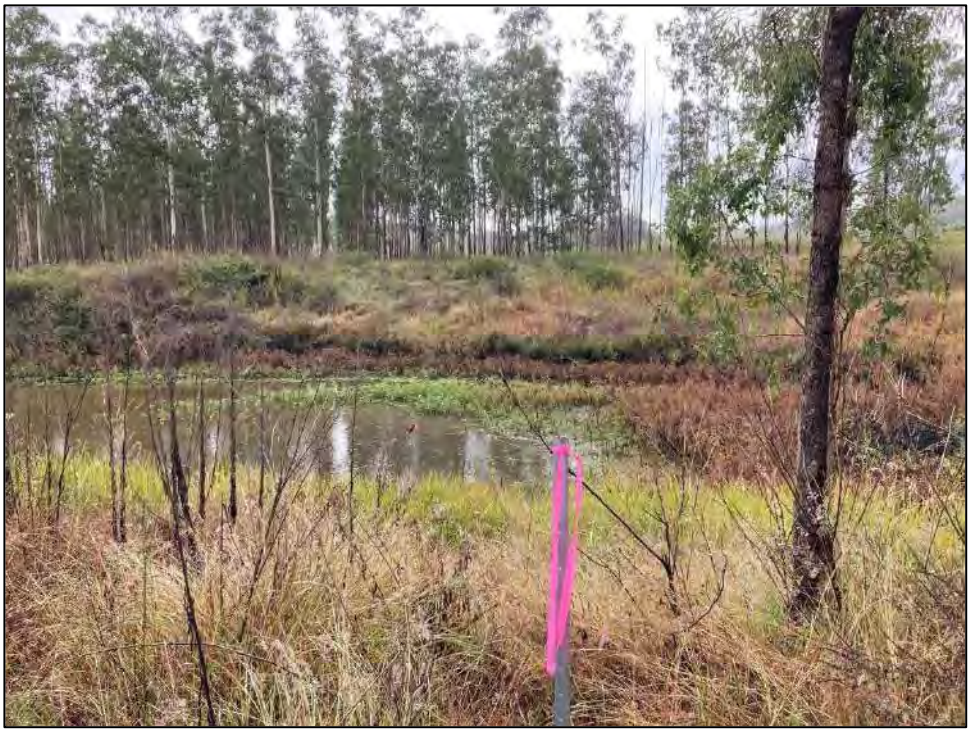
Photo Monitoring Point	Direction	Photo
10559 – 01	North-west	
10559 – 02 (a)	North-east	

Photo Monitoring Point	Direction	Photo
10559 – 02 (b)	West	
10559 – 03	South	

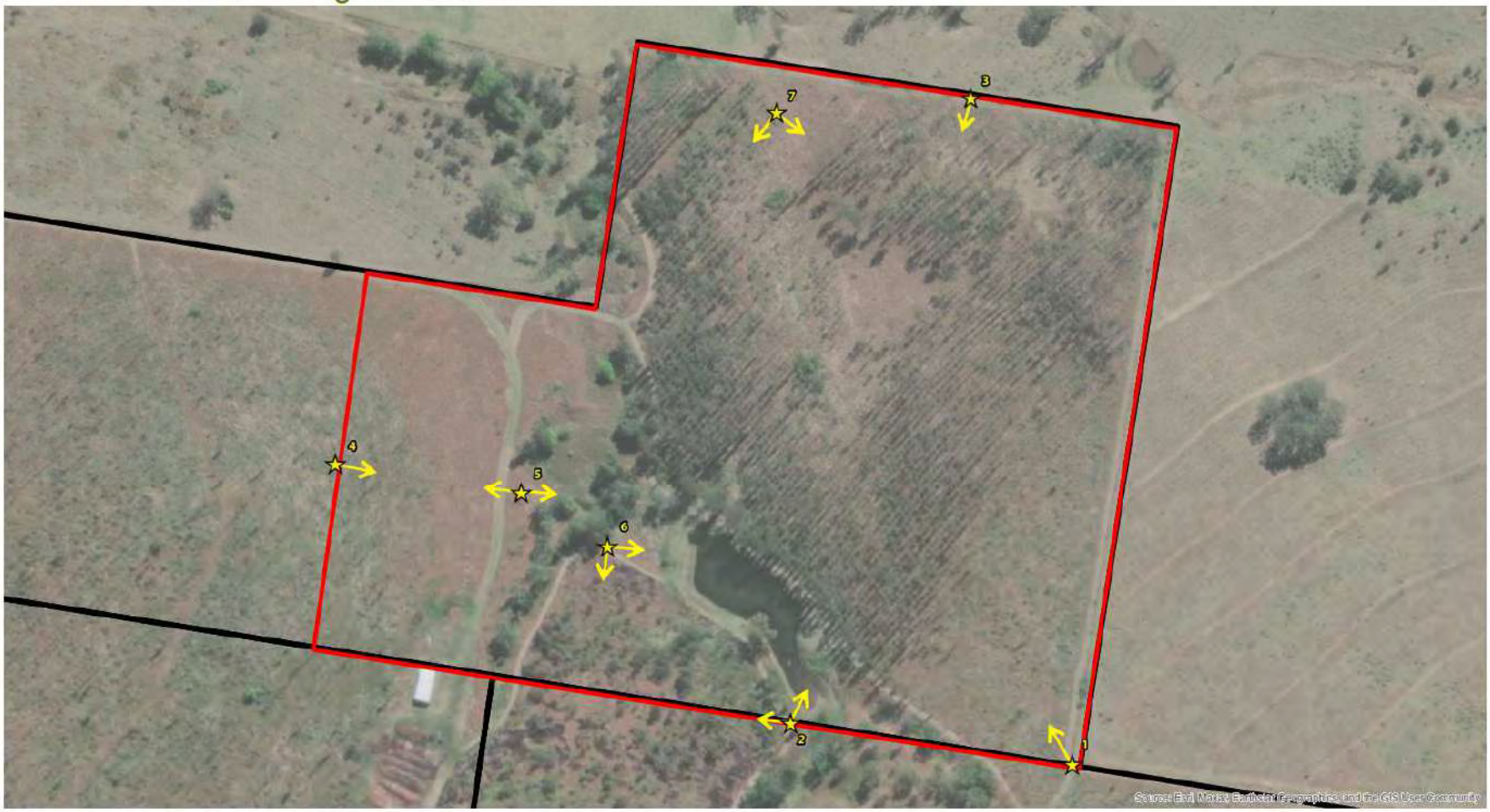
Photo Monitoring Point	Direction	Photo
10559 – 04	East	
10559 – 05 (a)	East	

Photo Monitoring Point	Direction	Photo
10559 – 05 (b)	West	
10559 – 06 (a)	East	

Photo Monitoring Point	Direction	Photo
10559 – 06 (b)	South	
10559 – 07 (a)	South-east	

Photo Monitoring Point	Direction	Photo
10559 – 07 (b)	South-west	

3. Photo Monitoring Locations



Montauban Environmental Offsets

N
W
E
S

1:2,380

Legend

- Offset Site DCDB
- Barrams Rd Offset Boundary
- Photo Point (with direction)