

Annual Compliance Report

15 December 2022 to 14 December 2023 (Year 1) EPBC 2018/8347 Providence East and Providence South

Prepared for AW Bidco 6 Pty Ltd 13 March 2024

Job No. 11487

Document Control

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A	13.03.2024	JG	AW

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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
km	kilometres
m	metres
MNES	Matters of National Environmental Significance
OMP	Offset Management Plan
PDA	Priority Development Area
PMAV	Property Map of Assessable Vegetation
QFC	Queensland Fauna Consultancy
SHG	Saunders Havill Group
SRC	Somerset Regional Council
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



1. Introduction

The Environmental Management Division of Saunders Havill Group was engaged by AW Bidco 6 Pty Ltd to prepare this Annual Compliance Report (ACR) for the Providence East and South development located at Barrams Road and Bayliss 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 2018/8347) and is specifically required by Condition 45 of the approval granted on 15 December 2022 (refer **Appendix A** for EPBC Act approval).

The project area, described as part of Lot 7047/SP307629, Lot 112/M3174, Lot 110/SP169001, Lot 111/SP169001 and Lot 190/S31349, is 215 hectares (ha) in size and is located within the northern-eastern portion of the Ripley Valley Priority Development Area (PDA), approximately 5 kilometres (km) south-east of the Ipswich Town Centre. Refer to site context map located at **Figure 1** and site aerial at **Figure 2**. The northern subject site boundary is bound by Barrams Road, while the eastern and western boundaries are bound by current residential developments under construction. Under Condition 2 of the approval, an impact to no more than 131.72 ha of Matters of National Environmental Significance (MNES) habitat being for *Phascolarctos cinereus* (koala) (131.72 ha), *Pteropus poliocephalus* (grey-headed flying-fox) (67.85 ha) and *Petauroides volans* (greater glider) (67.85 ha) is permitted. A land-based offset was secured to compensate for significant residual impacts on MNES habitat and is located 85 km north-west of the impact area within the Somerset Regional Council (SRC) suburb of Toogoolawah.

1.1. Approval details

Daleswan Pty Ltd, as the original Proponent of the Project (ref EPBC 2018/8347) 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 15 December 2022, subject to conditions. On 28 June 2023, the approval holder was transferred to AW Bidco 6 Pty Ltd c/- Stockland Development Pty Ltd. Refer to **Appendix A** for a copy of the EPBC Act approval and notification of transfer of approval. Key details relating to EPBC 2018/8347 are provided in **Table 1**.

Table 1:	Approval Details	
Commonwealt	h reference	EPBC 2018/8347
Approval holder		AW Bidco 6 Pty Ltd c/- Stockland Development Pty Ltd
		Note: transferred from Daleswan Pty Ltd
ACN		637 312 675
Approval date		15 December 2022
Expiry date of a	approval	30 November 2050
Approved action	on	Development of the Ripley Valley PDA Providence East and South, located 5 km south east of Ipswich, Queensland
Controlling pro	ovision	Approved – listed threatened species and communities (sections 18 & 18A)



Project commencement	30 January 2023
Reporting period	Year 1 – 15 December 2022 to 14 December 2023
Address	Barrams Road and Bayliss Road, Ripley, Queensland
Local government area	Ipswich City Council (ICC)

1.2. Reporting Period

This ACR details the status and compliance of the Project for the 12-month reporting period between the 15 December 2022 to the 14 December 2023.

In accordance with Condition 48 of the EPBC Act approval conditions, the ACR must be published on the approval holder's website and notification provided to the Department within three (3) months of the 12 month anniversary of the commencement of the action. The required date of upload is 13 March 2024.

1.3. Overview of Key Activities

The following key activities occurred between 15 December 2022 and 14 December 2023 (Year 1 of Project):

- Clearing of vegetation commenced within the impact area on 30 January 2023 marking the commencement of the action.
- Progression of clearing works across the northern portion of the impact area in accordance with preclearance 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 contractors.
- Commencement of management and monitoring activities within the offset area including revegetation works, weed management and targeted non-native pest management.





Legend		
Referral Area	Figure 1 Site Context	AW Bidco 6 Pty Ltd
	File ref. 11487 E Figure 1 ACR2 Site Context A Date 8/03/2024 Project Providence East (ACR #1)	saunders havill group
	0 2 4 6 8 km Scale (A4): 1:200,000 [GDA 2020 MGA Z56]	TH-S'E RANS HAVE BEEN PREMARD FOR THE DCULINE USE OF THE CLEMES AN OBSENHAUL (BOOLP C ANOT ACCEPT REPONSELTY FOR ANY USE OF OR RELARCE UPON THE CONTENTS OF THESE DRAWINGS BY ANY THRD PARTY



Legend	
	Qld DCDB
	Referral Area (2018/8347)
Developr	nent Areas
K I	Area A
	Area B



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	the atiums.
Full name	Murray Saunders
Position	Director
Organisation	Saunders Havill Group
	ABN 24 144 972 949
Date	13 March 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
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Role	Company / Appointed Contractor
Development Manager / Proponent	AW Bidco 6 Pty Ltd c/- Stockland Development Pty Ltd
Project Engineer	KN Group
Principal Contractor	SEE Civil
Environmental Coordinator	Saunders Havill Group
Fauna Spotter Catcher / Ecologist	Queensland Fauna Consultancy (QFC)
Offset Provider	One Environment



2. Habitat impact management

2.1. Commencement of the action

The action commenced on 30 January 2023 with the commencement of vegetation clearing within the impact area. The Department was notified on 31 January 2023. Refer to letter correspondence issued by SHG and signed letter of commencement from the Department at **Appendix B**.

2.2. Vegetation clearing protocol

Vegetation clearing occurred in two periods during the reporting period being January to April 2023 and August 2023.

A pre-clearing protocol is implemented to ensure the Project is compliant with the conditions of the EPBC Act 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.

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 including a mix of orange bunting and barrier mesh fencing (refer **Photo set 1**).
- Pre-clearance survey of clearing areas by the engaged fauna spotter catcher and preparation of preclearance reports including Wildlife Protection Management Plan (WPMP) and Wildlife Habitat and Impact Mitigation Plan (WHIMP).
- Presence of project fauna spotter catcher during all clearing activities and completion of post-works reporting.

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 completed EPSCL for clearing works undertaken in January 2023 is located at **Appendix C**.



Environme Coordina prepare wor document po source docu roquired from	ental ator k area ackage, ments ments	Environmental Coordinator review clearing extent domarcation	Project Engineer and/or Environmental Coordinator	All Stakeholders Attend	Environmental Coordinator	Clearing work may commence within demarcated limits
required from parties AND Princip	al	AND Fauna Spotter Catcher	advises Environmental Pre-start Checklist ready to be circulated and provides	environmental pre-start meeting and complete Environmental Pre-start Checklist	package (Environmental Pre-start Checklist and supporting documents)	and under the supervision of Fauna Spotter Catcher
Contrac demarcate c extent	tor learing t	undertake pre- clearance survey	supporting documents			

Figure 3:

Key steps prior to commencing impact work



Photo Set 1: Temporary tree protection and floppy top fauna fencing.

2.3. Review of impacts

Vegetation clearing commenced and progressed over the impact site between 30 January 2023 and 14 December 2023. The following impacts were completed within the reporting period:

- 6.19 ha of vegetation was cleared within the project area which included 4.94 ha of open paddock and 1.25 ha of regrowth RE12.9-10.2. Refer to **Plan 1** for a review of vegetation clearing impacts.
- 6.19 ha of habitat for the koala and 1.25 ha of habitat for grey-headed flying-fox and greater glider was impacted out of a maximum limit of 131.72 ha for koala, and 67.85 ha for grey-headed flying-fox and greater glider.

Clearing remains below the maximum clearing limits defined for vegetation and MNES habitat and measures have been implemented to ensure this is not exceeded.



2.4. Fauna spotter catcher reporting

2.4.1 Pre-clearance

Prior to the commencement of vegetation clearing in January and August, QFC undertook on-site fauna surveys, and prepared a Wildlife Protection and Management Plan (WPMP) and Wildlife and Habitat Impact Mitigation Plan (WHIMP). The January WHIMP and WPMP are provided at **Attachment D**. The WPMP contains details of the pre-clearing fauna survey methods and the results of these surveys, observed fauna, fauna signs, and habitat features found on-site, The WHIMP also details mitigation strategies and proposed fauna relocation points.

In addition to the measures outlined by QFC 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 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 and drone is utilised to conduct a thermal scan of canopy trees in the area in conjunction with a ground inspection. On days where a drone flight has not been conducted, no canopy trees are cleared, and only understorey scrubbing occurs.

2.4.2 Post-works

A post-clearing services report was prepared by the engaged fauna spotter catcher detailing observed fauna and any implemented mitigation measures or procedures. Refer to **Appendix E** for the fauna spotter catcher post-clearing services reports for April 2023 and August 2023.

During clearing works, observed fauna were limited to common fauna species with Least Concern *Cryptophis nigrescens* (Small-eyed Snake) and *Delma plebeia* (Leaden Delma) requiring capture and release into suitable vegetation. No harm occurred to any fauna as a result of clearing.



1. 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 wrifted 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 dataavailable at http://dlepatial.information.gld.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. This plan was prepared as a desktop assessment tool. The information on







Providence East (ACR #1)

Address / RPD: Barrams Road, White Rock (Ripley Valley PDA)

11/03/2024 | 11487 E 01 ACR 1 Vegetation Clearing Review A

3. Offset area management

A land-based offset was delivered to compensate for significant residual impacts on MNES being the koala, grey-headed flying-fox and greater glider under Condition 2 of the approval and is located within the ICC suburb of Ripley. The offset area is 183 ha in size and is comprised of several land parcels with access from Littles Road from the north which is a rural road off Ivory Creek Road (refer

Figure 4). Importantly the offset area has been selected to link remnant ridgeline habitat on adjoining land holdings to the replanted riparian and alluvial zones of Ivory Creek and will have significant benefit for the koala, grey-headed flying-fox, and greater glider through the creation and improvement of existing habitat (refer **Appendix A**).

To deliver the land-based offset, the Proponent partnered with One Environment Pty Ltd as the third-party environmental offset provider to implement the revised approved Offset Management Plan (OMP) dated May 2023.

3.1. Offset area legally secured

Under Condition 13a of the approval, the Avonvale and Cherry Gully offset area was required to be legally secured prior to the commencement of the action. The offset area was legally secured on 21 December 2022 via the Voluntary Declaration process administered under the Queensland *Vegetation Management Act 1999* (VMA). The Chief Executive of the Department of Resources (DOR) declared the offset area in a Declared Area Map (DAM 2022/002500) as an area of high nature conservation value in accordance with section 19F(1) of the VMA. The offset area is shown as Category A on the certified Property Map of Assessable Vegetation (PMAV 2022/002505). The Voluntary Declaration package administered by DOR is provided at **Appendix F**.

3.2. Offset area activities

A range of management measures were implemented by the offset provider on-ground in accordance with the prescribed measures and objectives detailed in the OMP. These are completed with the purpose of reducing threats to MNES, improving and creating habitat. A summary of management measures implemented across the offset area include:

- Confirmation of absence of livestock fromfrom offset area (confirmation provided at **Appendix G**).
- Implementation of seed collection program.
- Wildfire mitigation measures including creation and maintenance of firebreaks, fire management lines and low-intensity burns have been implemented.
- Intensive targeted weed control in the first quarter of 2023 primarily targeting Lantana.
- Consultation with Somerset Regional Council Pest Management Specialist.
- Implementation of targeted pest management program.

An Offset Area Annual Report completed by the offset provider for Year 1 is provided at **Appendix G** detailing the full scope and timing of management measures completed.





Figure 4: Avonvale and Cherry Gully offset area (extracted from OMP)

EPBC Act approval conditions compliance table

Table 3:

4. EPBC Act approval conditions compliance table

The EPBC Act approval conditions for the Project are provided in Error! Reference source not found. 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**.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
1	The approval holder must not clear or construct outside of the development area as part of this Action.	Compliant	No clearing or construction has occurred outside of the Project area within the Year 1 reporting period (15 December 2022 to 14 December 2023).
2	 The approval holder must not clear within the development area more than: a) 131.72 ha of Koala habitat b) 67.85 ha of Greater Glider habitat c) 67.85 ha of Grey-headed Flying-fox foraging habitat. 	Compliant	Approximately 6.19 ha of vegetation was cleared within the Project area within the Year 1 reporting period (15 December 2022 to 14 December 2023). This includes 6.19 ha of habitat for the koala and 1.25 ha of habitat for the grey-headed flying-fox and greater glider.
3	The approval holder must not clear or construct in or within 1 metre of the conservation area except as specified in the Conservation Area Management Plan, required under condition 11, approved by the Minister.	e Compliant	No clearing or construction has occurred within 1 metre of the Conservation Area within the Year 1 reporting period (15 December 2022 to 14 December 2023).
4	The approval holder must ensure that all clearing is undertaken with the supervision of an independent suitably qualified field ecologist who is given sufficient authority to cease any clearing that the independent suitably qualified field ecologist considers may not be compliant with the requirements of conditions 1, 2 and 3.	Compliant	Suitably qualified Fauna Spotter Catchers, QFC, were engaged by AW Bidco 6 Pty Ltd (Stockland) and were on-site during all clearing events.

EPBC 2018/8347 – Providence East and South



Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	Note: The independent suitably qualified field ecologist can be the same person as the fauna spotter catcher provided that they can demonstrate they have the relevant qualifications and meet the criteria in the definition of 'independent'.		
5	If the independent suitably qualified field ecologist requires the cessation of clearing, then the approval holder must not re- commence clearing unless the Minister has provided approval in writing.	Not Applicable	This condition is noted.
6	 To minimise risk of injury or death to the Koala, Greater Glider and Grey-headed Flying-fox 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 identify protected matters (including in hollow bearing trees), to ensure Koalas, Greater Gliders and Grey-headed Flying-foxes have safely vacated any area prior to clearing and construction occurring where it could injure animals in that area b) if a Koala, Greater Glider or Grey-headed Flying-fox is spotted within 100 m of any area of clearing and construction within the development area, cease all clearing and construction within 100 m of the Koala, Greater Glider or Grey-headed Flying-fox has moved on its own further than 100 m from the area of clearing and construction, or is translocated by the fauna spotter catcher 	Compliant	 a) Suitably qualified Fauna Spotter Catchers, QFC, were engaged by AW Bidco 6 Pty Ltd (Stockland) and were on-site during all clearing events. b) This condition is noted. c) All works were conducted in accordance with the Nature Conservation (Koala) Conservation Plan 2017 (Qld). d) Following the completion of clearing and prior to the commencement of construction, a temporary koala exclusion fence was installed around the construction works area. SHG were engaged as suitably qualified ecologists to complete a site visit on the 28 February 2023 where suitable fauna exclusion fencing was identified. Fencing will remain in place for the duration of construction. e) Workers are prohibited from bringing dogs into the development area and adjacent habitat during clearing and construction.

Condition number / reference	Condition	ls the project compliant with this condition?	Evidence / comments
	c) clear only in accordance with the Nature Conservation (Koala) Conservation Plan 2017, so as to allow Koalas to safely move out of the 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 proposed 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) prohibit workers from bringing dogs into the development area and adjacent Koala habitat, Greater Glider habitat and Grey-headed Flying-fox foraging habitat during clearing and construction. 		
7	 To minimise the risk of injury or death to the Koala, Greater Glider and Grey-headed Flying-fox within the development area from vehicle traffic, the approval holder must: a) only construct roads in accordance with Queensland's Fauna Sensitive Road Design guidelines to minimise the risks to Koalas, Greater Glider and Grey-headed Flying-fox foraging habitat of vehicle strike b) implement safe movement solutions and local traffic management measures to ensure that the speed of all vehicles on roads in the development area where koalas are likely to be present is no greater than 40 km/h at any time (except an emergency and until a government entity 	Compliant	 a) Road construction will be completed in accordance with the DTMR Fauna Sensitive Road Design Guidelines specifications and may include: Roads slowed to 50 km per hour Road thresholds changed to notify vehicles of the fauna linkage Erection of signage specific to fauna crossing solutions and koala crossing points Additional plantings in narrowed road reserves to maximise connectivity Additional lighting (as required)



Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	 controls these roads), so as to minimise the risk to Koala from vehicle strike c) install prominent Koala awareness signage consistent with Queensland's wildlife signing guidelines, prior to opening to public motorists, any road where the presence of protected matters is likely. 		 Road design to support and funnel exclusion fencing b) Should the proposed development entail esplanade roads running adjacent to the open space area, the design will adopt traffic calming and reduced speed signage to control vehicles adjoining sensitive areas. c) The project will adopt the Draft Technical Note Wildlife Signage Guidelines development by DTMR to ensure best practice fauna management is incorporated into the design of wildlife movement solutions (where considered appropriate) or slow down points.
8	For the protection of Koalas, Grey-headed Flying-foxes and Greater Gliders in the conservation area, the approval holder must implement measures, including signage, fencing, monitoring and enforcement, to effectively prevent any unauthorised persons from entering, and to prevent any persons leaving rubbish or bringing animals or vehicles into the conservation area.	Compliant	The proposed conservation area exclusion fencing is consistent with the DES Koala-sensitive Design Guidelines (2020) where properties adjoin the conservation area. The balance of the conservation area fencing aims to prevent unauthorised vehicle access. The effectiveness of the conservation area exclusion fencing will be monitored via the documentation of illegal access within the conservation area by unauthorised vehicles.
9	 For the protection of the Koala, Greater Glider and Grey-headed Flying-fox within the development area, within 6 months of this approval decision the approval holder must: a) complete baseline extent of weed cover and feral animal abundance surveys throughout the conservation area in accordance with a scientifically valid, robust, and repeatable methodology 	Compliant	 a) SHG were engaged as suitably qualified ecologists to conduct baseline weed and feral animal surveys for the conservation area in April and May 2023. b) The results of the baseline weed and feral animal surveys for the conservation area are detailed in the Conservation Area Management Plan which was submitted to the department on 14 June 2023. This

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	 b) submit the results of the baseline extent of weed cover and feral animal surveys required by 9(a) for the department's acceptance, and must make this information available or the website within 2 months of the report of the extent or weed cover and feral animal abundance surveys being accepted by the department c) prepare and submit a Conservation Area Management Plar for the approval by the Minister, with demonstration that it has been developed in consultation with the Council and relevant stakeholders, which specifies the methods, dates and results of the surveys required under condition 9(a) and the methods and intervals for monitoring to achieve the requirements of condition 10. 		information will be available on the project website within 2 months of acceptance from the department. c) A Conservation Area Management Plan dated June 2023 has been prepared by SHG which includes survey methodology and results, monitoring methods, and completion criteria. The Conservation Area Management Plan was submitted to the department on 14 June 2023.
10	For the remaining period of approval, the approval holder must ensure that the extent of weed cover and feral animal abundance does not increase with respect to the baseline documented by the extent of weed cover and feral animal surveys required by condition 9(a).	Compliant	The weed cover and feral animal abundance of the conservation area is documented in the Conservation Area Management Plan, dated June 2023 prepared by SHG. Management will occur upon approval of the management plan.
11	Within 1 year of the date of this approval decision, the approval holder must legally secure the conservation area. Within 20 business days of legally securing this area, the approval holder must provide the department with written evidence demonstrating that the conservation area has been legally secured.	Proponent compliant Condition not satisfied due to Department timeframe.	The conservation area has not been legally secured as the Conservation Area Management Plan has not been approved by the Department since it was submitted on 14 June 2023. No correspondence has been received from the Department since it was submitted.
12	For the ongoing protection of Koala, Grey-headed Flying-fox and Greater Glider habitat within the conservation area, the approva holder must manage the conservation area for the life of the approval, until and unless the approval holder provides writter	Compliant	Management of the conservation area will commence upon approval of the Conservation Area Management Plan, dated June 2023 prepared by SHG.

Condition number / reference	Condition Is the project compliant with the condition?		Evidence / comments
	confirmation from the Council that the Council will implement the Conservation Area Management Plan (required under condition 9(c)) and manage the conservation area for conservation purposes.		
13	 To compensate for the clearing and functional loss of up to 131.72 has of Koala habitat and up to 67.85 ha of Grey-headed Flying-fox foraging habitat, the approval holder must: a) Legally secure a minimum of 183 ha of land within the Avonvale and Cherry Gully Offset Area prior to commencing the action. b) Within 20 business days of legally securing the Avonvale and Cherry Gully Offset Area, provide the department with i. Written evidence demonstrating that the Avonvale and Cherry Gully Offset Area has been legally secured ii. Shapefiles and offset attributes of the Avonvale and Cherry Gully Offset Area. c) Achieve the habitat quality uplift as specified for each of year 5, year 10, year 15 and year 20 at the Avonvale and Cherry Gully Offset Area. 	Compliant	 a) The Avonvale and Cherry Gully offset area was legally secured on 21 December 2022 via the Voluntary Declaration process administered under the Queensland Vegetation Management Act 1999 (VMA). The Chief Executive of the Department of Resources (DOR) declared the offset area in a Declared Area Map (DAM 2022/002500) as an area of high nature conservation value in accordance with section 19F(1) of the VMA. The ORS is shown as Category A on the certified Property Map of Assessable Vegetation (PMAV 2022/002505). The Voluntary Declaration package administered by DOR is provided at Appendix F. b) The department was notified by SHG that the Avonvale and Cherry Gully Offset Area had been legally secured on 23 December 2022. Shapefiles and offset attributes were provided with this notification. c) This condition is noted.
14	For the protection of Koala Habitat, the approval holder must, by the end of Year 1, provide written confirmation to the department that all livestock has been permanently excluded from the Avonvale and Cherry Gully Offset Area.	Compliant	Livestock are not currently and have not been present within the offset area. Refer to Appendix G for letter from One Environment dated April 2023 confirming the absence of livestock from the offset area.
15	Within 3 months from the date of this approval, the approval holder must have a suitably qualified field ecologist and suitably qualified	Compliant	SHG were engaged as suitably qualified ecologists to conduct baseline surveys for the Avonvale and Cherry Gully Offset Area in February 2023. The results of these



Condition number / reference	Condition	ls the project compliant with this condition?	Evidence / comments
	mammal ecologist complete baseline surveys in accordance with a scientifically valid, robust, and repeatable methodology of the entire Avonvale and Cherry Gully Offset Area to determine the:		surveys are described in detail in the revised OMP which is to be resubmitted to the Department.
	a) vegetation condition attributes for each Regional Ecosystem		
	b) location and extent of weed cover		
	c) seasonal feral animal abundance		
	d) rate of koala mortality attributable to feral animals.		
	Note: The independent suitably qualified field ecologist can be the same person as the suitably qualified mammal ecologist provided that they can demonstrate they have the relevant qualifications and meet the criteria in the definition of 'independent'.		
16	Within 2 months of completion of the baseline surveys required under condition 15, the approval holder must submit to the department for approval by the Minister an Offset Management Plan for the Avonvale and Cherry Gully Offset Area.	Compliant	Baseline surveys were completed in February 2023. The revised Avonvale and Cherry Gully Offset Area OMP was submitted to the Department on 15 May 2023.
17	The Offset Management Plan must, to the satisfaction of the Minister, meet the requirements of the Environmental Offsets Policy and the Environmental Management Plan Guidelines and meet the	Not Applicable	On 12 December 2023, the Department sent written feedback on the OMP (dated 15 May 2023).
	requirements specified in Attachment H.		The revised OMP has not been resubmitted for approval.
18	If the Offset Management Plan for the Avonvale and Cherry Gully Offset Area 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 construction within the development area immediately. The approval holder must not	Not Applicable	12 months have not passed since the submission of the OMP. This condition is noted. 12 months from the initial submission of the OMP is 15 May 2024, however, may be subject to the Department receiving and assessing the requested revised OMP.

Condition number / reference	Condition	ls the project compliant with this condition?	Evidence / comments
	recommence any clearing or construction unless the Minister has approved the Offset Management Plan for the Avonvale and Cherry Gully Offset Area in writing.		
19	The approval holder must not clear or construct within Area B until the Offset Management Plan for the Avonvale and Cherry Gully Offset Area has been approved by the Minister in writing. The approval holder must implement the Offset Management Plan approved by the Minister for the remainder of the approval.	Compliant	No clearing or construction has occurred within Area B in the Year 1 reporting period (15 December 2022 to 14 December 2023). Once approved, the OMP will be implemented for the remainder of the approval.
20	Prior to commencement of the action, the approval holder must have a suitably qualified Greater Glider ecologist complete surveys to map the distribution, quantify the area, and measure the quality of all Greater Glider habitat within the development area, in accordance with a scientifically valid, robust, and repeatable survey methodology peer reviewed by an independent suitably qualified Greater Glider ecologist.	Compliant	Greater glider habitat within the development footprint is been mapped as being a 67.85 ha area, not including the habitat set to be retained in the conservation area located in the southern portion of the project area.
21	 To compensate for all impacts to the Greater Glider and for 82 ha of Greater Glider habitat, the approval holder must submit to the department, within 3 months of this approval decision, a Greater Glider Offsets Strategy (GGOS) for the approval of the Minister. The GGOS must meet the requirements of the Environmental Offsets Policy to the satisfaction of the Minister and: a) Specify the methods, effort, timing and results of the surveys required by condition 20. b) Contain all peer review comments and recommendations made by the independent suitably qualified Greater Glider ecologist and a statement from the independent suitably gualified. 	Compliant	 A GGOS dated March 2023 was prepared by SHG and was submitted to the department for approval on 16 March 2023. a) Section 3.0 of the GGOS includes details and discussion on the Greater Glider habitat impacts at the Providence East project. Attachment 2 of the GGOS includes the detailed data sheets, applied methodology and scoring metrics for habitat assessed. b) Attachment 3 of the GGOS contains a full version of the Greater Glider MHQA Review – V2 – 5 December 2022, completed by Teresa Eyre of Ecological. This document contains a peer review of the developed Greater Glider MHQA, inclusive of recommended inclusions, both



Condition number / reference	Conditi	ion	Is the project compliant with this condition?	Eviden	ce / comments
		independent and carried out the peer review to evaluate the adequacy of the survey methodology required by	; ,		adopted and not possible at this stage. The document includes Eco Logical's notes and comments on the proposed methodology.
	c)	condition 20. Identify a suitable environmental offset(s) for the residual significant impacts on the Greater Glider.	I.	c)	As noted throughout the GGOS, compensation for impacts to this species are being offset through:
	d)	 A specific actions within the 50 ha Co A specific actions within the 50 ha Co A being made adjacent to the d A detailed baseline information on the proposed offset(s) A specific actions within the 50 ha Co A being made adjacent to the d A specific actions within the 50 ha Co A	 Specific actions within the 50 ha Conservation land dedication being made adjacent to the development impact area (Section 4.0 of the GGOS) 		
	and commit to achievable ecological benefits, and timeframes for their achievement, for the proposed offset(s).			• 183 ha replanting offset at the Avonvale and Cherry Gully Offset site (Section 5.0 of the GGOS)	
	 e) Describe the monitoring program(s) to be implemente that will determine progress towards, attainment of an maintenance of the ecological benefits for Greater Glide habitat at the proposed offset(s). f) Specify how and at what frequency offset(s) management outcomes, monitoring program findings and assessment 	 		 Additional works at the broader Offset Site specific to improving outcomes for the Greater Glider. (Section 5.0 of the GGOS) 	
			 A Greater Glider Specific research proposal to be further determined and documented in partnership with the Department. (Section 6.0 of the GGOS) 		
of ecological benefits will be reported to the department These combined off and the public. other mitigation me g) Detail how the offset(s) will be protected and legally secured, and ecological benefits maintained, in perpetuity. d) Section 3.0 of the GGOS Attachment 2 of the GGO 4.0, 5.0 and 6.0 of the G	These combined offset areas and activities, in conjunction with other mitigation measures adopted at the impact site result in an				
	Detail how the offset(s) will be protected and legally secured, and ecological benefits maintained, in perpetuity.		d)	overall conservation benefit for the Greater Glider. Section 3.0 of the GGOS includes details of the impacted areas and Attachment 2 of the GGOS includes more detailed survey data. Sections 4.0, 5.0 and 6.0 of the GGOS details the offset areas and activities,	
				e)	including details on the outcome sought to be achieved for the species. Section 8.0 of the GGOS discusses and tabulates monitoring and reporting activities. It is noted that not all details are present at this
					phase and post discussion and approval by the Department will

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments	
			produce more detailed metrics and timeframes to be documented in the GGOMP.	
			f) As noted above Section 8.0 of the GGOS provides an early view of suitable monitoring activities and timeframes to be further developed within the GGOMP.	
			g) As per the GGOS, the Avonvale and Cherry Gully offset area has been legally secured via a Voluntary Declaration completed under the Queensland Government's Vegetation Management Act 1999 (VMA). The on-site conservation area will be legally secured through the same mechanism upon approval of the Conservation Area Management Plan.	
22	If the GGOS is approved by the Minister, the approval holder must:	Not Applicable	The GGOS was submitted to the department for approval on 16 March 2023.	
	 a) implement the GGOS approved by the Minister for the remainder of the period of this approval, b) provide written evidence to the department demonstrating that the offset(s) specified in the GGOS has 		On 6 November 2023, SHG received an email response and feedback on the GGOS from the Department with a request to complete updates prior to granting approval.	
	been legally secured within 20 business days of the offset(s) being legally secured, and		The revised GGOS is being prepared and has not been resubmitted for appr	
	 c) provide the department with shapefiles and offset attributes of the offset(s) specified in the GGOS within 20 business days of the offset(s) being legally secured. 			
	Note: Legal security requirements for the GGOS do not apply if the approved offset for Greater Glider, as required under condition 21, is the same as that required for Koala and Grey-headed Flying-fox as per condition 13.			
23	If the GGOS has not been approved by the Minister in writing within 6 months of the date that the GGOS was submitted to the department, the approval holder must cease all clearing and	Proponent compliant	The GGOS was submitted to the Department for approval on 16 March 2023. This would require the GGOS to be approved by 16 September 2023.	



Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	construction within the development area immediately. The approval holder must not recommence any clearing or construction unless the Minister has approved the GGOS in writing.	Condition not satisfied due to Department timeframe.	It was determined in a meeting with the Department on 14 August 2023 that the Department's expected assessment period would exceed the 6-month timeframe which would result in a non-compliance. It was suggested by the Department that the proponent request to vary Condition 23 of the approval. A request for a variation to extend the timeframe in Condition 23 was submitted by SHG on 5 September 2023. The variation seeks to rectify this non-compliance by extending the milestone to enable the Department to complete assessment and the proponent to respond and finalise the GGOS. The variation application is undergoing Department review and is yet to be approved.
24	The approval holder must, within 3 months of the date of the Minister's approval of the GGOS, submit to the department a Greater Glider Offset Management Plan (GGOMP) for any offset(s) specified in the approved GGOS for approval by the Minister. The GGOMP must meet the requirements of the Environmental Offsets Policy, Environmental Management Plan Guidelines and the requirements of Attachment H to the satisfaction of the Minister.	Not Applicable	The GGOMP will be prepared following approval of the GGOS.
25	The approval holder must implement the GGOMP approved by the Minister for the remainder of the period of this approval. The approval holder must achieve all ecological benefits and improvements in habitat quality specified in the approved GGOMP in the timeframes specified in the approved GGOMP.	Not Applicable	The GGOMP will be prepared following approval of the GGOS.
26	If the GGOMP 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 construction within the development area immediately. The	Not Applicable	The GGOMP will be prepared following approval of the GGOS.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	approval holder must not recommence any clearing or construction unless the Minister has approved the GGOMP in writing.		
27	The approval holder must not clear or construct within Area B until and unless the GGOMP has been approved by the Minister in writing.	Compliant	No clearing or construction occurred within Area B during the Year 1 reporting period (15 December 2022 to 14 December 2023).
28	Within three months prior to the end of each of Year 5, Year 10 and Year 15, the approval holder must have an independent expert undertake an assessment as to whether the outcomes required by condition 13 and the habitat quality improvements specified in the approved GGOMP for the particular period for which the assessment is undertaken have been, or are likely to be, achieved. The findings of each assessment must be published on the website within six months of the end of the particular period for which the assessment is undertaken, remain published on the website for the remainder of the duration of this approval, and each be provided to the department within 5 business days of first being published.	Not Applicable	The Year 5, Year 10, and Year 15 milestones have not occurred.
29	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 condition 13 and the habitat quality improvements specified in the approved GGOMP have been or are likely to be achieved or maintained, the Minister may require the approval holder to submit a revised Offset Management Plan or GGOMP 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, Grey-headed Flying- fox and Greater Glider.	Not Applicable	This condition is noted.
30	The Minister may specify a timeframe in which the approval holder must submit the revised Offset Management Plan or GGOMP to the	Not Applicable	This condition is noted.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	department and may specify that the revised Offset Management Plan or GGOMP must be prepared or reviewed by an independent expert.		
31	If the Minister writes to the approval holder stating that he/she considers that the revised Offset Management Plan or GGOMP is not likely to achieve the outcomes required under condition 13 and the habitat quality improvements specified in the approved GGOMP, then the approval holder must not register any title for any property in the development area until such time as a revised Offset Management Plan or GGOMP has been approved by the Minister in writing.	Not Applicable	This condition is noted.
32	The approval holder may, at any time, apply to the Minister for a variation to an action management plan approved by the Minister or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the EPBC Act.	Not Applicable	This condition is noted.
33	If the Minister approves a revised plan then, from the date specified, the approval holder must implement the approved revised plan in place of the previous version of that plan.	Not Applicable	This condition is noted.
34	The approval holder must submit all plans required by these conditions electronically to the department and notify the local authority.	Compliant	The revised Offset Management Plan, Greater Glider Offset Strategy, and Conservation Area Management Plan were all submitted to the Department for approval during the Year 1 reporting period (15 December 2022 to 14 December 2023).
35	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:	Not applicable	The above management plans have not been approved.

Condition number / reference	Condition	ls the project compliant with this condition?	Evidence / comments
	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.		
36	The approval holder must keep all published plans required by these conditions on the website until the expiry date of this approval.	Not Applicable	This condition is noted. No management plans have been published during the Year 1 reporting period (15 December 2022 to 14 December 2023) as these are pending Department approval. Upon approval, plans will be publicly available on the approval holder's website until the approval expires.
37	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	This condition is noted.
38	If sensitive ecological data is excluded or redacted from a plan in accordance with condition 37, 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	This condition is noted.
39	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 Department was notified on 31 January 2023 that the action commenced on 30 January 2023. This was completed within the required five (5) business days. A confirmation letter from the Department was issued on 21 March 2023. Refer to Appendix B for documentation.
40	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 agreement of the Minister.	Not Applicable.	The Action commenced on 30 January 2023.

Condition number / reference	Condition	ls the project compliant with this condition?	Evidence / comments
41	The approval holder must maintain accurate and complete compliance records.	Compliant	The approval holder and contractors coordinate and maintain the record keeping of activities undertaken under the approval.
42	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	This condition is noted.
	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.		
43	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 Guidelines for biological survey and mapped data, Commonwealth of Australia 2018, or as otherwise specified by the Minister in writing.	Compliant	All ecological monitoring data has been prepared in accordance with the Department's Guidelines for biological survey and mapped data by suitably qualified ecologists.
44	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 Guide to providing maps and boundary data for EPBC Act projects, Commonwealth of Australia 2021, or as otherwise specified by the Minister in writing.	Compliant	All ecological monitoring data has been prepared in accordance with the Department's Guide to providing maps and boundary data for EPBC Act projects by suitably qualified ecologists.
45	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 Annual Compliance Report is due to be published on the approval holder's website by 13 March 2024. The published Annual Compliance report can be found at the following weblink:
			< <u>Providence South Ripley House & Land Packages Stockland</u> >

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
46	Each compliance report must be consistent with the Compliance Report Guidelines, Commonwealth of Australia	e Annual Compliant a 2014.	The Year 1 ACR is consistent with the Annual Compliance Report Guidelines. This condition is noted for future ACRs.
47	 a) Accurate and complete details of any monito required by this approval. b) Accurate and complete details of compliance and compliance with the conditions and the plans, incidents. c) One or more shapefile showing all clearing protected matters, and/or their habitat, undertak the 12-month period at the end of which that correport is prepared. d) A schedule of all plans in existence in relation conditions and accurate and complete details of plan is being implemented. 	ring data dany non- , and any g of any ken within ompliance n to these how each	 a) The Year 1 ACR contains accurate and complete details of monitoring data. b) The Year 1 ACR contains accurate and completed details of compliance and any non-compliance. c) Refer to Plan 1 for all clearing of any protected matters undertaken within the Year 1 reporting period (15 December 2022 to 14 December 2023). d) Plans relating to the approval including the Conservation Area Management Plan and GGOS are not approved. The OAAR completed by One Environment detailing actions against the OMP for the Avonvale and Cherry Gully offset area is provided at Appendix G.
48	 The approval holder must: a) Publish each compliance report on the website business days following the end of the 12-month which that compliance report is required. b) Notify the department electronically, within 5 days of the date of publication that a compliance report been published on the website. 	Compliant within 60 period for business report has	 a) The first Annual Compliance Report is due to be published on the approval holder's website by 13 March 2024. b) The Department will be notified via email when the compliance report has been published on the website within 5 business days. c) The published Annual Compliance report can be found at the following weblink: <<u>Providence South Ripley House & Land Packages Stockland</u>>

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)	Compliance records will remain publicly available until the approval expires.	
	d)	Keep all published compliance reports required by these conditions on the website until the expiry date of this approval.		e) f)	This condition has been noted. This condition has been noted.	
	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: Cor	mpliance reports may be published on the department's website.				
49	The app within 2 potentia conditio	proval holder must notify the department electronically, the business days of becoming aware of any incident and/or al non-compliance and/or actual non-compliance with the ons or commitments made in a plan.	Not Applicable.	This con	ndition is noted. No evidence of non-compliance actions has occurred.	
50	The app a) b)	roval holder must specify in the notification: Any condition or commitment made in a plan which has been or may have been breached. A description of the incident and/or potential non- compliance and/or actual noncompliance.	Not Applicable.	This con	ndition is noted. No evidence of non-compliance actions has occurred.	

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 noncompliance and/or actual non-compliance.		
	Note: If the exact information cannot be provided, the approval holder must provide the best information available.		
51	 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- 	Not Applicable.	This condition is noted. No evidence of non-compliance actions has occurred.
	compliance and/or non-compliancec) The method and timing of any corrective action that will be undertaken by the approval holder.		
52	The approval holder must ensure that an independent audit of compliance with the conditions is conducted for every three-year period following the commencement of the Action until this approval expires, unless otherwise specified in writing by the Minister.	Not Applicable	This condition is noted. There has been no request from the Minister for a third- party audit.
53	For each independent audit, the approval holder must:	Not Applicable	This condition is noted. There has been no request from the Minister for a third- party audit.

Condition number / reference	Conditi	on	ls the project compliant with this condition?	Evidence / comments
	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.		
54	Each au that aud	dit report must report for the three-year period preceding lit report.	Not Applicable	This condition is noted. There has been no request from the Minister for a third- party audit.
55	Each au Minister Biodivers Guidelin	dit report must be completed to the satisfaction of the and be consistent with the Environment Protection and sity Conservation Act 1999 Independent Audit and Audit Report es, Commonwealth of Australia 2019.	Not Applicable	This condition is noted. There has been no request from the Minister for a third- party audit.
56	The app business approva	proval holder must notify the department electronically 60 s days prior to the expiry date of this approval, that the I is due to expire.	Not Applicable	This condition is noted.
Annual Compliance Report 2022/2023 – Year 1

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
57	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	This condition is noted.

5. Appendices

Appendix A

EPBC Act approval and transfer of approval confirmation

Appendix B

Commencement of the action documentation

Appendix C

Environmental Pre-start Checklist

Appendix D

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

Appendix E

Fauna spotter catcher post-clearance services reports (April and August 2023)

Appendix F

Voluntary Declaration package – Avonvale and Cherry Gully Offset Area

Appendix G

Offset Area Annual Report (Year 1) prepared by One Environment Pty Ltd



Appendix A

EPBC Act approval and transfer of approval confirmation



OFFICIAL



EPBC ref: 2018/8347

Mr David Franklin Project Director AW Bidco 6 Pty Limited PO Box 10160, Adelaide Street BRISBANE QLD 4001 david.franklin@stockland.com.au

Transfer of EPBC Act approval for Ripley Valley PDA Providence East and South, QLD (EPBC 2018/8347)

Dear Mr Franklin,

Thank you for your correspondence to the department dated 21 March 2023 requesting the transfer of this *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval from Daleswan Pty Ltd (Transferor) to AW Bidco 6 Pty Limited (Transferee).

I have considered the request for transfer in accordance with section 145B of the EPBC Act and, as delegate of the Minister for the Environment and Water, I have decided to consent to the transfer of the approval to AW Bidco 6 Pty Limited (ACN 637 312 675). The details of my decision are attached.

It should be noted that, although a transfer of approval has been granted under section 145B of the EPBC Act, the transfer does not affect the obligation of the approval holder to comply with any other law of the Commonwealth, State or Territory that is applicable to the action, or provide any right, title or interest that is required to access land or waters and to do the action.

Should you require any further information please contact Sarah Rottet by email at <u>PostApproval@dcceew.gov.au</u>.

Yours sincerely

Nola Sloan Assistant Director, Post Approvals Section (QLD, NT, SA) Environment Assessments VIC TAS and Post Approvals 28 June 2023

Att: Consent to transfer approval



Notification of consent to transfer approval

Ripley Valley PDA Providence East and South, QLD (EPBC ref 2018/8347)

This decision is made under Section 145B of the *Environment Protection and Biodiversity Conservation Act 1999 Act* (EPBC Act).

Transfer decision

approved action	Development of the Ripley Valley PDA Providence East and South, located 5 km south east of Ipswich, Queensland. See EPBC Act referral 2018/8347.
transferor	Daleswan Pty Ltd
(the person from whom the approval is transferred)	ACN 105 650 075
transferee	AW Bidco 6 Pty Ltd
(the person to whom the approval is transferred)	ACN 637 312 675

Person authorised to make decision

name and position	Nola Sloan
	Assistant Director, Post Approvals Section (QLD, NT, SA)
	Environment Assessments VIC TAS and Post Approvals Branch

Signature

date of decision

28 June 2023

OFFICIAL



Notification of approval

Ripley Valley PDA Providence East and South, QLD (EPBC 2018/8347)

This decision is made under section 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999* (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)	Daleswan Pty Ltd
ABN of approval holder	94 105 650 075
Action	Development of the Ripley Valley PDA Providence East and South, located 5 km south east of Ipswich, Queensland [See EPBC Act referral 2018/8347]

Approval decision

approval 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)	Approved				
period for which the approval has effect	This approval has effect until 31 November 2050.					
conditions of approval	The approval is subject to conditions under the EPBC Act as se Annexure A.	et out in				

Person authorised to make decision

name and position	Mark Say
	Acting Branch Head
	Environment Assessments Queensland and Sea Dumping Branch
signature	N-flag
date of decision	15 December 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** or **construct** outside of the **development area** as part of this Action.
- 2. The approval holder must not **clear** within the **development area** more than:
 - a. 131.72 ha of Koala habitat
 - b. 67.85 ha of Greater Glider habitat
 - c. 67.85 ha of Grey-headed Flying-fox foraging habitat.
- 3. The approval holder must not **clear** or **construct** in or within 1 metre of the **conservation area** except as specified in the Conservation Area Management Plan, required under condition 11, approved by the **Minister**.
- 4. The approval holder must ensure that all clearing is undertaken with the supervision of an independent suitably qualified field ecologist, who is given sufficient authority to cease any clearing that the independent suitably qualified field ecologist considers may not be compliant with the requirements of conditions 1, 2 and 3.

Note: The **independent suitably qualified field ecologist** can be the same person as the **fauna spotter catcher** provided that they can demonstrate they have the relevant qualifications and meet the criteria in the definition of '**independent**'.

5. If the **independent suitably qualified field ecologist** requires the cessation of **clearing**, then the approval holder must not re-commence **clearing** unless the **Minister** has provided approval in writing.

Impact mitigation

- 6. To minimise risk of injury or death to the Koala, Greater Glider and Grey-headed Flying-fox 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 identify **protected matters** (including in hollow bearing trees), to ensure

Koalas, Greater Gliders and **Grey-headed Flying-foxes** have safely vacated any area prior to **clearing** and **construction** occurring where it could injure animals in that area

- b. if a Koala, Greater Glider or Grey-headed Flying-fox is spotted within 100 m of any area of clearing and construction within the development area, cease all clearing and construction within 100 m of the Koala, Greater Glider or Grey-headed Flying-fox until the Koala, Greater Glider or Grey-headed Flying-fox has moved on its own further than 100 m from the area of clearing and construction, or is translocated by the fauna spotter catcher
- clear only in accordance with the Nature Conservation (Koala) Conservation Plan 2017, so as to allow Koalas to safely move out of the 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 proposed **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. prohibit workers from bringing dogs into the **development area** and adjacent **Koala habitat**, **Greater Glider habitat** and **Grey-headed Flying-fox foraging habitat** during **clearing** and **construction**.
- 7. To minimise the risk of injury or death to the **Koala, Greater Glider** and **Grey-headed Flying-fox** within the **development area** from vehicle traffic, the approval holder must:
 - a. only construct roads in accordance with Queensland's Fauna Sensitive Road Design guidelines to minimise the risks to Koalas, Greater Glider and Grey-headed Flying-fox foraging habitat of vehicle strike
 - b. implement safe movement solutions and local traffic management measures to ensure that the speed of all vehicles on roads in the development area where koalas are likely to be present is no greater than 40 km/h at any time (except an emergency and until a government entity controls these roads), so as to minimise the risk to Koala from vehicle strike
 - c. install prominent Koala awareness signage consistent with Queensland's wildlife signing guidelines, prior to opening to public motorists, any road where the presence of protected matters is likely.

Conservation Area

- 8. For the protection of Koalas, Grey-headed Flying-foxes and Greater Gliders in the conservation area, the approval holder must implement measures, including signage, fencing, monitoring and enforcement, to effectively prevent any unauthorised persons from entering, and to prevent any persons leaving rubbish or bringing animals or vehicles into the conservation area.
- 9. For the protection of the Koala, Greater Glider and Grey-headed Flying-fox within the development area, within 6 months of this approval decision the approval holder must:
 - a. complete baseline **extent of weed cover** and **feral animal** abundance surveys throughout the **conservation area** in accordance with a scientifically valid, robust, and repeatable methodology
 - b. submit the results of the baseline extent of weed cover and feral animal surveys required by 9(a) for the department's acceptance, and must make this information available on the website within 2 months of the report of the extent of weed cover and feral animal abundance surveys being accepted by the department

- c. prepare and submit a Conservation Area Management Plan for the approval by the **Minister**, with demonstration that it has been developed in consultation with the Council and relevant stakeholders, which specifies the methods, dates and results of the surveys required under condition 9(a), and the methods and intervals for monitoring to achieve the requirements of condition 10.
- 10. For the remaining period of approval, the approval holder must ensure that the **extent of weed cover** and **feral animal** abundance does not increase with respect to the baseline documented by the **extent of weed cover** and **feral animal** surveys required by condition 9(a).
- 11. Within 1 year of the date of this approval decision, the approval holder must **legally secure** the **conservation area**. Within 20 **business days** of **legally securing** this area, the approval holder must provide the **department** with written evidence demonstrating that the **conservation area** has been **legally secured**.
- 12. For the ongoing protection of **Koala**, **Grey-headed Flying-fox** and **Greater Glider habitat** within the **conservation area**, the approval holder must manage the **conservation area** for the life of the approval, until and unless the approval holder provides written confirmation from the **Council** that the **Council** will implement the Conservation Area Management Plan (required under condition 9(c)) and manage the **conservation area** for **conservation purposes**.

Environmental Offset Requirements

- 13. To compensate for impacts of up to 131.72 ha of **Koala habitat** and up to 67.85 ha of **Grey-headed Flying-fox foraging habitat**, the approval holder must:
 - a. Legally secure a minimum of 183 ha of land within the Avonvale and Cherry Gully Offset Area prior to commencement of the action.
 - b. Within 20 business days of legally securing the Avonvale and Cherry Gully Offset Area, provide the department with:
 - i. Written evidence demonstrating that the **Avonvale and Cherry Gully Offset Area** has been **legally secured**
 - ii. Shapefiles and offset attributes of the Avonvale and Cherry Gully Offset Area.
 - c. Achieve the habitat quality uplift.
- 14. For the protection of **Koala Habitat**, the approval holder must, by the end of **Year 1**, provide written confirmation to the **department** that all livestock has been permanently excluded from the **Avonvale and Cherry Gully Offset Area**.

Offset management plan for Koalas and Grey-headed Flying-foxes

- 15. Within 3 months from the date of this approval, the approval holder must have a **suitably qualified field ecologist** and **suitably qualified mammal ecologist** complete baseline surveys in accordance with a scientifically valid, robust, and repeatable methodology of the entire **Avonvale and Cherry Gully Offset Area** to determine the:
 - a. vegetation condition attributes for each regional ecosystem
 - b. location of weeds and extent of weed cover
 - c. seasonal feral animal abundance
 - d. rate of Koala mortality attributable to feral animals.

Note: The **independent suitably qualified field ecologist** can be the same person as the **suitably qualified mammal ecologist** provided that they can demonstrate they have the relevant qualifications and meet the criteria in the definition of '**independent**'.

- 16. Within 2 months of completion of the baseline surveys required under condition 15, the approval holder must submit to the **department** for approval by the **Minister** an Offset Management Plan for the **Avonvale and Cherry Gully Offset Area**.
- 17. The Offset Management Plan must, to the satisfaction of the **Minister**, meet the requirements of the **Environmental Offsets Policy** and the **Environmental Management Plan Guidelines** and meet the requirements specified in <u>Attachment H</u>.
- 18. If the Offset Management Plan for the Avonvale and Cherry Gully Offset Area 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 construction within the development area immediately. The approval holder must not recommence any clearing or construction unless the Minister has approved the Offset Management Plan for the Avonvale and Cherry Gully Offset Area in writing.
- 19. The approval holder must not **clear** or **construct** within **Area B** until the Offset Management Plan for the **Avonvale and Cherry Gully Offset Area** has been approved by the **Minister** in writing. The approval holder must implement the Offset Management Plan approved by the **Minister** for the remainder of the approval.

Offsets for Greater Glider

Offset Strategy

- 20. Prior to **commencement of the action**, the approval holder must have a **suitably qualified Greater Glider ecologist** complete surveys to map the distribution, quantify the area, and measure the quality of all **Greater Glider habitat** within the **development area**, in accordance with a scientifically valid, robust, and repeatable survey methodology peer reviewed by an **independent suitably qualified Greater Glider ecologist**.
- 21. To compensate for all impacts to the **Greater Glider** and for 82 ha of **Greater Glider habitat**, the approval holder must submit to the **department**, within 3 months of this approval decision, a Greater Glider Offsets Strategy (GGOS) for the approval of the **Minister**. The GGOS must meet the requirements of the **Environmental Offsets Policy** to the satisfaction of the **Minister** and:
 - a. Specify the methods, effort, timing and results of the surveys required by condition 20.
 - b. Contain all peer review comments and recommendations made by the independent suitably qualified Greater Glider ecologist and a statement from the independent suitably qualified Greater Glider ecologist that they are independent and carried out the peer review to evaluate the adequacy of the survey methodology required by condition 20.
 - c. Identify a suitable environmental offset(s) for the residual significant impacts on the **Greater Glider**.
 - d. Include summary information on the impacted areas and detailed baseline information on the proposed offset(s) and commit to achievable ecological benefits, and timeframes for their achievement, for the proposed offset(s).
 - e. Describe the monitoring program(s) to be implemented that will determine progress towards, attainment of and maintenance of the ecological benefits for **Greater Glider habitat** at the proposed offset(s).

- f. Specify how and at what frequency offset(s) management outcomes, monitoring program findings and assessments of ecological benefits will be reported to the **department** and the public.
- g. Detail how the offset(s) will be protected and **legally secured**, and ecological benefits maintained, in perpetuity.
- 22. If the GGOS is approved by the **Minister**, the approval holder must:
 - a. implement the GGOS approved by the **Minister** for the remainder of the period of this approval,
 - provide written evidence to the department demonstrating that the offset(s) specified in the GGOS has been legally secured within 20 business days of the offset(s) being legally secured, and
 - c. provide the **department** with **shapefiles** and **offset attributes** of the offset(s) specified in the GGOS within 20 **business days** of the offset(s) being **legally secured**.

Note: Legal security requirements for the GGOS do not apply if the approved offset for **Greater Glider**, as required under condition 21, is the same as that required for **Koala** and **Grey-headed Flying-fox** as per condition 13.

23. If the GGOS has not been approved by the Minister in writing within 6 months of the date that the GGOS was submitted to the department, the approval holder must cease all clearing and construction within the development area immediately. The approval holder must not recommence any clearing or construction unless the Minister has approved the GGOS in writing.

Offset Area Management Plan(s)

- 24. The approval holder must, within 3 months of the date of the **Minister's** approval of the GGOS, submit to the **department** a Greater Glider Offset Management Plan (GGOMP) for any offset(s) specified in the approved GGOS for approval by the **Minister**. The GGOMP must meet the requirements of the **Environmental Offsets Policy, Environmental Management Plan Guidelines** and the requirements of <u>Attachment H</u> to the satisfaction of the **Minister**.
- 25. The approval holder must implement the GGOMP approved by the **Minister** for the remainder of the period of this approval. The approval holder must achieve all ecological benefits and improvements in **habitat quality** specified in the approved GGOMP in the timeframes specified in the approved GGOMP.
- 26. If the GGOMP 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 **construction** within the **development area** immediately. The approval holder must not recommence any **clearing** or **construction** unless the **Minister** has approved the GGOMP in writing.
- 27. The approval holder must not **clear** or **construct** within **Area B** until and unless the GGOMP has been approved by the **Minister** in writing.

Monitoring

28. Within three months prior to the end of each of Year 5, Year 10 and Year 15, the approval holder must have an independent expert undertake an assessment as to whether the outcomes required by condition 13 and the habitat quality improvements specified in the approved GGOMP for the particular period for which the assessment is undertaken have been, or are likely to be, achieved. The findings of each assessment must be published on the website within six months of the end of the particular period for which the assessment is undertaken, remain published on the website for

the remainder of the duration of this approval, and each be provided to the **department** within 5 **business days** of first being published.

- 29. 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 condition 13 and the habitat quality improvements specified in the approved GGOMP have been or are likely to be achieved or maintained, the **Minister** may require the approval holder to submit a revised Offset Management Plan or GGOMP 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, Grey-headed Flying-fox** and **Greater Glider**.
- 30. The **Minister** may specify a timeframe in which the approval holder must submit the revised Offset Management Plan or GGOMP to the **department** and may specify that the revised Offset Management Plan or GGOMP must be prepared or reviewed by an **independent expert**.
- 31. If the **Minister** writes to the approval holder stating that he/she considers that the revised Offset Management Plan or GGOMP is not likely to achieve the outcomes required under condition 13 and the habitat quality improvements specified in the approved GGOMP, then the approval holder must not register any title for any property in the **development area** until such time as a revised Offset Management Plan or GGOMP has been approved by the **Minister** in writing.
- 32. The approval holder may, at any time, apply to the **Minister** for a variation to an action management plan approved by the **Minister** or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the **EPBC Act**.
- 33. If the **Minister** approves a revised **plan** then, from the date specified, the approval holder must implement the approved revised **plan** in place of the previous version of that **plan**.

SUBMISSION AND PUBLICATION OF PLANS

- 34. The approval holder must submit all **plans** required by these conditions electronically to the **department** and notify the local authority.
- 35. 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**.
- 36. The approval holder must keep all published **plans** required by these conditions on the **website** until the expiry date of this approval.
- 37. 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.
- 38. If **sensitive ecological data** is excluded or redacted from a **plan** in accordance with condition 37, 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

- 39. 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**.
- 40. 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 agreement of the **Minister**.

COMPLIANCE RECORDS

- 41. The approval holder must maintain accurate and complete **compliance records**.
- 42. 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.

- 43. 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 *Guidelines for biological survey and mapped data*, Commonwealth of Australia 2018, or as otherwise specified by the **Minister** in writing.
- 44. 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 *Guide to providing maps and boundary data for EPBC Act projects*, Commonwealth of Australia 2021, or as otherwise specified by the **Minister** in writing.

ANNUAL COMPLIANCE REPORTING

- 45. 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**.
- 46. Each **compliance report** must be consistent with the *Annual Compliance Report Guidelines*, Commonwealth of Australia 2014.
- 47. Each compliance report must include:
 - a. Accurate and complete details of any monitoring data required by this approval.
 - b. Accurate and complete details of compliance and any non-compliance with the conditions and the plans, and any incidents.
 - c. 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.
 - d. A schedule of all **plans** in existence in relation to these conditions and accurate and complete details of how each **plan** is being implemented.
- 48. 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

- 49. 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**.
- 50. 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.

- 51. 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

- 52. The approval holder must ensure that an **independent audit** of compliance with the conditions is conducted for every three-year period following the **commencement of the Action** until this approval expires, unless otherwise specified in writing by the **Minister**.
- 53. 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.
- 54. Each audit report must report for the three-year period preceding that audit report.
- 55. Each **audit report** must be completed to the satisfaction of the **Minister** and be consistent with the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines*, Commonwealth of Australia 2019.

COMPLETION OF THE ACTION

- 56. 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.
- 57. 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

Area B means the whole of the area represented in <u>Attachment B</u> by the areas with blue hatching and enclosed by the blue dashed lines designated 'Area B'.

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**.

Avonvale and Cherry Gully Offset Area means the whole of the area represented in <u>Attachment C</u> by the zones enclosed by the red lines designated 'EPBC 2018/8347 OFFSET AREA'. The **Avonvale and Cherry Gully Offset Area** is located on Littles Road, Toogoolawah, Queensland.

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

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

Commence the action or **Commencement of the action** means the first instance of any specified activity associated with the action including **clearing** and **construction**. **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 installation of temporary fencing, and use of existing surface access tracks
- d. install temporary site facilities for persons undertaking pre-commencement activities so long as these are located where they have no impact on the **protected matters**.

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

Completion of the action means the date on which all specified activities associated with the action have permanently ceased.

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 reports means written reports:

- a. providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**
- b. consistent with the *Annual Compliance Report Guidelines*, Commonwealth of Australia 2014
- c. include a **shapefile** of any **clearance** of any **protected matters**, or their habitat, undertaken within the relevant 12 month period
- d. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12 month period.

Conservation Area means the retained area of at least 50 ha containing mixed remnant and regrowth vegetation within the **development area**, represented by the zone shaded dark green labelled 'Conservation' in <u>Attachment A</u>.

Conservation benefit means measures which maintain or improve the quality of the habitat for **protected matters**. **Conservation benefit** measures may include rehabilitation works, low intensity mosaic burning, installation of educational signage as outlined in the Conservation Area Management Plan, **weed** removal and associated management/maintenance access tracks.

Construct or **Construction** means the erection of any building or structure that is or is to be fixed to the ground and wholly or partially fabricated on-site; the alteration, maintenance, repair or demolition of any building or structure; 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 construction on sold lots or roads managed by **Council**, and the installation and maintenance of temporary fences and signage, and works necessary for **conservation benefit** in the **Conservation Area**.

Council means the local government authority responsible for the local government area encompassing Ripley Valley Priority Development Area, currently Ipswich City Council, Queensland.

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

Development area means the location of the Action, the 210 ha area represented on <u>Attachment A</u> by the zone enclosed by the bold black line labelled 'Referral Area' which passes through the numbered waypoints representing the coordinates of the **development area** as specified in the table titled 'Coordinates (GDA94 MHA Zone 56)' in <u>Attachment A.</u>

Environmental Management Plan Guidelines means the *Environmental Management Plan Guidelines*, Commonwealth of Australia 2014.

Environmental Offsets Policy means the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*, Commonwealth of Australia 2012.

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

Expert means one or more professional having the qualifications and experience specified in the following defined terms that are specifically relevant to the requirements of the condition that requires the engagement of an **expert**:

- a. Suitably qualified field ecologist
- b. Suitably qualified Greater Glider ecologist
- c. Suitably qualified mammal ecologist.

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**, **Greater Glider habitat** and **Grey-headed Flying-fox foraging habitat** or reduce their ability to regenerate.

Fauna spotter catcher means a person licenced 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** and **Greater Gliders**.

Feral animals means non-native predators and non-native herbivores, including those known to predate on the **Koala** and/or **Greater Glider**, or with the potential to impact on vegetation habitat regeneration for **protected matters**.

Greater Glider means the EPBC Act listed threatened species *Petauroides volans* (southern and central).

Greater Glider habitat means:

- a. habitat critical to the survival of **Greater Glider**, as described in page 8 of *Conservation Advice for Petauroides volans (greater glider (southern and central))*, Commonwealth of Australia 2022
- b. areas represented in <u>Attachment B and D</u> identified as follows:



Grey-headed Flying-fox means the EPBC Act listed threatened species Pteropus poliocephalus.

Grey-headed Flying-fox foraging habitat means the following:

- habitat critical to the survival of Grey-headed Flying-fox, as described in pages 14 and 15 of National Recovery Plan for the Grey-headed Flying-fox Pteropus poliocephalus, Commonwealth of Australia 2021
- b. areas represented in <u>Attachment B and E</u>, identified as follows:



Habitat quality is the measure of the overall capacity and ongoing viability of a site to support the relevant **protected matter(s)**, determined with respect to site condition, site context and species stocking rate and/or composition.

Habitat quality uplift means, at Avonvale and Cherry Gully Offset Area, to:

- exceed the 'baseline score' for 'site condition', 'site context' and 'species stocking rate' scores for the Koala as specified in <u>Attachment F</u>, and achieve or exceed all scores specified in <u>Attachment F</u> in the 'Year 5' column by the end of year 5, in the 'Year 10' column by the end of year 10, in the 'Year 15' column by the end of year 15 and in the 'Year 20' column by the end of year 20 and
- exceed the 'AU Score' for 'site condition', 'site context' and 'species stocking rate' for the Grey-headed Flying-fox as specified in <u>Attachment G</u>, and achieve or exceed all scores specified in <u>Attachment G</u> in the 'Year 5 Score' column by the end of year 5, in the 'Year 10' column by the end of year 10, in the 'Year 15' column by the end of year 15 and in the 'Year 20' column by the end of year 20.

Incident means any event which has the potential to, or does, impact on one or more **protected matter**. Any death or injury of a **Koala, Grey-headed Flying-fox** or **Greater Glider** as a result of the Action is an **incident**. **Independent** means a person(s) or firm that does not have an individual, or by employment or family affiliation, any conflicting or competing interests with the approval holder, the approval holder's staff, the approval holder's consultants involved in the referral of this Action, representatives or associated persons; or the project, including any personal, financial, business or employment relationship, other than receiving payment for undertaking the role for which the condition requires an independent person.

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*, Commonwealth of Australia 2019.

Koala 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 safely 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, The State of Queensland 2020.

Koala habitat means the following:

- a. any area that provides or is likely to provide the essential life cycle requirements of the **Koala**, including dispersal, foraging and or breeding habitat as described in:
 - i. Conservation Advice for Phascolarctos cinereus (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory, Commonwealth of Australia 2022
 - National Recovery Plan for the Koala Phascolarctos cinereus (combined populations of Queensland, New South Wales and the Australian Capital Territory), Commonwealth of Australia 2022
 - iii. A review of koala habitat assessment criteria and methods, Youngentob, K.N, Marsh, K.F., Skewes, J. 2021
- b. areas represented in <u>Attachment B and D</u> identified as follows:



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**.

Local traffic management measures means devices that reduce the speed and/or volume of traffic, for example, road closures, chicanes, crosswalks, lighting, signage and rumble strips, as described in **Queensland's fauna sensitive road design guidelines**.

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*, The State of Queensland, 2022.

Offset attributes means an '.xls' file capturing relevant attributes of the offset area, including:

- a. EPBC Act reference number
- b. Physical address of the offset area
- c. Coordinates of the boundary points in decimal degrees
- d. Protected matters that the offset compensates for
- e. Any additional protected matters that are benefiting from the offset
- f. Size of the offset in hectares.

Queensland's fauna sensitive road design guidelines means *Fauna Sensitive Road Design - Volume 2: Preferred Practices,* The State of Queensland 2010.

Queensland's wildlife signing guidelines means *Traffic and Road Use Management, Transport and Main Roads Volume 3 – Signing and Pavement Marking, Part 8: Wildlife Signing Guidelines,* The State of Queensland.

Plan means any action management plan or strategy that the approval holder is required by these conditions to implement.

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

Regional ecosystem means any of the following vegetation communities in a bioregion that is consistently associated with a particular combination of geology, landform and soil as classified by the Queensland Government under the *Vegetation Management Act, 1999*: RE 12.3.3, 12.9-10.7, and 12.9-10.2.

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 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 (2016) *Sensitive Ecological Data – Access and Management Policy V1.0.*

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 means location and attribute information of 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 means a person who has professional qualifications and at least three (3) years of work experience designing and implementing surveys for **regional ecosystems**, and can give an authoritative assessment and advice on the type and quality of **regional ecosystems**

present, including management and restoration of the **regional ecosystems** using relevant protocols, standards, methods and/or literature.

Suitably qualified Greater Glider ecologist means a person who has professional qualifications and at least three (3) years of work experience designing and implementing surveys for the **Greater Glider**, and can give an authoritative assessment and advice on **Greater Glider** presence, habitat type and quality, and habitat management and restoration measures for the **Greater Glider** (and its habitat) using relevant protocols, standards, methods and/or literature.

Suitably qualified mammal ecologist means a person who has professional qualifications and at least three (3) years of work experience designing and implementing surveys for Grey-headed Flying-foxes and Koalas and can give an authoritative assessment and advice on Grey-headed Flying-fox and Koala presence, habitat type and quality, and habitat management and restoration measures for the Grey-headed Flying-fox and Koala (and their habitat) 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.

Unauthorised person means a person who has not been approved by the approval holder to access and enter the **conservation area** for the purposes of undertaking conservation management, inspecting the condition of the **conservation area** or undertaking scientific study for conservation purposes. **Unauthorised person** does not include any person authorised by the Australian Government, the Queensland Government or the City of Ipswich, who enters the **conservation area** in the necessary course of administering or enforcing legislation in respect of which they are authorised to act. **Unauthorised person** does not include any representative of the Australian Government, Queensland Government or the City of Ipswich who is required to enter the **conservation area** in the normal discharge of their lawful responsibilities.

Vegetation condition attributes means the quantitative values within BioCondition benchmarks that define a **regional ecosystem.**

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 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 20 means the period within twenty years from the date of this approval.

ATTACHMENTS

Attachment A: Development Area



any part of a without this note being included in full will sender t



Attachment B: Staged clearing





Ripley Road, Ripley

DCCEEW.gov.au John Gorton Building - King Edward Terrace, Parkes ACT 2600 Australia GPO Box 3090 Canberra ACT 2601 ABN: 63 573 932 849

423W9 / RFD (7047/SP307629, T12/M3174, 110/SP16300) 171/SP169001, & 190/S31349 19/10/2022 | 9896 E 28 Picp used Development B

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Attachment C: Avonvale and Cherry Gully Offset Area



Attachment D: Koala Impact Plan

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A4. Impacted Koala Vegetation Communities



Ripley Road, Ripley

this plan is not suitable for any other purpose seas, numbers of loss and contours and other ph led form existing info and and dea

 Meanings, 2022
 This note is an integral pair of this plan or any part of it without this note being reproduction of this plan ded in fall will render the wild and not at bubble for

Legend



Impacted Vegetation Communities

Koala Habitat - 131.91 ha

	Open Paddock - 64.06 ha
1	Regrowth RE123.3 - 985 ha
	Regrowth RE129-10.7 - 28.33 ha
	Regrowth RE129-10.2 - 18.60 ha
	Remnant RE12.9-10.2 - 11.07 ha
Non-K	oala Habitat - 32.08

Non-habitat - 32,08 ha

Proposed Development

Conservation
Development Footprint

Ressive Open Space

Road

110	Date	Description	Drawn Cheded
A.	509/202	Paeliminary	15 E
	50 100 1	50 200 250 m	^
Tanne	n eblerator (G	64 (964 (Zone 32) +46 (AG	a e A2 💟
Addre	n/ APIX 70 [1]	6758307828, 112685174 (58168001, 8-180/531789	, 1)05P169001,

5/09/2022 | 98967 04 impacted VegetationCommunities A_



A5. Impacted Grey-headed Flying-fox Vegetation Communities



Ripley Road, Ripley

ain and an adjustence and this plan is not suitable for any other purpose Property mean, purplers of ion and constant and other physical fe mexisting information mexisting information here may need verific have been compiled fi writied by field survey ved and dea too what other of how to ex-Copy Sources © Store of Quee isiond 2022.0

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Legend QdDCD8 Referral Area Impacted Vegetation Communities Grey-headed Flying-fox Habitat - 67.85 ha Regrowth RE123.3 - 985 ha Regrowth RE129-10.7 - 28.32 ha Regrowth RE129-10.2 - 1860 ha Remnant RE12.9-10.2 - 11.07 ha Non-Grey-headed Flying-fox Habitat - 96.14 ha Non-habitat - 96.14 ha Proposed Development Gonservation Development Rootprint Ressive Open Space Road



5/09/2022 | 98961 05 Impaced GHTT Communities A_

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Attachment F: EMZ 1 interim and final uplift, Koala

Table 12: MHQA Completion Criteria					C 1	171 Onen 6	Proving Count						
Assessment onto Tregional Loosystem						az i - open c	Average of	%	Baseline				
SITE CONDITION	RE12.11.14	Transect 1	Transect 2	Transect 3	Transect 4	Transect 5	Transect(s)	Benchmark	Score	Year 5	Year 10	Year 15	Year 20
Recruitment of woody perennial species	100	0	0	33	0	50	16.60	16.60	0	0	3	3	5
Native plant species richness - trees	6	1	1	3	0	2	1.40	23.33	0	5	5	5	5
Native plant species richness - shrubs	7	0	0	0	0	1	0.20	2.86	0	0	2.5	2.5	2.5
Native plant species richness - grasses	8	5	5	4	4	6	4.80	60.00	2.5	2.5	2.5	2.5	2.5
Native plant species richness - forbs	23	2	3	3	4	4	3.20	13.91	0	0	2.5	2.5	2.5
Tree canopy height (Canopy)"	25	0	12	0	0	12	4.80	19.20	0	0	3	3	5
Tree canopy height (Sub-canopy)"	13	6	0	8	0	6	4.00	30.77	3	3	3	3	5
						-A-	verage tree c	anopy height	0	1.5	3	3	5
Tree canopy cover (Canopy)**	40	0	0	0	0	0	0	0.00	0	0	2	5	5
Tree canopy cover (Sub-canopy)**	21	0	0	0	0	0	0.00	0.00	0	0	2	5	5
						A	verage tree c	anopy cover	0	0	2	5	5
Shrub canopy cover	4	0	0	0	0.7	0	0.14	3.50	0	5	5	5	5
Native grass cover"	45	84.8	45	93.4	100	89	82.44	183.20	5	5	5	5	5
Organic litter"	30	0	0.5	0	0	2	0.50	1.67	0	3	3	3	5
Large trees (euc plus non-euc) (per ha)	33	0	0	0	0	0	0.00	0.00	0	0	0	0	0
Coarse woody debris (per ha)	260	10.5	1.8	12.4	23.4	32	16.02	6.16	0	5	5	5	5
Non-native plant cover	0	40	25	35	30	28	31.60	6.33	5	5	10	10	10
Quality and availability of food and forag	NA	1	1	1	1	1	1.00		1	1	5	10	10
Quality and availability of shelter	NA	1	1	1	1	1	1.00		1	1	5	10	10
						S	ite Condition	Score (/100)	14	34	58.5	71.5	77.5
						S Dverall Site (ite Condition Condition Sco	Score (/100) pre - out of 3	14 U.42 Baseline	34 1.02	58.5 1.76	71.5 2.15	77.5 2.33
SITE CONTEXT						S Dverall Site (ite Condition Condition Sco	Score (/100) pre - out of 3	14 U.42 Baseline Score	34 1.02 Year 5	58.5 1.76 Year 10	71.5 2.15 Year 15	77.5 2.33 Year 20
<u>SITE CONTEXT</u> Size of patch	10	10	10	10	10	S Overall Site (10	ite Condition Condition Sco 10	Score (†100) pre - out of 3	14 U.42 Baseline Score 10	34 1.U2 Year 5 10	58.5 1.76 Year 10 10	71.5 2.15 Year 15 10	77.5 2.33 Year 20 10
<u>SITE CONTEXT</u> Size of patch Connectedness	10	10	10	10	10	S Overall Site (10 4	ite Condition Condition Scc 10 4	Score (†100) pre - out of 3	14 U.42 Baseline Score 10	34 1.02 Year 5 10 4	58.5 1.76 Year 10 10 4	71.5 2.15 Year 15 10 4	77.5 2.33 Year 20 10 4
SITE CONTEXT Size of patch Connectedness Contezt	10 5 5	10	10	10	10 4 4	S Dverall Site (10 4 4	ite Condition Condition Sco 10 4 4	Score (†100) ore - out of 3	14 U.42 Baseline Score 10 4	34 1.02 Year 5 10 4	58.5 1.76 Year 10 10 4 4	71.5 2.15 Year 15 10 4	77.5 2.33 Year 20 10 4 4
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors	10 5 5 6	10 4 4 6	10 4 4 6	10 4 4 6	10 4 4 6	S Dverall Site (10 4 4 6	ite Condition Condition Sec 10 4 4 6	Score (†100) pre - out of 3	14 U.42 Baseline Score 10 4 4 6	34 1.02 Year 5 10 4 4 6	58.5 1.76 Year 10 10 4 4 6	71.5 2.15 Year 15 10 4 4 6	77.5 2.33 Year 20 10 4 4 6
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p	10 5 5 6 5	10 4 6 5	10 4 6 5	10 4 6 5	10 4 6 5	S Dverall Site (10 4 4 6 5	ite Condition Condition Sec 10 4 4 6 5	Score (†100) pre - out of 3	14 U.42 Baseline Score 10 4 4 6 5	34 1.02 Year 5 10 4 4 6 5	58.5 1.76 Year 10 10 4 4 6 5	71.5 2.15 Year 15 10 4 4 6 5	77.5 2.33 Year 20 10 4 4 6 5
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species	10 5 5 6 5 15	10 4 6 5 1	10 4 6 5 1	10 4 6 5 1	10 4 4 6 5 1	S Overall Site (10 4 4 6 5 1	ite Condition Condition Sec 10 4 6 5 1	Score (†100) pre - out of 3	14 U.42 Baseline Score 10 4 4 6 5 5	34 1.02 Year 5 10 4 4 6 5 5 15	58.5 1.76 Year 10 10 4 4 6 5 15	71.5 2.15 Year 15 10 4 4 6 5 15	77.5 2.33 Year 20 10 4 4 6 5 5 15
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity	10 5 5 6 5 15 10	10 4 6 5 1 4	10 4 6 5 1 4	10 4 6 5 1 4	10 4 6 5 1 4	S Dverall Site (10 4 4 6 5 5 1 4	ite Condition Condition Sec 10 4 4 6 5 1 4	Score (†100) pre - out of 3	14 U.42 Baseline Score 10 4 4 6 5 5 1 4	34 1.02 Year 5 10 4 6 5 15 4	58.5 1.76 Year 10 10 4 6 5 15 4	71.5 2.15 Year 15 10 4 4 6 5 15 15 4	77.5 2.33 Year 20 10 4 4 6 5 5 15 7
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity	10 5 5 6 5 15 10	10 4 6 5 1 4	10 4 6 5 1 4	10 4 6 5 1 4	10 4 4 6 5 1 4	S Overall Site (10 4 4 6 5 1 1 4 0verall Site	ite Condition Condition Sec 10 4 6 5 5 1 4 Site Contez Contezt Sco	Score (/100) pre - out of 3 t Score (/56) pre - out of 3	14 U.42 Baseline Score 10 4 4 6 5 5 1 1 4 4 34 34 1.82	34 1.02 Year 5 10 4 4 6 5 15 4 4 8 2.57	58.5 1.76 Year 10 10 4 4 6 5 15 4 4 48 2.57	71.5 2.15 Year 15 10 4 4 6 5 15 15 4 4 8 2.57	77.5 2.33 Year 20 10 4 4 6 5 5 15 7 7 51 2.73
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity SPECIES STOCKING BATE	10 5 5 6 5 15 10	10 4 6 5 1 4	10 4 6 5 1 4	10 4 6 5 1 4	10 4 6 5 1 4	S Overall Site (10 4 4 6 5 1 1 4 0verall Site	ite Condition Condition Sec 10 4 4 6 5 5 1 4 Site Contez Contezt Scc	Score (/100) pre - out of 3 t Score (/56) pre - out of 3	14 U.42 Baseline Score 10 4 4 6 5 5 1 1 4 34 1.82	34 1.U2 Year 5 10 4 6 5 15 4 4 48 2.57	58.5 1.76 Year 10 10 4 4 6 5 15 4 48 2.57	71.5 2.15 Year 15 10 4 4 6 5 15 15 4 4 8 2.57	77.5 2.33 Year 20 10 4 4 6 5 15 7 51 2.73
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity SPECIES STOCKING BATE Koala Stocking Rate (utilising SSR & SSB Supplementar Table(s)	10 5 6 5 15 10	10 4 6 5 1 4	10 4 6 5 1 4	10 4 6 5 1 4	10 4 4 6 5 1 4	S Overall Site (10 4 4 6 5 1 1 4 0verall Site	ite Condition Condition Sec 10 4 4 6 5 5 1 4 Site Contez Context Sec	Score (/100) pre - out of 3 t Score (/56) pre - out of 3	14 U.42 Baseline Score 10 4 4 6 5 5 1 1 4 34 1.82	34 1.U2 Year 5 10 4 4 6 5 15 4 4 8 2.57	58.5 1.76 Year 10 10 4 4 6 5 15 4 48 2.57 30	71.5 2.15 Year 15 10 4 4 6 5 15 4 4 8 2.57	77.5 2.33 Year 20 10 4 4 6 5 5 5 15 7 51 2.73
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity SPECIES STOCKING RATE Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	10 5 6 5 15 10 70	10 4 6 5 1 4 5	10 4 6 5 1 4 5	10 4 6 5 1 4 5	10 4 6 5 1 4	S Dverall Site (10 4 4 6 5 1 4 0verall Site 5 Species 5	ite Condition Condition Sec 10 4 4 6 5 5 1 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Score (/100) pre - out of 3 t Score (/56) pre - out of 3 Score (/70)	14 U.42 Baseline Score 10 4 4 6 5 5 1 1 4 34 1.82 5 5.00 9 20	34 1.02 Year 5 10 4 6 5 15 4 4 8 2.57 5 5 5	58.5 1.76 Year 10 10 4 4 6 5 15 4 48 2.57 30 30 1.71	71.5 2.15 Year 15 10 4 4 6 5 15 15 4 4 8 2.57 30 30 30 1 71	77.5 2.33 Year 20 10 4 4 6 5 5 15 7 5 1 2.73 30 30 30 30
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity SPECIES STOCKING BATE Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)	10 5 6 5 15 10 70	10 4 6 5 1 4	10 4 6 5 1 4 5	10 4 6 5 1 4 5	10 4 6 5 1 4 0verall S	S Dverall Site (10 4 4 6 5 5 1 4 0 4 0 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ite Condition Condition Sec 10 4 4 6 5 5 1 4 Site Contez 2 Contezt Sec 5 5 5 tocking Rate	Score (/100) pre - out of 3 t Score (/56) pre - out of 3 e Score (/70) pre - out of 4	14 U.42 Baseline Score 10 4 4 6 5 5 1 1 4 34 1.82 5 5 5.00 0.29	34 1.U2 Year 5 10 4 4 6 5 15 4 4 8 2.57 5 5 0.29 7 00	58.5 1.76 Year 10 10 4 4 6 5 15 4 4 48 2.57 30 30 1.71 - 10 -	71.5 2.15 Year 15 10 4 4 6 5 15 4 4 8 2.57 30 30 1.71	77.5 2.33 Year 20 10 4 4 6 5 5 15 7 7 51 2.73 30 30 1.71
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity SPECIES STOCKING RATE Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s) Uverall Assessment Unit Score	10 5 6 5 15 10 70	10 4 6 5 1 4 5	10 4 6 5 1 4 5	10 4 6 5 1 4 5	10 4 6 5 1 4 0verall S	S Dverall Site (10 4 4 6 5 5 1 4 0 verall Site 5 Species Stoc	ite Condition Condition Sec 10 4 4 6 5 5 1 4 Site Contex 5 Context Sec 5 Stocking Rate Sec	Score (/100) pre - out of 3 t Score (/56) pre - out of 3 e Score (/70) pre - out of 4	14 U.42 Baseline Score 10 4 4 6 5 5 1 1 4 34 1.82 5 5 5.00 0.29 2.53	34 1.U2 Year 5 10 4 4 6 5 15 4 4 8 2.57 5 0.29 3.88	58.5 1.76 Year 10 10 4 4 6 5 15 4 48 2.57 30 30 1.71 5.04	71.5 2.15 Year 15 10 4 4 6 5 15 4 4 8 2.57 30 30 1.71 5.43	77.5 2.33 Year 20 10 4 4 6 5 5 15 7 5 1 2.73 30 30 1.71 6.77
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity SPECIES STOCKING RATE Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s) Uverall Assessment Unit Score Species Stocking Rate (SSR)	10 5 5 6 5 15 10 70	10 4 6 5 1 4 5	10 4 6 5 1 4 5	10 4 6 5 1 4 5	10 4 6 5 1 4 0verall S	S Dverall Site (10 4 4 6 5 1 4 0 verall Site 5 Species S 5 species S tool	ite Condition Condition Sec 10 4 4 6 5 1 4 Site Contex 2 Context Sec 5 Stocking Rate Sec Baseline	Score (†100) pre - out of 3 t Score (†56) pre - out of 3 e Score (†70) pre - out of 4 Year 5	14 U.42 Baseline Score 10 4 4 6 5 5 1 1 4 34 1.82 5 5.00 0.29 2.53	34 1.U2 Year 5 10 4 4 6 5 5 4 4 8 2.57 5 0.29 3.88 Year 15	58.5 1.76 Year 10 10 4 4 6 5 15 4 4 48 2.57 30 30 1.71 6.04 Year 20	71.5 2.15 Year 15 10 4 4 6 5 15 4 4 8 2.57 30 30 1.71 6.43	77.5 2.33 Year 20 10 4 4 6 5 5 15 7 7 51 2.73 30 30 1.71 6.77
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity SPECIES STOCKING RATE Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s) Uverall Assessment Unit Score Species Stocking Rate (SSR) Presence detected on or adjacent to site (neighbouring property with connecting habitat)	10 5 5 6 5 15 10 70 70 Score	10 4 6 5 1 4 5 5	10 4 6 5 1 4 5 7 9	10 4 6 5 1 4 5	10 4 6 5 1 4 0verall 9	S Dverall Site (10 4 4 6 5 5 11 4 0verall Site 5 Species Stocl 5 Species Stocl 10	ite Condition Condition Sec 10 4 4 6 5 5 1 4 Site Contex 5 Context Sec 5 5 Stocking Rate King Rate Sec Baseline 5	Score (/100) pre - out of 3 t Score (/56) pre - out of 3 e Score (/70) pre - out of 4 Year 5	14 U.42 Baseline Score 10 4 4 6 5 5 10 1 4 4 34 1.82 5 5.00 0.29 2.53 7 Year 10	34 1.U2 Year 5 10 4 6 5 15 4 4 8 2.57 5 0.29 3.88 Year 15 5	58.5 1.76 Year 10 10 4 4 6 5 15 4 4 48 2.57 30 30 1.71 5.04 Year 20 10	71.5 2.15 Year 15 10 4 4 6 5 15 4 4 8 2.57 30 30 1.71 6.43	77.5 2.33 Year 20 10 4 4 6 5 15 7 7 51 2.73 30 1.71 6.77
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall j Threats to the species Species mobility capacity Second Stocking Rate (utilising SSR & SSR Supplementary Table(s) Uverall Assessment Unit Score Species Stocking Rate (SSR) Presence detected on or adjacent to site (neighbouring property with connecting habitat) Species usage of the site (habitat type & evidenced usage)	10 5 5 6 5 15 10 70 70 Score Score	10 4 6 5 1 4 5 5 0 No No 0 No No	10 4 6 5 1 4 5 5 Yes - adjacent 5 Dispersel	10 4 6 5 1 4 5 5	10 4 6 5 1 4 Overall S Ves - on site	S Dverall Site (10 4 4 6 5 1 4 0verall Site 5 Species Stock 5 Species Stock 10 10 10 115	ite Condition Condition Second 10 4 4 6 5 1 4 8 5 6 5 6 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	Score (/100) pre - out of 3 t Score (/56) pre - out of 3 e Score (/70) pre - out of 4 Year 5 5	14 U.42 Baseline Score 10 4 4 6 5 5 0 1 1 4 4 34 1.82 5 5.00 0.29 2.53 7 4 2.53	34 1.U2 Year 5 10 4 6 5 15 4 4 8 2.57 5 0.29 3.88 Year 15 5	58.5 1.76 Year 10 10 4 4 6 5 15 4 4 48 2.57 30 30 1.71 5.04 Year 20 10 10	71.5 2.15 Year 15 10 4 4 4 6 5 15 4 48 2.57 30 30 1.71 5.43	77.5 2.33 Year 20 10 4 4 6 5 5 15 7 7 51 2.73 30 1.71 6.77
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity SPECIES STOCKING RATE Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s) Uverall Assessment Unit Score Species Stocking Rate (SSR) Presence detected on or adjacent to site (neighbouring property with connecting habitat) Species usage of the site (habitat type & evidenced usage) Approximate densitu (ner ha)	10 5 5 6 5 15 10 70 70 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	10 4 6 5 1 4 5 0 No No No No No No No No No No No No No	10 4 6 5 1 4 4 7 5 5 5 5 5 5 5 5 5 5 5 5 10 10 10 10	10 4 6 5 1 4 5 5 5 5 5	10 4 6 5 1 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	S Dverall Site (10 4 4 6 5 1 4 0verall Site 5 5 Species Stoc 5 5 pecies Stoc 10 10 10 11 15 30	ite Condition Condition Second 10 4 4 6 5 1 4 Site Contex 5 5 Stocking Rate King Rate Second Baseline 5 0	Score (/100) pre - out of 3 t Score (/56) pre - out of 3 Score (/70) pre - out of 4 Year 5 5 0	14 U.42 Baseline Score 10 4 4 6 5 5 1 1 4 34 1.82 5 5.00 0.29 2.53 7 Year 10 5 0	34 1.U2 Year 5 10 4 4 6 5 15 4 4 8 2.57 5 0.29 3.88 Year 15 5 0	58.5 1.76 Year 10 10 4 4 6 5 15 4 4 48 2.57 30 30 1.71 6.04 Year 20 10 10 10	71.5 2.15 Year 15 10 4 4 6 5 15 4 4 8 2.57 30 30 1.71 6.43	77.5 2.33 Year 20 10 4 4 6 5 15 7 7 51 2.73 30 30 1.71 6.77
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity Second Stocking Rate (utilising SSR & SSR Supplementary Table(s) Uverall Assessment Unit Score Species Stocking Rate (SSR) Presence detected on or adjacent to site (neighbouring property with connecting habitat) Species usage of the site (habitat type & evidenced usage) Approximate density (per ha)	10 5 5 6 5 15 10 70 70 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	10 4 6 5 1 4 5 5 0 No No No No No No No No No No No No No	10 4 6 5 1 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	10 4 6 5 1 4 5 5 5 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7	10 4 6 5 1 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	S Dverall Site (10 4 4 6 5 1 4 0verall Site 5 5 5 5 5 5 9 6 5 5 5 5 5 5 5 5 5 5 5 5	ite Condition Condition Second 10 4 4 6 5 1 1 4 Site Contex 5 Context Second 5 Stocking Rate king Rate Second Baseline 5 0	Score (/100) pre - out of 3 t Score (/56) pre - out of 3 e Score (/70) pre - out of 4 Year 5 0 0 0	14 U.42 Baseline Score 10 4 4 6 5 5 1 1 4 34 1.82 5 5.00 0.29 2.53 7 Year 10 5 0 0	34 1.U2 Year 5 10 4 6 5 15 4 4 8 2.57 5 0.29 3.88 Year 15 5 0 0	58.5 1.76 Year 10 10 4 4 6 5 15 4 4 48 2.57 30 30 1.71 5.04 Year 20 10 10 10 10	71.5 2.15 Year 15 10 4 4 6 5 15 4 48 2.57 30 30 1.71 5.43	77.5 2.33 Year 20 10 4 4 6 5 15 7 5 1 2.73 30 1.71 6.77
SITE CONTEXT Size of patch Connectedness Context Ecological Corridors Role of site location to species overall p Threats to the species Species mobility capacity SPECIES STOCKING RATE Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s) Uverall Assessment Unit Score Species Stocking Rate (SSR) Presence detected on or adjacent to site (neighbouring property with connecting habitat) Species usage of the site (habitat type & evidenced usage) Approximate density (per ha) Role/importance of species population on site*	10 5 5 6 5 15 10 70 70 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	10 4 6 5 1 4 5 5 0 No No No No No No No No No No No No No	10 4 6 5 1 4 4 5 5 5 5 5 5 5 10 10 10 10 10 10 5 5 5-15	10 4 6 5 1 4 5 5 5 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7	10 4 6 5 1 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	S Dverall Site (10 4 4 6 5 1 4 0 verall Site 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ite Condition Condition Second 10 4 4 6 5 1 4 Site Contex 5 Context Second 5 Stocking Rate 5 5 0 0 0	Score (/100) pre - out of 3 t Score (/56) pre - out of 3 e Score (/70) pre - out of 4 Year 5 5 0 0 0	14 U.42 Baseline Score 10 4 4 6 5 5 1 1 4 34 1.82 5 5.00 0.29 2.53 7 Year 10 5 0 0	34 1.U2 Year 5 10 4 4 6 5 5 4 4 8 2.57 5 5 0.29 3.88 Year 15 5 0 0 0 0	58.5 1.76 Year 10 10 4 4 6 5 15 4 4 48 2.57 30 30 1.71 5.04 Year 20 10 10 10 10 10 0	71.5 2.15 Year 15 10 4 4 6 5 15 4 48 2.57 30 30 1.71 6.43	77.5 2.33 Year 20 10 4 4 6 5 5 15 7 7 51 2.73 30 30 1.71 6.77

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John Gorton Building - King Edward Terrace, Parkes ACT 2600 Australia

GPO Box 3090 Canberra ACT 2601 ABN: 63 573 932 849

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Attachment G: EMZ 1 interim and final uplift, Grey-headed Flying-fox

Table 13: GHFF FHA Completion	n Criter	ia															
Assessment Unit – Regional Eco							A	U 1 – nor	-remnant	RE12.9-1	10.2						
Site Reference	Transect 1 Transect 2			Transect 3 Transect 4 Transect 5					Average	AU	Year 5	Year	Year	Year	OUT OF		
	Raw	Data	Ra v I	Data	Raw	Data	Raw	Data	Raw	Data	Score	Score	Score	10	15	20	(X/X)
Vegetation Condition	<u>с</u> .	at X	cal	X	03	at X	ca	<u>ιX</u>	ca	<u>tΧ</u>	5	5	5	5	10	10	20
Species Richness				3)	2		1.40	5	10	10	20	20	20		
Flower Score				L	0		J (/		J	0.71	8	8	8	8	8	10	
Timing of Biological Shortages	Alltrar	nsects: Di	ue to the juv	enile and	sparse nat	ure of the v	egetation, i	none of the	e biological s	nortages	10	10	10	10	10	10	10
					are	covered.		<u> </u>			1		10	10	10	20	20
Quality of Foraging Habitat	4	0.4	25	•/	20	U =•/	20	J 1977	20	, ,	27 50-/		10	20	20	20	20
Non-native Plant Cover	4	U%.	20	<u>.</u>		5/.	30	·/.	20	<i>.</i>	31.30%	3	10	20	20	20	20
Site Condition Secre											I	38	53	63	88	88	v
MAX Site Condition Score	1											100	100	100	100	100	
Site Condition Score - out of 4	1											152	2 12	2 52	3 52	3 52	<u> </u>
		1	I									1.02	E. 12	L.UL	0.02	0.02	••
Size of patch	Pate	h size	Patch size	>200ha	Patch siz	e>200ha	Patch size	e>200ha	Patch size	≥>200ha	10	10	10	10	10	10	10
						0		001									
Connectedness				All transe	ots have 4-	6 active ca	amps within i	∠Ukm			0	O	o	o	o	6	10
Context	31-	75%	31-7	5%	31-1	75%	31-7	75%	31-7	′5%	6	6	6	6	6	6	10
Ecological Corridors	Vi	ithin	With	nin	Wi	thin	Wit	hin	Wit	hin	6	6	6	6	6	10	10
Role of site location to					•												
species overall population in			All tran	sects hav	/e 1-3 activ	e level 3 Gl	HFF camps	within 20kr	n								
the state											0	0	0	0	0	5	10
Threats to the species		10	10)	1	10	1	0	10)	10	10	10	10	10	10	10
Site Context Score												32	32	32	32	47	X
MAX Site Context Score												60	60	60	60	60	X
Site Context Score - out of 3			1									1.60	1.60	1.60	1.60	2.35	X
GHFF Foraging Tree Density		0			ļ	0	())	0	1	1	2	5	5	10
														-		-	
Species Stocking Hate Score												1	1	2	5	5	<u>×</u>
X Species Stocking Rate Score	{											<i>NC</i>	<i>NC</i>	0.00	1.50	1.50	<u>×</u>
Stocking Hate Score - out of S	{											0.30	4.02	4.72	1.30	1.00	~
local												J.42	4.02	4.12	0.02	1.31	
		RE12.11	.14														
	Score	Stem	Density														
		Hesuit	stiiano														
	1	0 - 200	stems per														
		ne	ctare														
	2	201 – 2	50 stems														
	-	per h	nectare														
	5	251 – 3	00 stems														
	`	per h	nectare														
	-	301 - 3	25 stems														
	ľ	per h	nectare														
		326 - 3	50 stems														
	10	per h	nectare														
		251 2	75 eteme														
	7	001 - 0	no siems														
		276 4	00 stores														
	5	3/0 - 4	ou stems														
		per r	EC atoms														
	4	401 - 4	ou stems														
		per r	teme per														
	2	400 + S	ctare														
		ne	otare														



Attachment H: Offset Management Plan Requirements

In addition to any requirements of the conditions of approval, an offset management plan submitted for approval by the **Minister** must:

- a. Include a reference to the **EPBC Act** approval conditions (and state or local government approval conditions) to which the Offset Management Plan refers
- b. Specify referenced plans, including revegetation and rehabilitation plans, and how these can be accessed.
- c. Include detailed information on the residual impacts to protected matters that will be offset. This must include the area(s) of habitat for protected matters and its condition and quality at all impact sites which the offset is to address
- d. Identify a suitable environmental offset(s) for the impacts on protected matters, and provide detailed baseline information on the proposed offset(s) and commit to achievable and measurable ecological benefits, and timeframes for their achievement, for the proposed offset(s)
- e. Detail how the offset(s) will be protected, and ecological benefits maintained, in perpetuity
- f. Include a table of commitments to achieve the ecological benefits for relevant protected matters, and a reference to where the commitments are detailed in the Offset Management Plan
- g. Include timebound management actions that will be implemented to achieve the measurable ecological benefits for relevant **protected matters**
- h. Include an assessment of risks to achieving the ecological benefit(s) and what risk management strategies will be applied to address these
- i. Include reporting and review mechanisms, and documentation standards to inform others annually regarding compliance with management and environmental commitments, and attainment and maintenance of ecological benefits, as specified in the Offset Management Plan
- j. Propose corrective actions to ensure ecological benefits for the **protected matters** are attained or maintained, if trigger values are reached or performance indicators not attained
- k. Include a monitoring program for the full duration of the proposed offset management period, which must include:
 - i. measurable performance indicators to monitors progress towards, attainment of the ecological benefits for the **protected matters**
 - ii. a randomisation of monitoring within the offset area to ensure ecological benefits reflect the whole offset site(s)
 - iii. trigger values and timing of corrective actions
 - iv. the timing and frequency of monitoring to detect trigger values and changes in the performance indicators.

Appendix B Commencement of the action

documentation

EPBC 2018/8347 - Providence East and South



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 RIPLEY VALLEY PDA PROVIDENCE EAST AND SOUTH, QLD (EPBC 2018/8347)

On behalf of Daleswan Pty Ltd, as the proponent of *Ripley Valley PDA Providence East and South, QLD (EPBC 2018/8347)* and in accordance with Condition 39 of the approval, please accept this letter as formal notification that the action commenced on <u>Monday 30 January 2023</u>.

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 39 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



Saunders Havill Group Pty Ltd ABN 24 144 972 949

9 Thompson Street Bowen Hills QLD 4006

1300 123 SHG www.saundershavill.com

Know How

Australian Government

Department of Climate Change, Energy, the Environment and Water

Ref: EPBC 2018/8347 Email: EPBCmonitoring@dcceew.gov.au

Laura Thorley Senior Environment Scientist Saudners Havill Group Pty Ltd 9 Thompson Street BOWEN HILLS QLD 4006

Dear Laura,

Commencement of the Action – Ripley Valley PDA Providence East and South, QLD, EPBC 2018/8347

I refer to your letter on 31 January 2023 on behalf of Daleswan Pty Ltd notifying the Department of Climate Change, Energy, the Environment and Water (the department) of commencement of the action for the Ripley Valley PDA Providence East and South, QLD project in accordance with condition 39 of the *Environment Protection and Biodiversity Conservation Act* 1999 (the Act) EPBC 2018/8347 approval.

I note that the action commenced on 30 January 2023.

Condition 45 – Annual Compliance Reporting

Condition 45 of the approval requires the approval holder to prepare an Annual Compliance Report for each 12 month period following the date of this approval. The approval holder must continue to publish each report and notify the department of publication until the expiry of the approval on **31 November 2050.**

Condition 48 – Annual Compliance Reporting

Condition 48 of the approval requires the report must be published within 60 business days of every 12 month anniversary of the date of this approval. Documentary evidence of publication must be provided to the department within 5 business days the report is published.

Please notify the department of publication of the reports by email, including the link to where the report is publicly available, to <u>EPBCmonitoring@dcceew.gov.au</u>.

Please note the first Annual Compliance Report is due to the department by 14 March 2024.

When preparing the report please refer to the department's Annual Compliance Report Guidelines available on the department's website at

http://www.environment.gov.au/epbc/publications/annual-compliance-report-guidelines

Please note that the conditions of approval require the approval holder to maintain accurate records of all activities associated with, or relevant to, the approval conditions so that they can be made available to the department on request. These documents may be subject to audit and be used to verify compliance. Summaries of audits may be published by the department.

More information about the department's Monitoring and Audit program is available on the department's website at http://www.environment.gov.au/epbc/compliance-and-enforcement/auditing.

Section 142 of the Act requires an approval holder to comply with conditions attached to an approval. Penalties may apply to approval holders who contravene conditions.

If you would like to discuss this matter further, please contact Hannah Brugman at <u>EPBCmonitoring@dcceew.gov.au</u>.

Yours sincerely,

Thomas Long Assistant Director Environmental Audit Section 21 March 2023

Appendix C

Environmental Pre-start Checklist



Environmental Pre-Start Checklist

PROVIDENCE

Project Area: Barrams Road	Date: 27/01/2023				
Contractor: SEE Civil	Scope of Works: Vegetation clearing associated with Barrams Road construction located				
Date work is to start: 30/01/2023	within Providence East (EPBC2018/8347) and Barrams Road Residential Development				
Date work is to cease: 30/02/2023	(EPBC2021/9005). The extent of works is provided in Attachment 1 with EPBC2018/8347 and EPBC2021/9005 boundaries. Refer Attachment 2 for EPBC2018/8347 approval conditions.				

	Control Measure	Compliance (✓ × N/A)						
#		Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details	
EN	/IRONMENTAL COORDINATOR RESPONSIBILITIES							
1a	Has the environmental coordinator obtained approval for works located inside the <i>Environment Protection and Biodiversity Conservation Act 1999</i> referral area (EPBC 2018/8347)?					~	Yes, refer Attachment 2. Approval granted by the Department on 15 December 2022.	
1b	Has the minimum of 183 ha of land within the Avonvale and Cherry Gully offset area been legally secured to compensate for the loss of 131.72 ha of Koala and 67.85 ha of Grey-headed Flying- fox habitat in accordance with approval conditions 13 (EPBC 2018/78347) and the environmental coordinator notified the Department?					~	Yes, the offset area was legally secured on the 21 December 2022 and the Department was notified on the 23 December 2022.	
1c	Is the environmental coordinator aware that they are required to undertake an inspection of the temporary koala exclusion fencing installed following clearing but prior to commencement of construction?					~	Yes, the environmental coordinator is aware that an inspection of the temporary koala exclusion fencing will be required.	
1d	Has the environmental coordinator submitted a Greater Glider Offset Strategy (GGOS) to the Department for approval within 3 months of the date of EPBC Approval?					N/A	Not Applicable. Approval granted by the Department on 15 December 2022. Works for Barrams Road are scheduled to commence prior to the 15 March 2023.	



Environmental Pre-Start Checklist

Providence

#	Control Measure	Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details
1e	Has the environmental coordinator confirmed the completion of baseline surveys within 3 months of the date of EPBC approval?					N/A	Not Applicable. Approval granted by the Department on 15 December 2022. Works for Barrams Road are scheduled to commence prior to the 15 March 2023.
1f	Has the environmental coordinator confirmed the submission of an Offset Management Plan for approval to the minister within 2 months of completing the baseline surveys?					N/A	Not Applicable. Approval granted by the Department on 15 December 2022. Works for Barrams Road are scheduled to commence prior to the 15 February 2023.
1g	Has the environmental coordinator confirmed the Offset Management Plan for the Avonvale and Cherry Gully Offset Area has been approved by the Minister in writing within 12 months of the date on which it was submitted to the Department?					N/A	Not Applicable. Approval granted by the Department on 15 December 2022. Works for Barrams Road are scheduled to commence prior to the 15 December 2023.
1h	Has the environmental coordinator confirmed the Offset Management Plan for the Avonvale and Cherry Gully Offset Area has been approved by the Minister prior to commencing works within Area B (refer Attachment B of EPBC Approval)?					N/A	Not Applicable. Works are not located within Area B.
11	Has the environmental coordinator confirmed the Conservation Area has been legally secured within 1 year of the date of the EPBC Approval?					N/A	Not Applicable. Approval granted by the Department on 15 December 2022. Works for Barrams Road are scheduled to commence prior to the 15 December 2023.
1j	Has the environmental coordinator submitted a Conservation Area Management Plan been submitted to the Minister for approval within 6 months of the approval decision?					N/A	Not Applicable. Approval granted by the Department on 15 December 2022. Works for Barrams Road are scheduled to commence prior to the 15 June 2023.


Providence

#	Control Measure	Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details
2a	Has the contractor issued copies of the EPBC Approval to all site contractors and sub-construction and made these management plans available in the site construction office?			/			
2b	Have clearing extents provided by the site superintendent to the site contractor and environmental coordinator ?			/		~	Works extent has been issued to environmental coordinator and illustrated in Attachment 1.
2c	Have clearing extents been marked out and fenced as per Attachment 2 by the contractor and demarcation fencing signed off by the environmental coordinator ?			\checkmark		~	Fencing has not been erected or checked by the Environmental Coordinator.
2d	Has the environmental coordinator confirmed clearing extents are located within the EPBC approval area and not within 1 metre of the Conservation Area or as specified in the Conservation Area Management Plan?			/		~	Works extent does not encroach the Conservation Area (refer Attachment 1).
2e	Has the contactor appointed a fauna spotter catcher holding required DES permits and is an independent suitably qualified field ecologist (as defined under the EPBC Act Approval) to be present during all clearing?				/		QFC have been appointed and are an independent suitably qualified field ecologist as defined under the EPBC Act Approval.
2f	Has the appointed fauna spotter catcher been made aware of their responsibilities under the EPBC Act approval (EPBC2018/8347) by the contractor and environmental coordinator ?			/	/		Yes, environmental coordinator and fauna spotter catcher discussed requirements on 16 January 2023 and have been issued this checklist outlining their responsibilities.
2g	Has the appointed fauna spotter catcher completed pre- clearance surveys and reports (<i>i.e.</i> Wildlife Protection and Management Plan (WPMP) and Wildlife and Habitat Impact				/		Pre-clearance survey reports including WPMP and WHIMP have been completed and are provided in Attachment 3 and Attachment 4 respectively.



Providence

#	Control Measure	Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details
	Mitigation Plan (WHIMP) and have these been reviewed by the environmental coordinator ?						
2h	If any threatened fauna species or habitat/breeding places have been identified by the fauna spotter catcher , have appropriate controls been implemented and discussed with the key personnel?			~	/ /	¥	WPMP and WHIMP provided in Attachment 3 and 4, respectively identify the fauna species and habitat/breeding places identified during the pre-clear inspections and discussed appropriate controls to be in place during clearing and construction.
2i	Has the contractor put in place appropriate induction and management controls to ensure all contractors, subcontractors and associated personnel been instructed on environmental procedures and controls, including timing of clearing, stop-works procedures and non-compliance reporting requirements?			~	/		The Contractor is aware that they are required to complete appropriate induction and implement management controls.
2j	Has the site supervisor and environmental coordinator informed the contractor that they are required to install temporary Koala exclusion fencing around any area of proposed 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?			~		1	Yes, the contractor has been informed by the site supervisor and environmental coordinator that they are required to install temporary koala exclusion fencing following clearing.
2k	Does the site supervisor and contractor acknowledge that they are to notify the environmental coordinator following the installation of the temporary koala exclusion fencing for an inspection?			/		~	Yes, the site supervisor and contractor are aware that they are to notify the environmental coordinator following the installation of the temporary koala exclusion fencing for an inspection.



Providence

#	Control Measure	Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details
3	Has a pre-start been completed with all relevant parties?				/		Yes, this checklist and attachments has been reviewed by all relevant parties. Signatures are provided on Page 7.

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



PROVIDENCE

Additional Notes

Three (3) listed threatened species are considered likely to occur on site, as protected under Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC) and State Nature Conservation Act 1992 (NCA) legislation:

- Koala
- Grey-headed Flying-fox
- Greater Glider

Specific approval conditions relating to protected species and their habitat are applicable to works within the clearing area, including:

EPBC 2018/78347 approval conditions:

- No clearing of Koala, Grey-headed Flying-fox or Greater Glider habitat must occur outside of the approved area and be minimised where practicable (refer Attachment 1 for approved area).
- No clearing or construction in or within 1 metre of the Conservation Area except as specified in the Conservation Area Management Plan (refer Attachment 1 for Conservation Area).
- The approval holder must not clear or construct within Area B until the Offset Management Plan (OMP) for the Avonvale and Cherry Gully Offset Area has been approved by the Minister in writing. The approval holder must implement the Offset Management Plan approved by the Minister for the remainder of the approval
- The approval holder must not clear or construct within Area B until and unless the Greater Glider Offset
 Management Strategy (GGOS) has been approved by the Minister in writing.

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
		Client Representative		
		Site Superintendent		
M-TYDINK	SECINIL	Site Contractor	M	27/01
stefan Szwedzinski	QFC	Fauna Spotter Catcher	83	2/3
Laura Thorley	SHG	Environmental Coordinator	A	3/02





Appendix A

Environmental Awareness Acknowledgement



ENVIRONMENTAL AWARENESS

CONTRACTOR ACKNOWLEDGEMENT

I SEE CIVIL the Contractor (or the Contractor Representative), appointed by Daleswan Pty Ltd c/o Stockland Corporation Limited, acknowledge receipt and acceptance of the requirements outlined in the Barrams Road Environmental Pre-Clearance Package which includes the Environmental Pre-clearance Checklist and EPBC Act Decision Notice (EPBC2018/8347), granted by the Department on 15 December 2022, and attachments. By signing below, I acknowledge that there are mechanisms in place to ensure all material provided within the EPBC Act Decision Notice (EPBC2018/8347) will be read and understood by all site contractors and sub-contractors prior to commencing works on-site.

SEE CIVIL Company Name (Please print)

Signature (Contractor / Contractor Representative)

MATT MOINIC

Name (Please print)

PROJEG MANAGER

Title / Position

27/01/23

Date



Appendix B

Environmental Responsibilities

Environmental Responsibilities

This document sets out the environmental responsibilities for relevant parties appointed by Daleswan Pty Ltd for the Providence Project at Ripley.

The following management structure will be adopted:



Abbreviations

The following abbreviations have been adopted in this document:

AQF Australian Qualifications Framework

DES Department of Environment and Science (Qld)

WPMP Wildlife Protection and Management Plan

WHIMP Wildlife and Habitat Impact Mitigation Plan



I.I. Construction Contractor Responsibilities

The **Construction Contractor** is responsible for the following environmental controls on the project:

- Ensuring construction works (including pre-clearance checks, erosion and sediment control measures, clearing processes and post clearing requirements are undertaken in accordance with the Environmental Pre-Start Package for the Stage of Works and approved management plans (e.g. WPMP / WHIMP).
 - In the event of a non-compliance, all works are halted immediately and noncompliances are reported to the site supervisor and environmental coordinator.
 - Weekly review and reporting on compliance with approved management plans (N.B. this can be shown as an item in a weekly review / report / checklist).
 - Monthly environmental compliance reports to the environmental coordinator.
- Engagement and management of a DES approved fauna spotter catcher to undertake pre and post clearance checks, attend pre-start meetings and be present on site during all clearing activities.
 - The appointed fauna spotter catcher must hold a Rehabilitation Permit for native wildlife, including Koala, issued by the Department of Environment and Science (DES).
- Installation and maintenance of erosion and sediment controls as per approved management plans prepared by the site supervisor.
- Installation of demarcation fencing.
 - Fencing must be maintained during works and reinstated immediately if damaged or knocked down.
 - Temporary fencing must be installed around the Stage of Works site, any open space areas and / or individual trees to be retained.
 - Fencing must be fauna friendly and provide a least a 30cm gap between the bottom of the fence and the ground.
 - Fencing must remain in place until completion of bulk earthworks and removed prior to on maintenance or as required as subsequent stages of the development occurs.
- Ensuring daily limits and volumes of vegetation clearing occur in accordance with approval allowances (e.g. EPBC Act Approval, EDQ Approval).
- Ensuring stockpiles and cleared vegetation is managed in accordance with approved management plans.
- Ensuring clearing occurs between the hours of 6am 6pm.
- Ensuring clearing occurs in accordance with the direction of clearing plan or as prepared by the fauna spotter catcher.
- Ensuring all contractors, subcontractors and associated personnel been instructed on environmental procedures and controls.
 - Environmental procedures and controls must form part of induction material (and evidence should be able to be provided to the **environmental coordinator** on request).

- Copies of approved management plans are made available at the site office at all times and evidence should be able to be provided to the **environmental coordinator** on request).
- Install temporary Koala exclusion fencing around any area of proposed 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.

I.I.I Construction Contractor Pre-Clearance Procedure (for each Stage of Works) This procedure is to be followed by the **contractor** prior to clearing for each Stage of Works.

- 1. Have all **contractors**, subcontractors and associated personnel been instructed on environmental procedures and controls as part of their site induction?
- 2. Do you have a copy of the approved management plans?
- 3. Have copies of the approved management plans been made available to all site **contractors** and sub-contractors?
- 4. Has a copy of the approved management plans been made available in the site construction office?
- 5. Have clearing extents as per approved management plans been flagged by the construction contractor in association and checked by the environmental coordinator? N.B Fencing must be installed prior to the pre-start meeting for the Stage of Works.
- 6. Have erosion and sediment controls been installed as per approved plans prepared by the **site supervisor**)?
- 7. Have you engaged a DES approved **fauna spotter catcher** to undertaken necessary reporting requirements and be present during all clearing activities?
- 8. Has the appointed **fauna spotter catcher** undertaken pre-clearance checks and reporting, no more than 2 weeks prior to when clearing is to occur?
- 9. If any threatened fauna species or habitat/breeding places have been identified by the **fauna spotter catcher**, have appropriate controls been implemented and this information provided to the **environmental coordinator**?
- 10. Has a pre-start been completed with all relevant parties?
- 11. Have the requirements of the approved management plans been discussed a pre-start meeting?
- 12. Have all relevant parties reviewed the Environmental Pre-Start Package and signed the Environmental Pre-Start Checklist?

1.1.2 Construction Contractor During & Post-Clearance Checklist (for each Stage of Works) This procedure is to be followed by the **construction contractor** <u>during and post clearing</u> for each Stage of Works.

- 1. Has the clearing occurred in accordance approved management plans? If not, have any noncompliances been reported to the **site supervisor**) and **environmental coordinator**?
- 2. Have erosion and sediment controls been maintained as per approved plans prepared by the **site supervisor**)?
- 3. Has compliance with environmental procedures and controls been reported on within the weekly site compliance checklist?

- 4. Has cleared vegetation been processed though an on or off-site wood-chipper and disposed of as firewood or landscape mulch or otherwise reused / relocated for future use?
- 5. If vegetation has been stockpiled, has the **fauna spotter catcher** checked the stockpile prior to its removal?
- 6. Once clearing has ceased, has a post-clearance report been prepared by the **fauna spotter catcher** and provided to the **environmental coordinator**?
- 7. Has a monthly environmental compliance report been prepared and provided to the **environmental coordinator**?

I.2. Fauna Spotter Catcher Responsibilities

The appointed fauna spotter catcher must hold a Rehabilitation Permit issued by EHP and is responsible for the following environmental controls on the project:

- Ensuring works are undertaken in accordance with the Environmental Pre-Start Package for the Stage of Works and approved management plans (e.g. WPMP / WHIMP).
- Undertaking pre-clearance checks for the Stage of Works no more than 2 weeks prior to clearing.
- Preparing a WPMP and WHIMP (as per the Draft Code for Fauna Spotter Catchers) for each stage of works. This includes Identifying fauna habitat values, potential risks to fauna, and appropriate mitigation measures as well as identifying the direction and sequencing of clearing activities to ensure safe flushing of fauna. These are to be provided to the construction contractor and environmental coordinator for review.
- Attending the pre-start for each Stage of Works.
- Being present during all clearing activities.
- Implementing controls and procedures and controls in the WPMP and WHIMP.
- Preparing a post-clearing report to be provided to the construction contractor and environmental coordinator.
- Inspecting stockpiled vegetation for fauna prior to its removal.

I.3. Site Supervisor Responsibilities

The Site Coordinator (Engineer) is responsible for the following environmental controls on the project:

- Ensuring construction works are undertaken in accordance with the Environmental Pre-Start Package for the Stage of Works and approved management plans (e.g. WPMP / WHIMP).
- Ensuring the construction contractor receives copies of approved management plans for the Stage of Works.
- Ensuring required surveys and pre-clearance checks from the fauna spotter catcher and environmental coordinator have been conducted. (N.B. this includes any surveys i.e. tree plots, required to inform design stages or required for preparation of management plans and development applications).
- Providing the environmental coordinator with CAD copies of works extents (including clearing extents for bulk earthworks, access tracks, crossing etc.).

- Coordinating clearing extents to be demarcated by the construction contractor and checked by the environmental coordinator.
- Confirming works within waterways comply with *Water Act 2000* requirements for riverine protection and proceed under an applicable exemption or a riverine protection permit.
- Confirming works within waterways comply with *Fisheries Act 1994* requirements for waterway barrier works and proceed under accepted development outcomes or a permit.
- Ensuring erosion and sediment controls have been installed and maintained as per approved ESCPs prepared by the site supervisor?
- Coordination of any pre-start meetings and signing of the Environmental Pre-Start Checklist.
- Ensuring no clearing occurs until sign off is received from the **environmental coordinator**.
- Ensure temporary Koala exclusion fencing has been installed by the construction contractor around any area of proposed 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?

I.4. Environmental Coordinator Responsibilities

The Environmental Coordinator is responsible for the following environmental controls on the project:

- Ensuring all Commonwealth and State environmental approvals are obtained for the Stage of Works.
 - Ensuring all notifications government authorities in accordance with approvals have been issued.
- Ensuring all required management plans have been prepared for the Stage of Works.
- Ensuring all required management plans have been review and approved for the Stage of Works.
- Ensuring all relevant parties receive copies of approved management plans for the Stage of Works.
- Preparing, managing and compiling the Environmental Pre-Start Package for the Stage of Works, including the Environmental Pre-Start Checklist.
- Undertaking checks of demarcation flagging installed by the construction contractor.
- Reviewing **fauna spotter catcher** pre-clearance and post-clearance reporting.
- Ensuring works are undertaken in accordance with the Environmental Pre-Start Package for the Stage of Works and approved management plans (e.g. WPMP / WHIMP).

Acknowledgement

No clearing works can occur until the Environmental Pre-Start Package, for the specific works site, is distributed by the Environmental Coordinator and written instruction is given by the Site Superintendent).

By signing I agree that I have read and understood the Environmental Pre-Start Check Procedure and will comply with the procedure for all clearing works.

Name	Company	Position	Signature	Date
		Client Representative		
M-TYDINK C	SPECIVIL	Contractor	1A	27/01/2023
1 () / / //		Site Superintendent		
Laura Thorley	SHG	Environmental Coordinator	Ð	3/02/2023

Fauna Spotter Coordinator

Appendix D

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





January 2023

Fauna Spotter Catcher Wildlife and Habitat Impact Mitigation Plan

Barrams Road Extension South Ripley, Queensland Report prepared for SEE Civil



Report prepared by QLD Fauna Consultancy Pty Ltd Phone: (07) 3376 9780 Email: fauna@qfc.com.au

Date:	24/01/2023
Title:	Fauna Spotter Catcher Wildlife and Habitat Impact Mitigation Plan Barrams Road Extension, South Ripley, Queensland
Author/s:	Bryan Robinson, Jasmine Zeleny
Reviewed by:	Jasmine Zeleny
Status:	Final Report
Filed as:	QFC FHA WHIMP SEE Civil South Ripley Jan 2023.doc

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1. Introduction

1.1 Project Background

Queensland Fauna Consultancy Pty Ltd has been engaged by SEE Civil Pty Ltd to prepare a Fauna Spotter Catcher Wildlife and Habitat Impact Mitigation Plan for the Barrams Rd Extension located at Ripley, Queensland. The site location is presented in Map 1.

The objective of this report is to summarise the existing fauna values presented in the Fauna Spotter Catcher Pre-Clearance Survey and Wildlife Protection and Management Plan (WPMP) and assign mitigatory strategies applicable to probable species likely to be encountered during the clearing of identified habitats throughout or within specific localities of the site. Fauna species both common and of elevated conservation value have been considered within the parameters of onsite investigations and, where provided to QFC, include review of current fauna and floristic reports that may influence the assemblages expected to utilise the microhabitats evident within the site.

This review encompasses species identified under the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and the Queensland *Nature Conservation Act 1992*. Further consideration is given, where applicable, to species of iconic, cultural and/or regional significance identified under commonwealth, state or local planning instruments aimed at the persistence of biodiversity values within the area.

The Barrams Road Extension alignment overlaps two Residential Development Approvals issued by the Australian Government, Department of Climate Change, Energy, the Environment and Water and is subsequently subject to the conditions as stated within each approval. These approvals include:

- Ripley Valley PDA Providence East and South, QLD (EPBC 2018/8347)
- Barrams Road Residential Development, Qld (EPBC 2021/9005)

1.2 Project Location and Site Description

The Barrams Road Extension, South Ripley is located at the eastern end of the existing portion of Barrams road and continues through to terminate at Cumner road.

Existing features exhibit a highly disturbed, sparsley vegetated eucalypt woodland complex on slightly undulating topography with naturally occurring ephemeral drainage features. Dominant trees species include *Eucalyptus tereticornis, E. propinqua and C. tessalaris.* Pasture grasses and weed species are consistent across the site due to previous livestock activities.

Map 1: Project Location



Source: Google Earth/Maxar Technologies (2023) Construction overlay showing extent of clearing provided by SEE Civil Pty Ltd.

1.3 Current Permits and Authorities

All activities conducted during the site investigations were implemented under the provisions of a number of permits issued to Queensland Fauna Consultancy Pty Ltd by the Department of Environment and Science (DES) and the Department of Employment, Economic Development and Innovation (DEEDI). These permits and additional authorities are listed in *Table 1*.

Table 1: Current Permits and	l authorities issued to QFC
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Permit/Authorisation	Permit/Authorisation Permit Number	
Damage Mitigation Permit	WA0047114	31 st October 2025
Rehabilitation Permit	WA0026789	16th September 2023
Scientific Purposes Permit	WA0032325	3 rd March 2026
Scientific User Registration	Registration Number 589	27 th February 2025
Animal Ethics	CA 2022/01/1569	27 th February 2025
General Fisheries Permit	207015	16 th April 2023

These permits and approvals enable QFC to conduct the investigation, observation and relocation of protected animals exposed to disturbance due to infrastructure expansion resulting in the destruction of natural and artificial habitats.

2. Mitigation Strategies

2.1 Fauna Spotter

It is advised that all identified fauna habitats onsite be inspected by a licensed Fauna Spotter prior to vegetation clearing, and all vegetation removal activities be supervised during the clearing process.

2.2 Clearing Methodologies

In accordance to the *Nature Conservation (Koala) Conservation Plan 2017* the following sequential clearing conditions are required to be adhered to:

- Clearing of trees is carried out in a way that ensures koalas living in or near the area being cleared (the clearing site) have enough time to move out of the clearing site without human intervention, including in particular, for a clearing site with an area of more than 6ha, by:
 - Carrying out the clearing in stages; and
 - Ensuring not more than the following is cleared in any one stage:
 - for a clearing site with an area of 6 ha or less—50 percent of the site's area;
 - for a clearing site with an area of more than 6ha—3ha or 3 percent of the site's area, whichever is the greater; and
 - Ensuring that between each stage there is at least one period of 12 hours that starts at 6 p.m. on a day and ends at 6 a.m. on the following day, during which no trees are cleared on the site;

In addition to these measures it is recommended that clearing activities be undertaken in a directional manner specified by the fauna spotter/catcher. This is done to reduce the likelihood of negative interactions between fauna and potential hazards e.g. roads and traffic, prevent isolation of fauna through habitat fragmentation, and to ensure that natural dispersal of wildlife away from clearing activities is not impeded.

A plan detailing the recommended clearing direction for Phase 1 can be viewed in Appendix A.

2.3 Fauna Fencing

Due to the location of the clearing activities, the installation of temporary fauna fencing is not deemed necessary in minimising the movement of large fauna, including highly mobile macropods. Areas adjacent to the site present little to no risk to fauna which by way of movement off the site are exposed to conditions not dissimilar to those present within the clearing footprint.

The addition of fauna fencing may be required if site conditions change and fauna considerations are presented by the fauna spotter catcher.

2.4 Felling Procedures

Trees identified as having potential fauna values (such as hollows, arboreal termitaria and exfoliating bark) will be clearly identified and subsequently marked for supervision during felling and inspected once felled. Efforts will be made to determine potentially occupant species by way of investigations for indicative signs (scats, scratchings and tracks) on the day(s) of clearing. Where no signs are found or potentially occupant species are undeterminable, machinery operators will be instructed to fell trees in a manner directed at minimising the potential risk of injury to fauna.

All identified microhabitats will be inspected via ground-based observation and the direction of felling will be determined considering the safety of personnel, machinery and potentially occupant fauna. Felling procedures will see implementation of a soft felling technique specifically constructed by QFC to achieve minimal deceleration and impact upon felling. This will be achieved under direction of the Fauna Spotter present directly communicating with the plant operator(s).

2.5 Macropods

Macropod movement throughout the site was identified by the presence of scats and footprints during the fauna survey.

The area of proposed clearing activities exhibits direct connectivity to notable habitat values to the north and south. Clearing from the western end of the site moving east would be preferable to ensure any fauna movement is not adversely directed to already cleared land. Therefore if clearing commences in a directional and incremental fashion any macropods potentially encountered on site may move on of their own volition. In this event, it is recommended that clearing proceed as recommended with continual reassessment by the onsite fauna spotter(s).

2.6 Aquatic Fauna

In the event aquatic dewatering activities will be required within the proposed clearing area; pooled water and drainage features will be inspected during terrestrial load reduction activities ahead of the clearing front. The following recommendations are made to mitigate impacts to potentially occupant fauna:

- Inspection of banks, peripheral vegetation and other immediate terrestrial microhabitats;
- Identification of potential fauna values including: logs, rocks, artificial structures, discarded rubbish and burrows;
- Targeted searched for frog egg deposition sites on debris, bank edges, water surface and vegetation.

2.7 General Terrestrial and Arboreal Fauna

Overall, the site contains low-moderate value refugial opportunities for arboreal and terrestrial fauna species. The species expected within the site are likely to primarily reflect common fauna assemblages for the region however provisions are proposed directly for common fauna and species of conservation significance.

It is advised that all identified fauna habitats onsite be inspected by a DES approved Fauna Spotter prior to vegetation clearing and all vegetation removal activities be supervised during the clearing process. Terrestrial load reduction activities will be conducted ahead of the clearing front where possible. Fauna captured will be relocated to adjacent habitat consistent with the life history requirements of the species requiring translocation.

2.8 EVNT & SLC Fauna

It is not envisaged that any species, listed under the provisions of the *Environment Protection and Biodiversity Conservation Act 1999* or the *Nature Conservation Act 1992*, other than those listed in the WPMP, will require specific management during vegetation clearing activities.

However, specific management for those identified EVNT & SLC species will include targeted investigations immediately prior to vegetation removal activities on each day of clearing and subsequently whilst clearing takes place. Preliminary investigations will be supported by additional monitoring applied during clearing activities with a designated fauna spotter operating with each machine actively involved in vegetation or identified habitat disturbance. These should include the following:

Short-beaked Echidna

Although no individuals were observed during the survey, evidence of echidna foraging activity was observed during the inspection by QFC and would see probability for the Short-beaked Echidna to be encountered during clearing activities.

The following recommendations are made for management of potentially occurring Short-beaked Echidna:

- Daily inspection of areas to be cleared for transient individuals;
- Inspection daily for potential burrow sites;
- Monitored dismantling of identified microhabitats by fauna spotters with machinery assistance

<u>Koala:</u>

As favoured Koala food trees on site exceed a diameter of 100mm at 1.3 metres from the ground, requirements under the Koala Plan's 'Koala Habitat Area' provisions trigger the need for inspection and monitoring during vegetation clearing by a qualified Fauna Spotter.

Historically known to occur within the area the Koala will feature highly in daily search efforts with a dedicated and detailed methodology employed as follows:

- Pre-clearing (preliminary) investigations to be conducted specifically for Koala detection by one experienced fauna spotter a minimum half hour prior to works each day. The investigation will embrace all designated clearing zones identified for that day inclusive of a 25-metre buffer around that zone;
- Once clearing commences a fauna spotter will accompany each machine providing continuous verification of habitat values and potential identification of undetected koalas ahead of operating plant. This will also account for potentially transient Koalas that may enter the site after preliminary investigations are complete.

Direct observational methodology will include the following components

- Use of binoculars to inspect the crown, forks and trunk of trees for individuals currently occupying the site;
- 'Drip zone' searches at the base of known food trees for the presence of scats to a radius equal to that of the crown of individual trees;
- Inspection of trunks for scratchings indicative of use by Koalas;
- Repeat observations made of single trees from numerous angles at repeated times throughout the clearing activities by the assigned fauna spotter.

In the event a Koala is detected, the Fauna Spotter will determine the appropriate course of action with exclusion zones implemented and alterations to the clearing plan discussed with the Site Supervisor. Once defined, these directions will be communicated to the plant operators and clearing will proceed in accordance with the recommendations made.

Changes to Koala management strategies highlighted in the *Nature Conservation (Koala) Conservation Plan 2017* have resulted in particular conditions placed on vegetation clearance involving the removal of Koala food trees. These provisions entail an increased responsibility by developers and land clearance operators alike to ensure the welfare of potentially present Koalas in areas identified as having significance for the persistence of this species.

Where significance under planning instruments is assigned provisions may include the restriction of all clearance that directly interferes with any tree a Koala is residing in or surrounding trees that, when felled, may impact on the crown of the host tree. Koalas are to leave via their own volition through a corridor designated by the Fauna Spotter to the closest remaining suitable habitat.

Throughout this time the Koala may not be interfered with by any means unless special dispensation has been sought through the appropriate government body or where the Koala is evidently in a state of compromised health. Only when Koalas have vacated a tree can clearance operations include the identified host tree and surrounding vegetation which composes the established exclusion zone. Recommendations made by the Fauna Spotter on site will embrace these provisions.

Response to Diseased/Injured Koalas

In the event the Fauna Spotter Catcher detects a koala showing signs of disease or injury the following procedure is to be implemented immediately after establishing the machinery exclusion zone:

- Photograph the animal and where possible the specific issue observed (i.e. dirty rump, emaciation);
- Contact Bryan Robinson, Principal Ecologist at QFC, to provide further assessment of the Koala via the images taken;
- Bryan to contact the Ipswich Koala Protection Society (IKPS) President Ruth Lewis for further opinion and collaboratively decide on the relevant response and timing;
- Where deemed to require veterinary assistance a Koala trap will be acquired from IKPS and installed by QFC;
- Bryan to ensure DES are immediately notified of the intended take of the animal;
- All Koalas will be taken to Moggill Koala Hospital for veterinary examination upon capture.

Employed Koala Trapping Technique

A dedicated Koala trap will be utilised in the event a Koala is deemed to require veterinary assistance. The trap used (Figure 1 and Figure 2) will be supplied by IKPS and consists of the following components:

- 1200mm high Core flute wall;
- Steel bracing pins/star pickets;
- Zip ties;
- Purpose built Koala trapping box with guillotine/footpad style closing mechanism.

The core flute wall is placed around the tree the koala is in to form a solid barrier, subsequently channelling the animal to the trapping box when it descends from the tree. Checks are conducted on the trap periodically between 6pm and 6am to check if the Koala has entered the trap. Once captured the Koala is transported within the trapping box to minimise handling and undue stress or interference. Notification is given immediately to Bryan Robinson who will provide transportation and inform IKPS of the pending arrival of the Koala to Moggill Koala Hospital.



Figure 1: Koala trap exterior



Figure 2: Koala trap interior

Greater Glider:

Preferred habitat occurs in proximity to the survey area and the species is documented within the area. While the survey area contains suitable feed trees and hollow-bearing trees, the likelihood of the species utilising these habitat trees as den trees is low due to the reduced connectivity to larger green spaces.

The following recommendations are made for management of potentially occurring Greater Glider;

- Basal and drip zone searches for scats indicative of the presence of Greater Glider;
- Inspection daily of trees assigned for removal in areas of likely occurrence to detect Great Glider;
- Implementation of a soft felling technique where trees are determined to have potential for occupancy.

White-throated Needletail:

The site contains preferred habitat types for the White-throated Needletail; however, the species does not breed in Australia. It is unlikely that either species will be impacted by clearing activities as it is rare to see these species perched. Observations are likely to be limited to flyovers and aerial foraging high above the area of works.

Tusked Frog:

Habitats conducive to the presence of these amphibians are noted at several localities throughout the site. Subsequently, it is recommended that Inspection of these microhabitats be conducted prior to the disturbance of microhabitat to detect potentially occupant frogs.

3. Wildlife Capture & Removal Plan

Relocation of native fauna is a strategy that may be required during the course of developmental works to adhere to the project's required nature conservation, animal welfare and human safety objectives.

In all circumstance where native fauna is required to be relocated it must be done so, or under the direct supervision of, a suitably licensed fauna spotter/catcher. A summary of the fauna capture, handling and relocations strategies to be implemented by the fauna spotter/catcher for fauna groups deemed likely, or possible, to occur on site are presented in *Table 2*.

Table 2: Fauna capture, handling and relocation strategy table

Animal Group	Capture and handling	Relocation
Lizards Geckoes Dragons Monitors	 Place one hand behind the head at the base of the quadrates and the other at the base of the tail behind the hind limbs; Be cautious when handling smaller skinks and legless lizards as they may discard their tail; Lizards and geckoes can be placed inside suitably sized calico bags In the case of large monitor lizards keep the animal's ventral surface directly away from the body with the tail between the upper arm and torso. Dragons and small monitors can be placed in suitably sized calico bags. Larger monitors to be placed in suitably sized crate 	 Place the lizard head first into a suitable holding crate for later release. Dragons & monitors- release up trees or into heavy vegetation; Water dragons - in the vicinity of riparian areas; Skinks, Geckoes, Legless lizards - around creek margins.
Snakes	 Due to their mobile nature, large snakes generally do not require to be handled or relocated, with the exception of slow moving species (i.e. pythons) or smaller species; Snakes should be identified and only moved if competent and safe to do so (see SOP006 Handling Venomous Snakes Procedure); Do not attempt to catch a snake if you're not competent; Injured snakes should be handled with suitable equipment. 	 Release in suitable habitat e.g. along creek lines for python and tree snakes If feasible take them well away from clearance site to a suitable release location Release discreetly away from high density suburban areas
Small Mammals	 Place a gloved hand around the whole animal in the case of small mammals (melomys or rats), Do not handle rodents by the tail as this will cause damage to the tail sheath Place the animal in calico bag in a cool place for later relocation. Minimise holding time to avoid animal gnawing through bags and escaping 	• Release animal into area suitable to its habitat requirements. Ensure plenty of cover is available.

Animal Group	Capture and handling	Relocation
Glider Family	 Place gloved hands around the animal at initial capture; Place the glider(s) into a calico bag or suitable animal crate ensuring family groups are kept together for all-inclusive release; Place in a cool dry area during the day. When using calico bags ensure the bag is hung and well ventilated Where possible contain gliders within hollow by plugging openings with a towel or calico bag 	 Release glider into habitat with natural hollows and canopy cover; When releasing a family group with more than one furred young (being carried on the back) either: Divide young between parents as a mother is unlikely to carry more than one young, Place young in elevated hollow with parents and allow them to move away in their own time. Place animal in bag at the base of the selected tree, opening the bag wide and allowing the animal to leave the bag when it is ready. Relocate hollow (with gliders inside) to suitable habitat and cover lightly with foliage so that the gliders can move away of their own accord and are protected from predators.
Amphibians	 Amphibians should be handled only when necessary and handling times should be kept to a minimum to help prevent: Removal of the protective mucous layer covering the skin of amphibians; To prevent handling stress induced by changes in their body temperature; Risk of spreading pathogens and parasites. Amphibians from different sites need to be kept isolated from each other, and need to be kept in different containers or bags; Any dead or sick amphibians need to be quarantined from other amphibians. Amphibians can be handled utilising one of the following methodologies: Bare handed – ensure hands are sterilized before handling and free from lotions, sunscreen etc. Gloves – disposable gloves desirable or disinfect gloves between handling different animals; Plastic bags – Single use lightweight plastic bags can be used to pick up and handle frogs; again, plastic bags should be disposed of before handling amphibians form a different site. All staff should be knowledgeable and familiar with the Interim Hygiene Protocol for Handling Amphibians – Technical Manual (DEHP) 	 Always ensure that amphibians are kept moist until release. This can include storing in a designated container with moist soil or toweling or in a wet calico bag; Release into suitable adjacent vegetation that is typical of the species requirements; Suitable release locations include riparian vegetation, low-lying wetlands, alongside creek lines, hollow logs, dams and ponds; Amphibians from different sites need to be released in separate locations; Disinfection procedures in relation to amphibians need to be followed.

Animal Group	Capture and handling	Relocation
Macropods	 Capture and restraint of macropods carries a high risk of injury and fatal hyperthermia/myopathy syndrome, and must not be performed by inexperienced personnel, or without appropriate equipment and sedation. Capture and restraint of healthy macropods (other than pouch young) must be performed using sedation or anaesthesia due to the high risk of developmental myopathy, and other capture and restraint-associated conditions. Sedative and anaesthetic drugs may only be used under direct supervision of a registered veterinarian, or by appropriately licensed persons (Hanger & Nottidge, 2009). 	 Release animal into suitable to its habitat requirements. Ensure plenty of cover is available. Macropods are to be released within the range of normal movement from their place of origin. E.g. a Kangaroo can be released within 100 km of its origin, based on its capacity to travel long distances. Monitor animals to ensure adequate recovery if sedated.
Microbats	 Only vaccinated persons are to handle bats If possible, plug the hollow opening with a bag or towel and ask the operator to cut the hollow from the tree; Always wear gloves when handling bats. If not contained within a hollow, place bats inside a calico bag and hang upright in a cool place 	 Relocate hollow (with bats inside) to suitable habitat and cover lightly with foliage so that the bats can move away of their own accord and are protected from predators. Bats not contained within a hollow should be released as late as possible at the end of the day.
Possums	 Use thick elbow length gloves when handling possums; Try to grip the animal behind the head near the shoulder blades and around the tail so that you have control of the animal; Keep fingers away from the mouth of the animal; Keep the animal's body facing away at all times; Transfer into a thick calico bag and then into a kitty crate. Place in a safe and shady place until you can relocate the animal. 	 Release the possum into habitat with adequate hollows and cover; Place animal in bag at the base of a select tree, opening the bag and allow the animal to leave the bag when it is ready; When releasing a Ringtail Possum mother with more than one furred young (being carried on her back) it is unlikely that she will carry both young if highly stressed; Choose a smaller shrubby tree with vines or heavy foliage (so the adult can construct a drey easily) Watch the adult ascend the tree, it is possible she will only carry one young and so any additional young may be pushed from her back It may be necessary to take one or more of the young to a wildlife carer If possible place mother and young in a suspended hollow, cover lightly with foliage and allow the animals to move on their own accord. This way the mother can ferry young one at a time to a more suitable location.

Animal Group	Capture and handling	Relocation
Birds	 Use gloves when handling larger birds Use a towel to cover the bird and simultaneously restrain the bird and transfer into calico bag With larger parrots and raptors, restrain head and legs and transfer into a kitty crate Wrap chicks loosely in a towel and transfer to kitty crate, keep in a warm location. 	 Relocate adult birds in suitable habitat Chicks should be referred to wildlife carer
Koalas	Movement of Koalas is heavily legislated in South East Queensland. Koalas are not to be captured or relocated without the prior consent of Department of Environment and Science (DES). Koalas should be left to move away of their own volition and trees are not to be felled while a Koala remains in occupancy. See SOP003 Koala Management Procedure for further information.	

4. Wildlife Contingency Plan

In the event sick, injured or orphaned protected animals are encountered during the course of the project they shall be administered to in accordance with the *Code of Practice Care of Sick, Injured or Orphaned Protected Animals in Queensland* under the *Nature Conservation Act 1992*.

The stages in which injuries or illness are described under the code are as follows:

Critical: Injuries or illnesses that are life-threatening; for example, an animal that has been struck by a car and has serious head injuries.

Serious: Injuries or illnesses 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; for example, an animal with a closed fracture but no other apparent injuries and that is alert and responsive.

Mild: The injuries or illness of an animal appear to cause little discomfort, pain or function loss and are not life-threatening (even without immediate vet treatment); for example, superficial cuts, superficial bruising or orphaned animals suffering from mild dehydration.

4.1 Basic Wildlife Care

If wildlife requiring care are encountered by the fauna spotter/catcher, they will be attended to in the manner set out by the guidelines provided in *Table 4*. Supplementary advice will be sought from a wildlife carer and/or veterinarian where required. QFC have previously utilised experienced local carer groups and vets. These are listed in Table 3.

Vets							
Name	Location	Contact Number	Comments				
RSPCA Wildlife Hospital	139 Wacol Station Road, Wacol	07 3426 9999	24 Hours/7days				
Carers							
Name	Location	Contact Number	Comments				
RSPCA Wildlife Hospital	139 Wacol Station Road, Wacol	07 3426 9999	24 Hours/7days				
Ipswich Koala Protection Society	lpswich	Ruth: 07 5464 6274 / 0419 760 127 Helen: 07 3282 5035 / 0417 604 761	Specialize in koalas however rescue all wildlife				
Ann De Jong	Gailes	(07) 3736 1967	Most fauna, particularly birds				
Jessica	Park Ridge South	0431 330 664	Birds				
Natalie Scotcher	Goodna	0430 007 691	Marsupials, macropods, birds				
Ivan	Woodend	0413 262 300	Most fauna, particularly birds				

Table 3: List of Local Vets & Wildlife Carer Groups

Table 4: Basic Wildlife Care

Birds	Reptiles & Amphibians	Mammals
Egg	Egg	Neonate
Viable eggs must be kept warm until transferred to a suitable wildlife carer. It is necessary that the orientation of the eggs be maintained as fixed embryos may be lost. Keep wrapped in a pouch and on a heat source (where available). An ideal temperature is between 25-27° (DEHP 2013); where possible attempt to identify the species so the carer can be informed as the management of eggs can vary in accordance with species and stage of development.	Viable eggs must be kept warm and stable until transferred to a wildlife carer. It is necessary that the orientation of the eggs be maintained as fixed embryos may be lost. Keep wrapped in pouch or towel and place into an animal crate in a safe location.	Unfurred animals need to be kept warm until transferred to a carer. Place into a pouch and onto a heat pad. Ideal temperature is between 31-34°. 25-27° is appropriate in most other cases (DEHP 2013). Regularly check the animal to ensure it is not overheating by observing for obvious signs of distress (i.e. panting, very warm to the touch, red blotched skin). Adjust the temperature where required. Seek further advice from the carer if you are unsure.
Chick	Juvenile	Juvenile
Make sure the animal is correctly identified as different species often have very different requirements. Place chicks into a pouch/towel onto a heat source maintained around 31-34° (only if they have not fledged) and keep in an animal crate until transferred to a carer.	Place animals in a suitable lined crate and keep covered in a dark quiet place. Refer to the wildlife contact list in your QFC Folder for a carer who specialises in reptiles.	Place into a lined crate and keep covered in a dark and quiet location.
Adult	Adult	Adult
Keep adult birds in a lined animal crate or cage and covered in a quiet area.	Place animals in a suitable lined crate and keep covered in a dark quiet place. Refer to the wildlife contact list in your QFC Folder for a carer who specialises in reptiles.	Place into a lined crate and keep covered in a dark and quiet location.
Feeding	Feeding	Feeding
Providing food and water is generally not required during short periods (2-3 hrs) though this should be reconsidered if animals need to held longer. Consult the vet and/or carer for further advice on how to proceed.	Newly hatched reptiles may require feeding if kept overnight. Consult with QFC for further advice. Snakes and turtles will not require feeding but water should be made available.	Providing food and water is generally not required during short periods (2-3 hrs) though this should be reconsidered if animals need to be held longer. Consult the carer for further advice on how to proceed.

4.2 First Aid

Animals suffering from serious injuries or illness encountered on the project should be passed on to veterinary care as soon as possible. In the interim a licensed fauna spotter/catcher can provide first aid for the animal and organise suitable transportation.

If a seriously sick or injured animal is encountered the fauna spotter/catcher should:

- 1. Keep the animal calm by placing into an animal crate and keeping it covered in a dark and quiet location. Isolate any nearby threats such as domestic animals or predators.
- 2. Quickly and thoroughly inspect the animal for trauma. If the injuries are not serious enough to require euthanasia administer the basic first aid as a minimum (but only if capable to do so)

Representative first aid that may be administered by a fauna spotter/catcher is provided in *Table 5*.

Ailment	First Aid
Bleeding	Using material that is clean and sanitary, apply direct pressure to the affected area. Bandages can be used to hold material in place until vet treatment can be sought. Veterinarian treatment should be sought for further assistance as soon as possible.
Broken limbs	House the animal in a suitably sized animal crate with towels under the animal for comfort. Keep the crate covered and in a quiet location. Proceed to a veterinarian for further assistance as soon as possible.
Injured tails	House the animal in a suitably sized animal crate with towels under the animal for comfort. Keep the crate covered and in a quiet location. Proceed to a veterinarian for further assistance as soon as possible.
Concussions	House the animal in a suitably sized animal crate with towels under the animal for comfort. Keep the crate covered and in a quiet location. Proceed to a veterinarian for further assistance as soon as possible.

Table 5: Wildlife First Aid

4.3 Euthanasia

Section 12 of the code details how to determine when euthanasia is required and how to euthanise animals ethically. The following standards as listed under the code are to be followed when assessing whether euthanasia is required:

- The euthanasia of wildlife where required is to be provided for by all wildlife rehabilitators;
- Euthanasia without exception is to be carried out when:
 - Significant pain or suffering is to be alleviated where it is not able to be managed by a vet;
 - Further treatment is **not** practical, or recovery is **not** expected in a way in which the animal can be successfully rehabilitated back to the wild;
 - Resources are not available to provide appropriate care or an acceptable quality of life throughout the likely rehabilitation period.
- Animals that are suffering and have a poor prognosis for survival must be euthanised rather than left to die from the injury or illness. Failure to undertake appropriate action is a breach of the Animal *Care and Protection Act 2001*.
- Unless permission has been granted by the Department of Environment and Heritage Protection for the animal to enter the Queensland Species Management Plan (QSMP) or otherwise advised by the DEHP Wildlife Management Director, animals must be euthanised when:
 - An orphaned animal is not viable or likely to be rehabilitated;
 - No suitable release locations are available;
 - The ability for an animal 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. Examples are: a missing or impaired limb, wing, foot or tail that would significantly impair the animal's ability to survive in the wild;
 - The ability to sense environment (i.e. see, smell, fell, taste or hear) is permanently impaired. For example: missing or injured organ such as an eye, ear or nose that would 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.
5. Wildlife Storage & Housing Plan

For wildlife requiring storage, temporary housing and transportation to release sites and/or to a wildlife carer or veterinarian, guidelines set out in the Code of Practice and QFC's Animal Ethics Permit will be followed.

Dependent on the species of animal and condition of the animal, temporary storage and housing of animals will be as follows:

Calico bags: Calico bags will be used to temporarily house fauna such as snakes, lizards and small mammals (including microbats), Bags will range in size from 200mm x 200mm to 600mm x 1800mm. Bag selection will vary according to the size of animals to be placed in them. In the case of snakes, a "hoop bag" may be used to facilitate capture. The hoop is approximately 500mm in diameter attached to a handle. The bag is placed around the hoop ensuring a greater area in which to pass the snake through into the bag.

Plastic holding tubs/containers/animal crate: Plastic holding tubs/containers/crates will be used to temporarily house fauna such as snakes, lizards, frogs, small mammals and birds (Plastic holding tubs/containers/crates will range in size from 150mm x 150mm x 120mm to 500mmx 400mm x

400mm. Plastic holding tubs/containers/crates selection will vary according to the size and number of animals to be placed in them.

In addition to this, material is used to line the tub/crate to ensure the animals won't lose its footing. This may include folded towels on the bottom of the crate or a fitted pad. These items are washed between each use to reduce the spread of disease/parasites.

Section 9 of the Code relates to how transportation of wildlife should be undertaken. The following will be adhered to when transporting wildlife to the vet and/or carer:

- Additional pain or distress of the animal is to be avoided;
- Wildlife should only be transported when necessary;
- Transport containers must be appropriate for the species (size, strength and behaviour of species being moved;
- Transport containers must be designed and maintained in a way as to:
 - Prevent injury;
 - Prevent escape;
 - Prevent rolling/tipping during transit;
 - Prevent damage to plumage (feathers);
 - Be hygienic;
 - Minimise stress and
 - Be suitably ventilated.

- Non-compatible species must not be transported in a manner which allows for visual or physical contact;
- Containers must be secured to prevent movement and provide protection from direct sunlight, wind and rain;

Venomous, dangerous or potentially disease transmitting animals must be clearly marked with warning labels (i.e. Caution – 'venomous snake' or 'live bat') and be locked and secured.

6. Wildlife Release & Disposal Plan

Retained bushland lies to the east of the clearing area and contains habitat types suitable for species likely to be encountered when clearing.

With the exception of highly mobile species such as birds and macropods where natural relocation may occur, it will be necessary for the fauna spotter/catcher to translocate the majority of fauna found into suitable habitat within these areas. A map of the intended release site can be viewed in Appendix B.

In regard to all fauna capture and disposal activities conducted on the project the following records will be made:

- a. species;
- **b.** identification name or number;
- c. sex (M, F, or unknown);
- d. approximate age or age class (neonate, juvenile, sub-adult, adult);
- e. time and date of capture;
- f. method of capture;
- g. exact point of capture (GPS point);
- **h.** state of health;
- i. incidents associated with capture likely to affect the animal;
- j. veterinary intervention or treatments;
- **k.** time held in captivity;
- I. disposal (euthanasia, re-release, translocation etc);
- m. date and time of disposal;
- n. details of disposal (if released, exact point of release GPS);
- o. for released animals: distance in metres from point of capture to point of release.

7. Post Works Impact Minimisation

As the project area will be cleared of all vegetation, post works impact monitoring and/or impact minimisation is deemed not necessary.

In the event that fauna is found on site post-works, it is recommended personnel contact QFC and a licensed and experienced wildlife consultant can be dispatched to remove and relocate the animal should it be necessary. QFC wildlife consultants are available 24/7 for fauna related call-outs in relation to this project.

It is recommended that if any fauna, such as Kangaroos and Wallabies, are noted in the wider area and appear distressed post-works that QFC be contacted to further assess the situation.

8. Assessment, Conclusion and Fauna Management Recommendations

A number of conclusions and recommendations are presented, with the specific intention of providing a comprehensive management structure to facilitate minimal impact to fauna during the clearing of vegetation and subsequent disturbance of habitats. The directives given by Fauna Spotter Catchers should embrace a "best practice" approach which includes implementation of proven specific management techniques for identified habitat types and compliance with legislation relevant to the activity.

Fauna management is presented here specific to EVNT & SLC fauna, general terrestrial and arboreal fauna and aquatic fauna. Although each is treated separately, overlap does occur within target techniques providing a comprehensive approach for target species of all conservation significance.

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10. Appendix A: Intended Direction of Clearing



Source: Google Earth/Maxar Technologies (2023) Construction overlay showing extent of clearing provided by SEE Civil Pty Ltd.

11. Appendix B: Intended Release Sites for Wildlife



Source: Google Earth/Maxar Technologies (2023)



January 2023

Fauna Spotter Catcher Pre-clearance Survey and Wildlife Protection & Management Plan

Barrams Road Extension South Ripley, Queensland Report prepared for SEE Civil Pty Ltd



Report prepared by QLD Fauna Consultancy Pty Ltd Phone: (07) 3376 9780 Email: fauna@qfc.com.au

Date:	24/01/2023
Title:	Fauna Spotter Catcher Pre-clearance Survey and Wildlife Protection & Management Plan - Barrams Road Extension, South Ripley, Queensland
Author/s:	Bryan Robinson, Jasmine Zeleny
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1. Introduction

1.1 Project Background

Queensland Fauna Consultancy Pty Ltd has been engaged by SEE Civil Pty Ltd to conduct a Fauna Spotter Catcher Pre-clearance and Habitat Values Survey and present a subsequent report for the Barrams Road Extension, South Ripley, Queensland. The site location is presented in Map 1.

The objective of this report is to summarise the existing fauna values present and assign mitigatory strategies applicable to probable species likely to be encountered during the clearing of identified habitats throughout or within specific localities of the site. Fauna species both common and of elevated conservation value have been considered within the parameters of onsite investigations and, where provided to QFC, include review of current fauna and floristic reports that may influence the assemblages expected to utilise the micro habitats evident within the site.

This review encompasses species identified under the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and the Queensland *Nature Conservation Act 1992*. Further consideration is given, where applicable, to species of iconic, cultural and/or regional significance identified under commonwealth, state or local planning instruments aimed at the persistence of biodiversity values within the area.

The Barrams Road Extension alignment overlaps two Residential Development Approvals issued by the Australian Government, Department of Climate Change, Energy, the Environment and Water and is subsequently subject to the conditions as stated within each approval. These approvals include:

- Ripley Valley PDA Providence East and South, QLD (EPBC 2018/8347)
- Barrams Road Residential Development, Qld (EPBC 2021/9005)

1.2 **Project Location and Site Description**

The Barrams Road Extension, South Ripley is located at the eastern end of the existing portion of Barrams road and continues through to terminate at Cumner rd.

Existing features exhibit a highly disturbed, sparsley vegetated eucalypt woodland complex on slightly undulating topography with naturally occurring ephemeral drainage features. Dominant trees species include *Eucalyptus tereticornis, E. propinqua and C. tesselaris.* Pasture grasses and weed species are consistent across the site due to previous livestock activities.

Map 1: Project Location



Source: Google Earth/Maxar Technologies (2023) Construction overlay showing extent of clearing provided by SEE Civil Pty Ltd.

1.3 Current Permits and Authorities

All activities conducted during the site investigations were implemented under the provisions of a number of permits issued to Queensland Fauna Consultancy Pty Ltd by the Department of Environment and Science (DES), formerly the Department of Environment and Heritage Protection (DEHP), and the Department of Employment, Economic Development and Innovation (DEEDI). These permits and additional authorities are listed in Table 1.

Permit/Authorisation	Permit Number	Expiry Date
Damage Mitigation Permit	WA0047114	31 st October 2025
Rehabilitation Permit	WA0026789	16th September 2023
Scientific Purposes Permit	WA0032325	3 rd March 2026
Scientific User Registration	Registration Number 589	27 th February 2025
Animal Ethics	CA 2022/01/1569	27 th February 2025
General Fisheries Permit	207015	16 th April 2023

Table 1: Current Permits and authorities issued to QFC

These permits and approvals enable QFC to conduct the investigation, observation and relocation of protected animals exposed to disturbance due to infrastructure expansion resulting in the destruction of natural and artificial habitats.

2. Methodology

A site inspection was carried out on 9th January 2023 by Qld Fauna Consultancy. A standard set of observational techniques aimed at maximising the detection of fauna and the probable habitats they may occupy were employed to ascertain and identify the current fauna values throughout the project area. Where species of elevated conservation significance where foreseen as potentially present targeted searches were instigated to further evaluate individual species habitat.

Due to the habitat variability expressed across the development site the composition of investigations may include a range of features that entail specific components indicative of the presence of particular species or faunal groups. This may include where evident, observation of activity or signs of both historical and current use.

These may include but are not limited to the following:

- Identification of terrestrial microhabitats such as ground hollows, rock, burrows, leaf litter, stands of heavy vegetation, fallen branches and bark exfoliations;
- Identification of arboreal micro habitats including basal, trunk and limb hollows, tree fissures, bark exfoliates and arboreal termitaria;
- Identification of constructed arboreal micro habitats including bird nests and Ringtail Possum dreys;
- Artificial habitats including, but not limited to ornamental gardens, discarded rubbish, human dwellings and other infrastructure;
- Observation and investigation of aquatic habitats including dams, soaks, creeks, rivers and seasonally inundated vegetation communities. Artificial aquatic habitats may include constructed drains and culverts. Further components of interest include bank profiles and undercuts, submerged and/or exposed timber and rock, immediate aquatic and riparian vegetation, surfacing animals, nesting and/or feeding birds;
- Direct observation of active or exposed fauna within terrestrial, aquatic and arboreal habitats;
- Identification of scats, tracks and scratchings to determine fauna potentially present or to have historically utilised the site for either transient or longer-term life history purposes.

2.1 Specific methodology for Koalas *Phascolarctos cinereus*

Due to specific requirements and the cryptic nature of the Koala the following techniques were employed to assist in ascertaining the current and historical presence/absence status of the species at the site:

- Use of binoculars to inspect the crown, forks and trunk of trees for individuals currently occupying the site;
- 'Drip zone' searches at the base of known food trees for the presence of scats to a radius equal to that of the crown of individual trees;
- Inspection of trunks for scratchings indicative of use by Koalas.

3. Findings

The findings endeavor to demarcate the existing habitat profiles and the features present into three distinct groups: terrestrial, arboreal and aquatic. All habitat features present onsite are noted, however it is probable additional features will be present with these being accounted for during the Fauna Spotter Catcher process to be applied to all vegetation clearing across the site.

3.1 Terrestrial Habitat Features

The terrestrial fauna values of the site consist of different components and microhabitat features. This includes an open low-level understorey consisting of dense grass and weed growth (Figure 1), providing refugial opportunities and microhabitat connectivity that can be exploited by many different native terrestrial vertebrate and invertebrate species.

The site is also exhibitive of scattered woody debris, timber stockpiles, artificial debris, hollow logs and rock piles (Figure 2 to Figure 5), providing refugial and foraging opportunities, and a contributory factor to the provision of a variety of thermal and moisture gradients that can be exploited by a number of different native terrestrial vertebrate and invertebrate species.

Terrestrial termite mounds feature heavily onsite (Figure 6 and Figure 7), with some mounds displaying excavations indicative of Short-beaked Echidna *Tachyglossus aculeatus* foraging activities.

Mammal assemblages may comprise both native and introduced species. Macropod activity on site was observed in the form of tracks (Figure 8). Macropod species likely to occur on site include the Eastern Grey Kangaroo *Macropus giganteus* and Red-necked Wallaby *Notamacropus rufogriseus*. Other native mammals which may occur on site include the Northern Brown Bandicoot *Isoodon macrourus* which may be present in localities with significant vegetative ground cover.

These features collectively contribute to the potential presence of a variety of native fauna species utilising the area for refugial, foraging and other resources.

GPS coordinates for all indicative terrestrial habitat features are shown in Table 2. Localities for identified terrestrial habitat features are presented in Map 2. A comprehensive list of fauna species recorded in the region can be viewed in Appendix C.

Number	Habitat Feature	GPS Coordinates (Latitude, Longitude)
1	Hollow Log	-27.6951293,152.8319423
2	Rock Pile	-27.6937850,152.8313001
3	Terrestrial Termitaria	-27.6937561,152.8318350
4	Terrestrial Termitaria	-27.6934967,152.8313362
5	Terrestrial Termitaria	-27.6953317,152.8261469
6	Terrestrial Termitaria	-27.6953125,152.8256825
7	Terrestrial Termitaria	-27.6953627,152.8255985
8	Terrestrial Termitaria	-27.6952362,152.8257252
9	Terrestrial Termitaria	-27.6953434,152.8252786
10	Terrestrial Termitaria	-27.6954118,152.8251589
11	Terrestrial Termitaria	-27.6954352,152.8252004
12	Terrestrial Termitaria	-27.6954647,152.82519342
13	Terrestrial Termitaria	-27.6958309,152.8247928
14	Terrestrial Termitaria	-27.6952056,152.8240877
15	Timber Stockpile	-27.6958610,152.8249905
16	Woody Debris	-27.6952819,152.8317816

Table 2: Localities for identified terrestrial habitat features



Figure 1: Dense grass and weed growth



Figure 2: Woody debris



Figure 3: Stockpiled timber and artificial debris



Figure 4: Stockpiled timber and artificial debris



Figure 5: Rock/concrete pile



Figure 6: Terrestrial termitaria



Figure 7: Terrestrial termitaria



Figure 8: Macropod tracks

3.2 Arboreal Habitat Features

The clearance area consists predominately of roadside regrowth Eucalypt and Acacia woodland (Figure 9 to Figure 13). Onsite trees exhibit potential feeding and nesting resources for a number of bird and mammal species.

Hollow-bearing trees present in the clearance area may provide habitat opportunities for arboreal mammals, reptiles, and birds (Figure 14 to Figure 16). Exfoliating bark on tree trunks may provide refugial opportunities for reptile species including skinks and geckos.

A single arboreal termite mound on a fence post is also present within the clearing area, however it did not exhibit excavations at the time of the inspection (Figure 17). This mound has potential for use as egg deposition and incubation sites by species such as the Lace Monitor Varanus varius, Laughing Kookaburra Dacelo novaeguineae, and Sacred Kingfisher Todiramphus sanctus.

One avian stick nest was located during the inspection but did not appear active at the time of the survey. However, further inspections are recommended immediately prior to clearing commencement. A number of avian species were observed utilising the site at the time of the inspection (foraging or perching) these species are presented in Table 4.

No Possum dreys were located during the inspection, however, further inspections are recommended immediately prior to clearing commencement.

GPS coordinates for all indicative arboreal habitat features are shown in Table 3. Localities for identified arboreal habitat features are presented in Map 2.

Primary and secondary Koala food trees located in the clearance area and include *Eucalyptus tesselaris, E. propinqua,* and *Corymbia tesselaris.* However, no evidence was observed to indicate recent use of these trees by koalas. No koala scats were found during 'drip zone' searches and characteristic scratchings were not found during trunk investigations. A Koala habitat values map for the clearance area is presented in Appendix A.

Number	Habitat Feature	GPS Coordinates (Latitude, Longitude)
1	Bird Nest	-27.6946258,152.8279701
2	Hollow Bearing Tree	-27.6937103,152.8314183
3	Hollow Bearing Tree	-27.6956630,152.8319203
4	Hollow Bearing Tree	-27.6956775,152.8318344
5	Hollow Bearing Tree	-27.6955464,152.8251843

Table 3: Localities for identified arboreal habitat features



Figure 9: Site overview



Figure 10: Site overview



Figure 11: Site overview



Figure 12: Site overview



Figure 13: Site overview



Figure 14: Hollow-bearing tree



Figure 15: Hollow-bearing tree



Figure 16: Hollow-bearing tree



Figure 17: Arboreal termite mound

Number	Common Name and Caiontific Name	Conservation Status	
Number	Common Name and Scientific Name	NCA	EPBC
1	Australian Magpie Cracticus tibicen	Least Concern	Not Listed
2	Torresian Crow Corvus orru	Least Concern	Not Listed
3	Double-barred Finch Taeniopygia bichenovii	Least Concern	Not Listed
4	Crested Pigeon Ocyphaps lophotes	Least Concern	Not Listed
5	Superb Fairy-wren Malurus cyaneus	Least Concern	Not Listed
6	Magpie-lark Grallina cyanoleuca	Least Concern	Not Listed
7	Blue-faced Honeyeater Entomyzon cyanotis	Least Concern	Not Listed
8	Brown Quail Coturnix ypsilophora	Least Concern	Not Listed
9	Willie Wagtail Rhipidura leucophrys	Least Concern	Not Listed
10	Buff-banded Rail Gallirallus philippensis	Least Concern	Not Listed
11	Dusky Moorhen Gallinula tenebrosa	Least Concern	Not Listed
12	Purple Swamphen Porphyrio porphyrio	Least Concern	Not Listed
13	Pacific Black Duck Anas superciliosa	Least Concern	Not Listed
14	Australian Wood Duck Chenonetta jubata	Least Concern	Not Listed
15	Golden-headed Cisticola Cisticola exilis	Least Concern	Not Listed
16	Spotted Dove Spilopelia chinensis	Introduced	Introduced

Table 4: Arboreal Fauna Species Observed

3.3 Aquatic Habitat Features

A creek, pond and small area of wetland habitat are present within the clearing area and were all retaining water at the time of the inspection (Figure 18 and Figure 19). Native species may exploit the various microhabitats present by such environmental features, particularly during times of rainfall, including the Longfin Eel *Anguilla reinhardtii*, Eastern Long-necked Turtle *Chelodina longicollis*, Striped Marsh Frog *Limnodynastes peronii*, Tusked Frog *Adelotus brevis*, Eastern Sedge Frog *Litoria fallax*, and various mammals and birds as a water resource.

GPS coordinates for all indicative aquatic habitat features are shown in Table 5. Localities for identified aquatic habitat features are presented in Map 2.

Number	Habitat Feature	GPS Coordinates (Latitude, Longitude)
1	Creek	-27.6936035,152.8313340
2	Creek	-27.6939544,152.8311145
3	Pond	-27.6937866,152.8315674
4	Wetland	-27.6948394,152.8269821

Table 5: Localities for identified aquatic habitat features



Figure 18: Creek



Figure 19: Pond

Map 2: Localities for identified terrestrial, arboreal, and aquatic habitat features

Identified Habitat Features

Barrams Road Extension - South Ripley





Identified Habitat Features

Barrams Road Extension - South Ripley

Egend		Attribution
POINT-Bird Nest.csv	Road crossing	Maxar
•	- Bridge	Includes material © State of Queensland (Department of Resources); © Commonwealth of
POINT-Creek.csv	Cities and Towns	Australia (Geoscience Australia); © 21AT, © Earth-i, all rights reserved, 2022,
	0	© State of Queensland (Department of Resources) 2022
Tree.csv	Railway	© State of Queensland (Department of Resources) 2021
POINT Hollow Los cor	-	
	Road Highway	
POINT-Pond.csv	- Main Local	
•	- Private	
POINT-Rock Pile.csv		
POINT-Terrestrial Termitaria.csv		
POINT-Timber Stockpile.csv		
POINT-Wetland.csv		
POINT-Woody Debris.csv		

3.4 Endangered, Vulnerable and Near Threatened (EVNT) & Special Least Concern (SLC) Species

It is not envisaged that any EVNT or SLC fauna species will be detrimentally impacted by the proposed works. However, five species identified within the Online EPBC Protected Matters Report (Appendix B) and the Queensland Government Wildlife Online Search Tool (Appendix C) were considered likely or possible to occur within the site and will require further mitigation during clearing activities.

Although evidence was not found during the site inspection of recent Koala use, the species has previously been recorded in the area. While the clearing area itself does not contain Core Koala Habitat, the site has connectivity to adjacent Core Koala Habitat under the Koala Habitat in South East Queensland mapping sourced from the Queensland Globe online search tool (see Appendix A).

It is advised that dedicated methodologies be employed by a qualified Fauna Spotter specific to the detection of these species prior to vegetation clearing activities.

Common Name Scientific Name	Species Information	Likelihood of Occurrence within the Clearance Survey area
Mammals		
Koala <i>Phascolarctos cinereus</i> EPBC: Endangered NCA: Endangered	Inhabits a range of open forest and woodland communities which may include any of the following noted food trees: <i>Eucalyptus, Corymbia, Melaleuca, Angophora</i> and <i>Lophostemon</i> .	Possible Known food trees for the transient Koala (<i>Phascolarctos cinereus</i>) occur on the clearance site and the species is well documented within the area.
Southern Greater Glider <i>Petauroides volans volans</i> EPBC: Vulnerable NCA: Endangered	Largest of the gliders, the Greater Glider is found along eastern Australia within a variety of eucalypt dominated forests and tall open woodlands (Lindenmayer 2002)	Possible Preferred habitat occurs in proximity to the survey area and the species is documented within the area. However, the species is unlikely to occupy the potential habitat trees within the survey area as a result of reduced connectivity to larger green spaces.
Short-beaked Echidna <i>Tachyglossus aculeatus</i> EPBC: Not Listed NCA: Special Least Concern	Inhabits a broad range of habitat types across Australia where there is a supply of ants or termites. Echidnas will shelter within hollow logs, under bushes and debris (Van Dyck & Strahan 2008).	Possible Suitable feeding resources occur onsite and evidence of diggings observed onsite.

Table 6: Significant species deemed likely or possible to occur within the clearance survey area

Birds		
White-throated Needletail <i>Hirundapus caudactus</i> EPBC: Vulnerable NCA: Vulnerable	Non-breeding migrant which occurs over many habitats including forests and areas with updrafts such as coastal cliffs. Usually seen flying high in very large flocks and is rarely seen perching in Australia, however there are records of birds roosting in the outer foliage of trees (Menkhorst et al. 2017).	Possible Aerial flyovers possible, however, this species is highly unlikely to be impacted by works as they are very rarely seen perching. The species has also been recorded in the area.
Amphibians		
Tusked Frog Adelotus brevis EPBC: Not Listed NCA: Vulnerable	Inhabits permanent ponds and streams within rainforests, wet to dry forests and farmland areas (Anstis 2013). Nests are constructed under leaf litter, vegetation or logs at the edge of ponds or stream pools in concealed locations (Anstis 2013).	Possible Habitat conducive to this species is found within the survey area.

4. Fauna Impacts

It is important to consider the existing and future residential developmental areas when investigation potential fauna impacts.

Impacts to fauna, as a result of vegetation clearance, will include the following:

- Loss of trees for foraging, roosting and nesting;
- Loss of hollow-bearing trees for nesting and refuge;
- Loss of habitat and foraging areas for terrestrial species;
- Loss of overall habitat;
- Potential loss of abundance of some local species.

Other impacts may include:

- Injury or death during felling of trees;
- Injury or death from machinery;
- Alteration of nesting, foraging and general activities due to disturbance.

5. Assessment and Conclusion

Overall, the site contains low-moderate value refugial opportunities for arboreal and terrestrial fauna species (see Section 3.1 and 3.2). The species expected within the site are likely to primarily reflect common fauna assemblages for the region; however, provisions will be proposed directly for common fauna and species of conservation significance.

The connectivity to adjacent conservation land in the south, in conjunction with sequential clearing methodologies, will aid in the movement of medium to large size fauna such as Koala and Kangaroos. Specific methodologies for these species will be detailed within the Wildlife and Habitat Impact Mitigation Plan (WHIMP).

A number of conclusions and recommendations will be presented in the WHIMP, with the specific intention of providing a comprehensive management structure to facilitate minimal impact to fauna during the clearing of vegetation and subsequent disturbance of habitats.

It is advised that all identified fauna habitats onsite be inspected by a DES approved Fauna Spotter prior to vegetation clearing and all vegetation removal activities be supervised during the clearing process. Terrestrial load reduction activities will be conducted ahead of the clearing front where possible. Fauna captured will be relocated to adjacent habitat consistent with the life history requirements of the species requiring translocation. The directives given by Fauna Spotter Catchers should embrace a "best practice" approach which includes implementation of proven specific management techniques for identified habitat types and compliance with legislation relevant to the activity.

It is recommended that in the event any nests which contain chicks are identified during clearing be left until fledged, and those that are in a construction phase should be dismantled to prevent further nesting activity. Any fertile eggs recovered will require incubation and subsequent rearing for latter release.

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7. Appendix A: Koala Habitat Values



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O Queensland Government Department of Resources

Legend	Attribution
Kaala priority area	Maxar
Koala priority area	Includes material © State of
	Queensland (Department of Resources); © Commonwealth of Australia (Geoscience Australia): ©
Core koala habitat area	21AT, © Earth-i, all rights reserved, 2022.
	© State of Queensland (Department of
	Environment and Science) 2021
Identified koala broad- hectare area	© State of Queensland (Department of Resources) 2022
	© State of Queensland (Department of Resources) 2021
Locally refined koala habitat area	
Road Crossing	
Bridge	
Tunnel	
Road	
Highway	
- Main	
Local	
- Private	
Cities and Towns	
0	
Railway	
-	

8. Appendix B: EPBC Act Protected Matters Report



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: 23-Jan-2023

Summary
Details
Matters of NES
Other Matters Protected by the EPBC Act
Extra Information
Caveat
Acknowledgements
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:	47
Listed Migratory Species:	17

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:	1
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:	37
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)	[Re	source Information]
Ramsar Site Name	Proximity	Buffer Status
Moreton bay	30 - 40km upstream from Ramsar site	In feature area

For threatened ecological communities where the distribution is well known, maps are derived from recover	ery			
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) Endangered Community may occurIn feature area Forest of New South Wales and South within area East Queensland ecological community within area				
Grey box-grey gum wet forest of subtropical eastern AustraliaEndangeredCommunity likely to occur within area	only			
Lowland Rainforest of Subtropical Critically Endangered Community may occur In feature area within area				
Poplar Box Grassy Woodland on Alluvial Endangered Community may occur In feature area Plains within area				
Subtropical eucalypt floodplain forest Endangered Community likely to In feature area and woodland of the New South Wales occur within area occur within area North Coast and South East Queensland bioregions occur within area				
White Box-Yellow Box-Blakely's Red Critically Endangered Community likely to In feature area occur within area Gum Grassy Woodland and Derived Native Grassland Occur within area Occur within area				

Listed Threatened Species			[Resource Information]
Status of Conservation Dependent an Number is the current name ID.	d Extinct are not MNES und	er the EPBC Act.	
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 may occur within area	In feature area
<u>Calidris ferruginea</u> 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
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Cyclopsitta diophthalma coxeni Coxen's Fig-Parrot [59714]	Endangered	Species or species habitat may occur within area	In feature area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	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
<u>Geophaps scripta scripta</u> 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 known to occur within area	In feature area
Turnix melanogaster			
Black-breasted Button-quail [923]	Vulnerable	Species or species habitat known to occur within area	In feature area
INSECT			
Argynnis hyperbius inconstans Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
Chalinolobus dwveri			
Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat may occur within area	In feature area
<u>Dasyurus hallucatus</u> Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat may occur within area	In buffer area only
Dasvurus maculatus maculatus (SE mai	nland nonulation)		
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 known to occur within area	In feature area
<u>Petaurus australis australis</u> Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In feature area
Phascolarctos cinereus (combined popula Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	<u>ations of Old, NSW and th</u> Endangered	e ACT) 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 buffer area only
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
PLANT			
Arthraxon hispidus			
Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Bosistoa transversa Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Cupaniopsis shirleyana</u> Wedge-leaf Tuckeroo [3205]	Vulnerable	Species or species habitat may occur within area	In feature area
Cupaniopsis tomentella Boonah Tuckeroo [3322]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Dichanthium setosum bluegrass [14159]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Fontainea venosa</u> [24040]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
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 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
<u>Notelaea ipsviciensis</u> Cooneana Olive [81858]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Notelaea Iloydii</u> 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 feature area
Planchonella eerwah Shiny-leaved Condoo, Black Plum, Wild Apple [17340]	Endangered	Species or species habitat likely to occur within area	In feature area
Plectranthus habrophyllus [64589]	Endangered	Species or species habitat known to occur within area	In feature area
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Rhodomyrtus psidioides</u> Native Guava [19162]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Samadera bidwillii</u> Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Thesium australe</u> Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area	In feature area
REPTILE			

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Delma torguata</u>			
Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may 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		[Res	source 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 may occur within area	In feature area
<u>Hirundapus caudacutus</u> White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Monarcha melanopsis</u> Black-faced Monarch [609]		Species or species habitat known to occur within area	In feature area
<u>Motacilla flava</u> 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
<u>Rhipidura rufifrons</u> Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Symposiachrus trivirgatus as Monarcha tr Spectacled Monarch [83946]	<u>ivirgatus</u>	Species or species habitat may 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 likely to occur within area	In feature area
<u>Calidris ferruginea</u> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Calidris melanotos</u> Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Gallinaqo hardwickii</u> Latham's Snipe, Japanese Snipe [863]		Species or species habitat known 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
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
<u>Tringa nebularia</u> Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands	Į	Resource Information]
The Commonwealth area listed below may indicate the presence of Co the unreliability of the data source, all proposals should be checked as Commonwealth area, before making a definitive decision. Contact the department for further information.	ommonwealth lar to whether it imp State or Territory	nd in this vicinity. Due to pacts on a y government land
Commonwealth Land Name	State	Buffer Status
Defence		

Defence - AMBERLEY - AP90 SMALL ARMS RANGE (PURGA) [31817]	QLD	In buffer area only

Listed Marine Species		[Res	source 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 likely to 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
Calidris melanotos			
Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area

_				
	Scientific Name	Threatened Category	Presence Text	Buffer Status
	Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only
	<u>Gallinago hardwickii</u> Latham's Snipe, Japanese Snipe [863]		Species or species habitat known 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
	<u>Hirundapus caudacutus</u> 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
	<u>Merops ornatus</u> Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
	<u>Monarcha melanopsis</u> Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
	<u>Motacilla flava</u> 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 likely to occur within area	In buffer area only
Rhipidura rufifrons			
Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula bengha	lensis (sensu lato)		
Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Symposiachrus trivirgatus as Monarcha t	rivirgatus		
Spectacled Monarch [83946]		Species or species habitat may 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
Stewartdale	Nature Refuge	QLD	In buffer area only
White Rock	Conservation Park	QLD	In buffer area only

EPBC Act Referrals			[Resou	rce Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Barrams Road Residential Development	2021/9005		Post-Approval	In feature area
Ripley Valley PDA Providence East and South	2018/8347		Post-Approval	In feature area
Controlled action				
AV JENNINGS PTY LTD - Coleman Road, South Ripley - Residential Development	2021/9061	Controlled Action	Assessment Approach	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Casino Ipswich Pipeline	2007/3877	Controlled Action	Completed	In feature area
CROCODILE 03 Military Training Exercise	2002/888	Controlled Action	Post-Approval	In buffer area only
Cumner Road mixed use subdivision, Whiterock,Ripley Valley,Qld	2014/7388	Controlled Action	Post-Approval	In feature area
ECCO Ripley Residential Development, Ipswich, QLD	2015/7513	Controlled Action	Post-Approval	In buffer area only
Grampian Drive Deebing Heights Residential Development, Old	2015/7628	Controlled Action	Post-Approval	In buffer area only
Hayfield School Site	2021/9070	Controlled Action	Assessment Approach	In buffer area only
Paradise Waters Residential Estate, Gampian Drive, Deebing Heights	2013/6864	Controlled Action	Post-Approval	In buffer area only
Providence West Residential Development	2020/8698	Controlled Action	Further Information Request	In buffer area only
Residential Development, Ripley	2020/8791	Controlled Action	Assessment Approach	In buffer area only
Ripley Road Residential Development	2019/8539	Controlled Action	Post-Approval	In buffer area only
Ripley Road residential development, Ripley Valley, Old	2017/8095	Controlled Action	Post-Approval	In buffer area only
Ripley View Residential Subdivision	2020/8615	Controlled Action	Further Information Request	In buffer area only
Southern Regional Water Pipeline	2006/2593	Controlled Action	Post-Approval	In buffer area only
Spring Mountain mixed use master planned community development, Springfield, Old	2013/7057	Controlled Action	Post-Approval	In buffer area only
Woogaroo Heights master planned residential development, Springfield, Qld	2017/7875	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Blackstone Power Station	2012/6252	Not Controlled Action	Completed	In buffer area only
BrisWest Holdings - Release 5 Operational Works	2021/9086	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action	Reference	Referrar Outcome	Absessment otatas	Dunci Otatus
Fernbrooke Ridge residential estate development - Balance Land, Redbank Plains, Old	2013/6818	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Inland Rail Gowrie to Kagaru Geotechnical Project, QLD	2018/8263	Not Controlled Action	Completed	In buffer area only
Master planned residential community, Ripley Valley, QLD	2014/7325	Not Controlled Action	Completed	In buffer area only
Northern Link Parallel Road Tunnels Project	2007/3824	Not Controlled Action	Completed	In buffer area only
REMONDIS Waste to Energy Facility	2020/8806	Not Controlled Action	Completed	In buffer area only
Removal of Grey-headed Flying-fox Habitat	2005/2137	Not Controlled Action	Completed	In buffer area only
Residential/Commercial development Binnies Road, Ripley, Old	2016/7669	Not Controlled Action	Completed	In buffer area only
<u>Residential Subdivision on Monterea</u> <u>Road, Ripley</u>	2012/6644	Not Controlled Action	Completed	In buffer area only
Ripley Town Centre, Ipswich, QLD	2015/7471	Not Controlled Action	Completed	In buffer area only
South West Transport Corridor	2006/2547	Not Controlled Action	Completed	In feature area
Swanbank Gas Fired Combined Cycle Plant	2008/4087	Not Controlled Action	Completed	In buffer area only
<u>Swanbank Waste Management</u> Facility Stage 1B extension Area, Qld	2015/7581	Not Controlled Action	Completed	In buffer area only
Underground Bus and Train Project, Brisbane	2013/7106	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manne	er)			
Construction & Operation 275/330kV Transmission Line	2006/2820	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Cross River Rail	2010/5427	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action (particular manne	er)			
Paper Mill	2003/915	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only

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 -Roval 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

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Please feel free to provide feedback via the Contact us page.

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WildNet species list

Search Criteria: Species List for a Specified Point Species: Animals Type: Native Queensland status: All Records: All Date: Since 1980 Latitude: -27.6941 Longitude: 152.8301 Distance: 5 Email: jasmine@qfc.com.au Date submitted: Tuesday 24 Jan 2023 14:38:54 Date extracted: Tuesday 24 Jan 2023 14:40:02

The number of records retrieved = 345

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Kingdom	Class	Family	Scientific Name	Common Name	I	Q	А	Records
animals	amphibians	Hylidae	Litoria balatus	slender bleating treefrog		С		2
animals	amphibians	Hylidae	Litoria caerulea	common green treefrog		С		7
animals	amphibians	Hylidae	Litoria fallax	eastern sedgefrog		С		12
animals	amphibians	Hylidae	Litoria gracilenta	graceful treefrog		С		7
animals	amphibians	Hvlidae	Litoria latopalmata	broad palmed rocketfrog		С		8
animals	amphibians	Hylidae	Litoria nasuta	striped rocketfrog		С		3
animals	amphibians	Hylidae	Litoria rubella	ruddy treefrog		С		10
animals	amphibians	Hylidae	Litoria wilcoxii	eastern stony creek frog		С		5
animals	amphibians	Limnodynastidae	Limnodynastes peronii	striped marshfrog		С		12
animals	amphibians	Limnodynastidae	Limnodynastes terraereginae	scarlet sided pobblebonk		С		9
animals	amphibians	Limnodynastidae	Platyplectrum ornatum	ornate burrowing frog		С		18
animals	amphibians	Myobatrachidae	Crinia parinsignifera	beeping froglet		С		12
animals	amphibians	Myobatrachidae	Mixophyes fasciolatus	great barred frog		С		5
animals	amphibians	Myobatrachidae	Pseudophryne coriacea	red backed broodfrog		С		1
animals	amphibians	Myobatrachidae	Pseudophryne raveni	copper backed broodfrog		С		13
animals	amphibians	Myobatrachidae	Uperoleia fusca	dusky gungan		С		2
animals	amphibians	Myobatrachidae	Úperoleia rugosa	chubby gungan		С		1
animals	birds	Acanthizidae	Acanthiza chrysorrhoa	vellow-rumped thornbill		С		4
animals	birds	Acanthizidae	Acanthiza lineata	striated thornbill		С		7
animals	birds	Acanthizidae	Acanthiza nana	vellow thornbill		C		5
animals	birds	Acanthizidae	Acanthiza pusilla	brown thornbill		Č		14
animals	birds	Acanthizidae	Acanthiza reguloides	buff-rumped thornbill		č		13
animals	birds	Acanthizidae	Gervaone mouki	brown gervaone		č		1
animals	birds	Acanthizidae	Gervgone olivacea	white-throated gervgone		С		39
animals	birds	Acanthizidae	Pvrrholaemus sagittatus	speckled warbler		С		23
animals	birds	Acanthizidae	Sericornis frontalis	white-browed scrubwren		С		33
animals	birds	Acanthizidae	Smicrornis brevirostris	weebill		С		28
animals	birds	Accipitridae	Accipiter cirrocephalus	collared sparrowhawk		С		1
animals	birds	Accipitridae	Accipiter fasciatus	brown goshawk		С		15
animals	birds	Accipitridae	Accipiter novaehollandiae	grev goshawk		С		1
animals	birds	Accipitridae	Aguila audax	wedge-tailed eagle		С		38
animals	birds	Accipitridae	Aviceda subcristata	Pacific baza		С		6
animals	birds	Accipitridae	Circus approximans	swamp harrier		С		4
animals	birds	Accipitridae	Elanus axillaris	black-shouldered kite		С		15
animals	birds	Accipitridae	Haliaeetus leucogaster	white-bellied sea-eagle		С		24
animals	birds	Accipitridae	Haliastur indus	brahminy kite		С		2
animals	birds	Accipitridae	Haliastur sphenurus	whistling kite		С		6
animals	birds	Accipitridae	Lophoictinia isura	square-tailed kite		С		1
animals	birds	Accipitridae	Milvus migrans	black kite		С		1
animals	birds	Acrocephalidae	Acrocephalus australis	Australian reed-warbler		С		9
animals	birds	Aegothelidae	Aegotheles cristatus	Australian owlet-nightiar		С		12
animals	birds	Alcedinidae	Ceyx azureus	azure kingfisher		С		9
animals	birds	Alcedinidae	Dacelo novaeguineae	laughing kookaburra		С		68
animals	birds	Alcedinidae	Todiramphus macleavii	forest kingfisher		С		11
animals	birds	Alcedinidae	Todiramphus sanctus	sacred kingfisher		С		28
animals	birds	Anatidae	Anas castanea	chestnut teal		С		9

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Kingdom	Class	Family	Scientific Name	Common Name	1 (Q	А	Records
animals	birds	Anatidae	Anas gracilis	grey teal	(С		27
animals	birds	Anatidae	Anas superciliosa	Pacific black duck	(С		43
animals	birds	Anatidae	Aythya australis	hardhead	(С		30
animals	birds	Anatidae	Chenonetta jubata	Australian wood duck	(С		48
animals	birds	Anatidae	Cygnus atratus	black swan	(С		25
animals	birds	Anatidae	Dendrocygna arcuata	wandering whistling-duck	(С		3
animals	birds	Anatidae	Dendrocygna eytoni	plumed whistling-duck	(С		8
animals	birds	Anatidae	Malacorhynchus membranaceus	pink-eared duck	(С		6
animals	birds	Anatidae	Spatula rhynchotis	Australasian shoveler	(С		10
animals	birds	Anatidae	Stictonetta naevosa	freckled duck	(С		1
animals	birds	Anatidae	Tadorna tadornoides	Australian shelduck	(С		1
animals	birds	Anhingidae	Anhinga novaehollandiae	Australasian darter	(С		18
animals	birds	Anseranatidae	Anseranas semipalmata	magpie goose	(С		5
animals	birds	Apodidae	Hirundapus caudacutus	white-throated needletail	1	V	V	10
animals	birds	Ardeidae	Ardea alba modesta	eastern great egret	(С		13
animals	birds	Ardeidae	Ardea intermedia	intermediate egret	(С		13
animals	birds	Ardeidae	Ardea pacifica	white-necked heron	(С		11
animals	birds	Ardeidae	Bubulcus ibis	cattle egret	(С		28
animals	birds	Ardeidae	Egretta garzetta	little earet	(Ĉ		3
animals	birds	Ardeidae	Egretta novaehollandiae	white-faced heron	Ċ	č		33
animals	birds	Ardeidae	Nycticorax caledonicus	nankeen night-heron	č	č		2
animals	birds	Artamidae	Artamus cvanopterus	dusky woodswallow	č	č		7
animals	birds	Artamidae	Artamus leucorvnchus	white-breasted woodswallow	č	č		6
animals	birds	Artamidae	Artamus superciliosus	white-browed woodswallow	Ċ	č		ĭ
animals	birds	Artamidae	Cracticus nigrogularis	nied butcherbird	č	č		67
animals	birds	Artamidae	Cracticus torquatus	arev butcherbird	č	č		46
animals	birds	Artamidae	Gymnorhina tibicen	Australian magnie	Ċ	č		74
animals	birds	Artamidae	Strepera graculina	nied currawong	č	č		39
animals	birds	Burbinidae	Burhinus grallarius	bush stone-curlew	č	č		1
animals	birds	Cacatuidae	Cacatua galerita	sulphur-crested cockatoo	č	č		29
animals	birds	Cacatuidae	Cacatua sanguinea	little corella	č	č		5
animals	birds	Cacatuidae	Calvptorhvnchus banksii	red-tailed black-cockatoo	č	č		5
animals	birds	Cacatuidae	Calvptorhynchus lathami lathami	glossy black-cockatoo (eastern)	1	v	V	2
animals	birds	Cacatuidae	Folophus roseicapilla	galah	Ċ	ċ		28
animals	birds	Cacatuidae	Nymphicus hollandicus	cockatiel	č	č		1
animals	birds	Campenhagidae	Coracina novaehollandiae	black-faced cuckoo-shrike	č	č		59
animals	birds	Campenhagidae	Coracina nanuensis	white-bellied cuckoo-shrike	č	č		7
animals	birds	Campenhagidae	Edolisoma tenuirostre	common cicadabird	č	č		27
animals	birds	Campephagidae	Lalage leucomela	varied triller	č	č		10
animals	birds	Campenhagidae	Lalage tricolor	white-winged triller	č	č		2
animals	birds	Charadriidae	Elsevornis melanops	black-fronted dotterel	č	č		16
animals	birds	Charadriidae	Ervthrogonys cinctus	red-kneed dotterel	č	č		5
animals	birds	Charadriidae	Vanellus miles	masked lanwing	Ì	č		ğ
animals	birds	Charadriidae	Vanellus miles novaehollandiae	masked lapwing (southern subspecies)	Ì	č		39
animals	birds	Ciconiidae	Enhippiorhynchus asiaticus	black-necked stork	Ì	č		12
animals	birds	Cinclosomatidae	Cinclosoma punctatum	spotted quail-thrush	ò	č		7

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Kingdom	Class	Family	Scientific Name	Common Name	Ι	Q	Α	Records
animals	birds	Cisticolidae	Cisticola exilis	golden-headed cisticola		С		40
animals	birds	Climacteridae	Cormobates leucophaea	white-throated treecreeper		С		6
animals	birds	Climacteridae	Cormobates leucophaea metastasis	white-throated treecreeper (southern)		С		35
animals	birds	Columbidae	Chalcophaps longirostris	Pacific emerald dove		С		5
animals	birds	Columbidae	Geopelia humeralis	bar-shouldered dove		С		29
animals	birds	Columbidae	Geopelia placida	peaceful dove		С		33
animals	birds	Columbidae	Lopholaimus antarcticus	topknot pigeon		С		6
animals	birds	Columbidae	Macropygia phasianella	brown cuckoo-dove		С		16
animals	birds	Columbidae	Ocyphaps lophotes	crested pigeon		С		37
animals	birds	Columbidae	Phaps chalcoptera	common bronzewing		С		18
animals	birds	Coraciidae	Eurystomus orientalis	dollarbird		С		30
animals	birds	Corvidae	Corvus orru	Torresian crow		С		116
animals	birds	Cuculidae	Cacomantis flabelliformis	fan-tailed cuckoo		С		30
animals	birds	Cuculidae	Cacomantis pallidus	pallid cuckoo		С		1
animals	birds	Cuculidae	Cacomantis variolosus	brush cuckoo		С		13
animals	birds	Cuculidae	Centropus phasianinus	pheasant coucal		С		23
animals	birds	Cuculidae	Chalcites basalis	Horsfield's bronze-cuckoo		С		10
animals	birds	Cuculidae	Chalcites lucidus	shining bronze-cuckoo		С		8
animals	birds	Cuculidae	Cuculus optatus	oriental cuckoo		SL		5
animals	birds	Cuculidae	Eudvnamvs orientalis	eastern koel		С		20
animals	birds	Cuculidae	Scvthrops novaehollandiae	channel-billed cuckoo		С		26
animals	birds	Dicaeidae	Dicaeum hirundinaceum	mistletoebird		С		40
animals	birds	Dicruridae	Dicrurus bracteatus	spangled drongo		С		27
animals	birds	Dicruridae	Dicrurus bracteatus bracteatus	spangled drongo (eastern Australia)		С		1
animals	birds	Estrildidae	Lonchura castaneothorax	chestnut-breasted mannikin		С		13
animals	birds	Estrildidae	Neochmia temporalis	red-browed finch		С		32
animals	birds	Estrildidae	Taeniopygia bichenovii	double-barred finch		С		36
animals	birds	Estrildidae	Taeniopygia guttata	zebra finch		С		1
animals	birds	Eurostopodidae	Eurostopodus mystacalis	white-throated nightjar		С		11
animals	birds	Falconidae	Falco berigora	brown falcon		С		3
animals	birds	Falconidae	Falco cenchroides	nankeen kestrel		С		24
animals	birds	Falconidae	Falco longipennis	Australian hobby		С		4
animals	birds	Falconidae	Falco peregrinus macropus	Australian peregrine falcon		С		15
animals	birds	Hirundinidae	Cheramoeca leucosterna	white-backed swallow		С		9
animals	birds	Hirundinidae	Hirundo neoxena	welcome swallow		С		37
animals	birds	Hirundinidae	Petrochelidon ariel	fairy martin		С		16
animals	birds	Hirundinidae	Petrochelidon nigricans	tree martin		С		14
animals	birds	Jacanidae	Irediparra gallinacea	comb-crested jacana		С		10
animals	birds	Laridae	Chlidonias hybrida	whiskered tern		С		2
animals	birds	Laridae	Chroicocephalus novaehollandiae	silver gull		С		1
animals	birds	Locustellidae	Cincloramphus cruralis	brown songlark		С		1
animals	birds	Locustellidae	Cincloramphus timoriensis	tawny grassbird		С		15
animals	birds	Locustellidae	Poodytes gramineus	little grassbird		С		5
animals	birds	Maluridae	Malurus cyaneus	superb fairy-wren		С		32
animals	birds	Maluridae	Malurus lamberti	variegated fairy-wren		С		39
animals	birds	Maluridae	Malurus melanocephalus	red-backed fairy-wren		С		54

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Kingdom	Class	Family	Scientific Name	Common Name	I	Q/	A Records
animals	birds	Megapodiidae	Alectura lathami	Australian brush-turkey		С	7
animals	birds	Meliphagidae	Acanthorhynchus tenuirostris	eastern spinebill		С	14
animals	birds	Meliphagidae	Anthochaera chrysoptera	little wattlebird		С	8
animals	birds	Meliphagidae	Caligavis chrysops	yellow-faced honeyeater		С	51
animals	birds	Meliphagidae	Entomyzon cyanotis	blue-faced honeyeater		С	15
animals	birds	Meliphagidae	Lichenostomus melanops	yellow-tufted honeyeater		С	5
animals	birds	Meliphagidae	Lichmera indistincta	brown honeyeater		С	49
animals	birds	Meliphagidae	Manorina melanocephala	noisy miner		С	67
animals	birds	Meliphagidae	Meliphaga lewinii	Lewin's honeyeater		С	31
animals	birds	Meliphagidae	Melithreptus alboqularis	white-throated honeyeater		С	46
animals	birds	Meliphagidae	Melithreptus gularis	black-chinned honeveater		С	10
animals	birds	Meliphagidae	Melithreptus lunatus	white-naped honeveater		С	4
animals	birds	Meliphagidae	Mvzomela sanguinolenta	scarlet honeveater		C	50
animals	birds	Meliphagidae	Philemon citreogularis	little friarbird		č	21
animals	birds	Meliphagidae	Philemon corniculatus	noisy friarbird		С	64
animals	birds	Meliphagidae	Plectorhyncha lanceolata	striped honeveater		č	9
animals	birds	Meliphagidae	Ptilotula fusca	fuscous honeveater		č	13
animals	birds	Meropidae	Merops ornatus	rainbow bee-eater		č	48
animals	birds	Monarchidae	Grallina cvanoleuca	magpie-lark		č	56
animals	birds	Monarchidae	Monarcha melanopsis	black-faced monarch		Š	13
animals	birds	Monarchidae	Mviagra inquieta	restless flycatcher		C C	2
animals	birds	Monarchidae	Mylagra rubecula	leaden flycatcher		č	28
animals	birds	Monarchidae	Symposiachrus trivirgatus	spectacled monarch		ši	20
animals	birds	Motacillidae	Anthus novaeseelandiae	Australasian ninit		č	7
animals	birds	Neosittidae	Danhoenositta chrysontera	varied sittella		č	31
animals	birds	Oriolidae	Oriolus sagittatus	olive-backed oriole		č	31
animals	birds	Oriolidae	Sphecotheres vieilloti	Australasian fighird		č	16
animals	birds	Pachycenhalidae	Colluricinela harmonica	arev shrike-thrush		č	50
animals	birds	Pachycephalidae	Colluricincla megarhyncha	little shrike_thrush		č	12
animals	birds	Pachycephalidae	Pachycenhala nectoralis	aolden whistler		č	36
animals	birds	Pachycephalidae	Pachycephala rufiventris	rufous whistler		č	49
animals	birds	Pardalotidae	Pardalotus punctatus	spotted pardalote		č	27
animals	birds	Pardalotidae	Pardalotus striatus	striated pardalote		č	77
animals	birds	Pelecanidae	Pelecanus conspicillatus	Australian pelican		č	21
animals	birds	Petroicidae	Fonsaltria australis	eastern vellow rohin		č	45
animale	birde	Petroicidae	Microeca fascinans	iacky winter		č	12
animals	birde	Petroicidae	Detroica rosea	rose robin		č	22
animals	birde	Phaethontidae	Phoethon lenturus	white tailed tropichird		ei -	23
animals	birde	Phalacrocoracidae	Microcarbo melanoleucos	little nied cormorant		C	27
animale	birds	Phalacrocoracidae	Phalacrocoray carbo	areat cormorant		č	10
animals	birde	Phalacrocoracidae	Phalacrocoray sulpirostris	little black cormorant		č	22
animals	birde	Phalacrocoracidae	Phalacrocoray varius	nice black comorant		č	11
animals	birde	Dhasianidaa	Coturniy postoralia	stubble quait		č	2
animals	birdo	Phasianidae	Suppieus vesilenhorus	stubble quali		č	∠ 19
animals	birdo	Pedergidee	Dedergue etrigeidee	brown quali		č	10
animais	birdo	Podargidae	Podargus strigoldes	tawny frogmouth		Č	21
animais	DIFOS	Podicipedidae	Podiceps cristatus	great crested grebe		C	Э

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Kingdom	Class	Family	Scientific Name	Common Name	I	Q	А	Records
animals	birds	Podicipedidae	Poliocephalus poliocephalus	hoarv-headed grebe		С		1
animals	birds	Podicipedidae	Tachybaptus novaehollandiae	Australasian grebe		С		28
animals	birds	Pomatostomidae	Pomátostomus temporalis	grev-crowned babbler		С		11
animals	birds	Psittaculidae	Alisterus scapularis	Australian king-parrot		С		10
animals	birds	Psittaculidae	Barnardius zonarius	Australian ringneck		С		3
animals	birds	Psittaculidae	Parvipsitta pusilla	little lorikeet		C		37
animals	birds	Psittaculidae	Platvcercus adscitus	pale-headed rosella		С		49
animals	birds	Psittaculidae	Platvcercus adscitus palliceps	pale-headed rosella (southern form)		С		2
animals	birds	Psittaculidae	Platycercus eximius	eastern rosella		С		3
animals	birds	Psittaculidae	Trichoglossus chlorolepidotus	scalv-breasted lorikeet		č		56
animals	birds	Psittaculidae	Trichoglossus moluccanus	rainbow lorikeet		č		60
animals	birds	Psophodidae	Psophodes olivaceus	eastern whinbird		č		37
animals	birds	Ptilonorhynchidae	Chlamydera maculata	spotted bowerbird		č		3
animals	birds	Ptilonorhynchidae	Sericulus chrysocephalus	regent bowerbird		č		3
animals	birds	Rallidae	Amaurornis moluccana	nale-vented bush-hen		č		1
animals	birds	Rallidae	Fulica atra	Furasian coot		č		26
animale	birde	Rallidae	Gallinula tenebrosa	dusky moothen		č		30
animale	birde	Pallidae	Gallirallus philippensis	buff banded rail		č		6
animals	birde	Pallidao		Lowin's rail		č		4
animals	birde	Pallidao	Dernhyria malanatus	Durple swamphop		č		10
animals	birde	Pallidao	Porpriyno melanolus	Australian spotted stake		č		19
animals	birds	Rallidae		Australian spolled crake		č		10
animais	birds	Railidae	Zapornia pusilia Zapornia tobuonoio	Ballion's crake		č		13
animais	birds	Railidae	Zapornia tabuensis	spouess crake		č		0
animais	DIrds	Recurvitostindae	Rimaniopus leucocephaius	pied suit		č		20
animais	Dirds	Rhipiduridae	Rhipidura albiscapa	grey lantali		č		49
animais	DIrds	Rhipiduridae	Rhipidura leucophrys	wille wagtail		Š		50
animais	birds	Rhipiduridae	Rhipidura leucophrys leucophrys	willie wagtali (southern)		C		1
animais	birds	Rhipiduridae	Rhipidura rutitrons	rutous fantail		SL	_	18
animals	birds	Rostratulidae	Rostratula australis	Australian painted-snipe		E	E	1
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		С		17
animals	birds	Strigidae	Ninox strenua	powerful owl		V		9
animals	birds	Threskiornithidae	Platalea flavipes	yellow-billed spoonbill		С		10
animals	birds	Threskiornithidae	Platalea regia	royal spoonbill		С		13
animals	birds	Threskiornithidae	Plegadis falcinellus	glossy ibis		SL		4
animals	birds	Threskiornithidae	Threskiornis molucca	Australian white ibis		С		12
animals	birds	Threskiornithidae	Threskiornis spinicollis	straw-necked ibis		С		23
animals	birds	Turnicidae	Turnix maculosus	red-backed button-quail		С		2
animals	birds	Turnicidae	Turnix varius	painted button-quail		С		11
animals	birds	Tytonidae	Tyto javanica	eastern barn owl		С		1

Kingdom	Class	Family	Scientific Name	Common Name	1	Q	А	Records
animals	birds	Zosteropidae	Zosterops lateralis	silvereve		С		57
animals	birds	Zosteropidae	Zosterops lateralis cornwalli	silvereve (eastern)		С		1
animals	insects	Hesperiidae	Neohesperilla xanthomera	vellow grass-skipper				1
animals	insects	Lycaenidae	Acrodipsas brisbanensis	bronze ant-blue				2
animals	insects	l vcaenidae	Candalides cyprotus pallescens	copper pencilled-blue				1
animals	insects	Lycaenidae	Ogyris oroetes oroetes	silky azure				1
animals	insects	Lycaenidae	Ogyris zosine zosine	northern purple azure (southern subspecies)				1
animals	insects	Lycaenidae	Psychonotis caelius tavgetus	small green-banded blue				1
animals	insects	Nymphalidae	Acraea andromacha andromacha	alasswing				8
animals	insects	Nymphalidae	Charaxes sempronius sempronius	tailed emperor				2
animals	insects	Nymphalidae	Danaus petilia	lesser wanderer				5
animals	insects	Nymphalidae	Danaus sp					1
animals	insects	Nymphalidae	Eunloea corinna	common crow				4
animale	insects	Nymphalidae	lunonia villida villida	meadow argus				2
animals	insects	Nymphalidae	Melanitis leda bankia	evening brown				2
animals	insects	Nymphalidae	Tirumala hamata hamata	blue tiger				1
animals	insects	Nymphalidae	Vonosoo korobowi	Australian painted ledv				1
animais	insects	Nymphalidae	Vanessa kersnawi	Australian painted lady				2
animais	insects	Papilionidae	Graphium choredon	blue triangle				3
animais	insects	Papilionidae	Papilio aegeus aegeus	orchard swallowtail (Australian subspecies)				1
animals	insects	Pieridae	Belenois java teutonia	caper white				1
animals	insects	Pieridae	Catopsilia pomona	lemon migrant				2
animals	insects	Pieridae	Cepora perimale scyllara	caper gull (Australian subspecies)				1
animals	insects	Pieridae	Delias argenthona argenthona	scarlet jezebel				1
animals	insects	Pieridae	Delias nigrina	black jezebel				2
animals	insects	Pieridae	Eurema brigitta australis	no-brand grass-yellow				1
animals	insects	Pieridae	Eurema hecabe	large grass-yellow				5
animals	insects	Pieridae	Eurema smilax	small grass-vellow				2
animals	mammals	Acrobatidae	Acrobates pygmaeus	feathertail glider		С		1
animals	mammals	Canidae	Canis familiaris (dingo)	dingo		-		2
animals	mammals	Dasyuridae	Antechinus flavipes flavipes	yellow-footed antechinus (south-east Queensland)		С		2
animals	mammals	Dasvuridae	Phascogale tapoatafa tapoatafa	brush-tailed phascogale		С		1
animals	mammals	Dasyuridae	Sminthopsis murina	common dunnart		č		1
animals	mammals	Emballonuridae	Saccolaimus flaviventris	vellow-bellied sheathtail bat		č		1
animals	mammals	Macropodidae	Macronus giganteus	eastern grey kangaroo		č		14
animals	mammals	Macropodidae	Macronus sn	castern grey kungaroo		č		1
animals	mammals	Macropodidae	Notamacropus dorsalis	black-striped wallaby		č		1
animals	mammals	Macropodidae	Notamacropus parivi	whintail wallaby		č		5
animale	mammale	Macropodidae	Notamacropus rufogriseus	red_necked wallaby		č		15
animale	mammale	Macropodidae	Ashtranter robustus	common wallaroo		č		1
animals	mammale	Macropodidae	Wallahia bioolor	swamp wallaby		č		1/1
animala	mammala	Minioptoridae	Miniapla Dicolor Miniaptorus sebreibereii ecoeporeis	swamp wanaby		č		4/ 1
animals	mammala	Melessides	Austronomus sustralia	easient bent-wing bat		č		Z 11
animais	mammais	Malassidae	Austronomus australis	white-supped freetail bat		Č		1
animals	mammals	Molossidae	Mormopterus lumsdenae	northern free-tailed bat		C		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	А	Records
animals	mammals	Molossidae	Mormopterus sp.			С		1
animals	mammals	Muridae	Rattus fuscipes	bush rat		С		1
animals	mammals	Muridae	Rattus tunneyi	pale field-rat		С		1
animals	mammals	Peramelidae	Isoodon macrourus	northern brown bandicoot		С		2
animals	mammals	Petauridae	Petaurus breviceps sensu lato	sugar glider		С		8
animals	mammals	Petauridae	Petaurus norfolcensis	squirrel glider		С		10
animals	mammals	Petauridae	Petaurus sp.			С		1
animals	mammals	Phalangeridae	Trichosurus vulpecula	common brushtail possum		С		19
animals	mammals	Phascolarctidae	Phascolarctos cinereus	koala		Е	E	50
animals	mammals	Potoroidae	Aepyprymnus rufescens	rufous bettong		С		1
animals	mammals	Pseudocheiridae	Petauroides armillatus	central greater glider		E	E	10
animals	mammals	Pseudocheiridae	Pseudocheirus peregrinus	common ringtail possum		С		3
animals	mammals	Pteropodidae	Pteropus scapulatus	little red flying-fox		С		2
animals	mammals	Pteropodidae	Pteropus sp.	, ,		С		1
animals	mammals	Tachyglossidae	Tachyglossus aculeatus	short-beaked echidna		SL		4
animals	mammals	Vespertilionidae	Chalinolobus gouldii	Gould's wattled bat		С		2
animals	mammals	Vespertilionidae	Chalinolobus morio	chocolate wattled bat		С		1
animals	mammals	Vespertilionidae	Nyctophilus gouldi	Gould's long-eared bat		С		3
animals	mammals	Vespertilionidae	Scotorepens grevii	little broad-nosed bat		С		1
animals	mammals	Vespertilionidae	Scotorepens sp.			С		2
animals	mammals	Vespertilionidae	Scotorepens sp. (Parnaby)	central-eastern broad-nosed bat		С		1
animals	mammals	Vespertilionidae	Vespadelus troughtoni	eastern cave bat		Č		1
animals	rav-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	lonafin eel				2
animals	ray-finned fishes	Eleotridae	Hypseleotris compressa	empire audaeon				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	reptiles	Agamidae	Diporiphora australis	tommy roundhead		С		4
animals	reptiles	Agamidae	Intellagama lesueurii	eastern water dragon		č		4
animals	reptiles	Agamidae	Pogona barbata	bearded dragon		С		16
animals	reptiles	Boidae	Morelia spilota	carpet python		С		1
animals	reptiles	Chelidae	Chelodina expansa	broad-shelled river turtle		С		1
animals	reptiles	Chelidae	Chelodina Iongicollis	eastern snake-necked turtle		С		2
animals	reptiles	Chelidae	Emvdura macquarii macquarii	Murray turtle		С		1
animals	reptiles	Colubridae	Boiga irregularis	brown tree snake		С		1
animals	reptiles	Colubridae	Dendrelaphis punctulatus	green tree snake		C		5
animals	reptiles	Colubridae	Tropidonophis mairii	freshwater snake		С		2
animals	reptiles	Diplodactvlidae	Oedura trvoni	southern spotted velvet gecko		С		5
animals	reptiles	Elapidae	Brachvurophis australis	coral snake		С		1
animals	reptiles	Elapidae	Cacophis harriettae	white-crowned snake		Ċ		2
animals	reptiles	Elapidae	Cryptophis nigrescens	eastern small-eved snake		č		4
animals	reptiles	Elapidae	Demansia psammophis	vellow-faced whipsnake		Č		5
animals	reptiles	Elapidae	Pseudechis guttatus	spotted black snake		č		1
animale	rentiles	Flanidae	Dseudechis pornhyriacus	red bellied black snake		ē		7

Page 7 of 8 Queensland Government Species lists (WildNet database) - Extract Date 24/01/2023 at 14:40:02

Kingdom	Class	Family	Scientific Name	Common Name	1	Q	А	Records
animals	reptiles	Elapidae	Pseudonaja textilis	eastern brown snake		С		4
animals	reptiles	Elapidae	Vermicella annulata	bandy-bandy		С		1
animals	reptiles	Gekkonidae	Gehyra dubia	dubious dtella		С		1
animals	reptiles	Pygopodidae	Delma plebeia	common delma		С		2
animals	reptiles	Pygopodidae	Lialis burtonis	Burton's legless lizard		С		3
animals	reptiles	Scincidae	Anomalopus verreauxii	three-clawed worm-skink		С		1
animals	reptiles	Scincidae	Calyptotis scutirostrum	scute-snouted calyptotis		С		5
animals	reptiles	Scincidae	Carlia munda	shaded-litter rainbow-skink		С		1
animals	reptiles	Scincidae	Carlia pectoralis	open-litter rainbow skink		С		1
animals	reptiles	Scincidae	Carlia pectoralis sensu lato			С		2
animals	reptiles	Scincidae	Carlia schmeltzii	robust rainbow-skink		С		2
animals	reptiles	Scincidae	Carlia vivax	tussock rainbow-skink		С		15
animals	reptiles	Scincidae	Concinnia martini	dark bar-sided skink		С		2
animals	reptiles	Scincidae	Concinnia tenuis	bar-sided skink		С		1
animals	reptiles	Scincidae	Cryptoblepharus pulcher pulcher	elegant snake-eyed skink		С		23
animals	reptiles	Scincidae	Ctenotus arcanus	arcane ctenotus		С		1
animals	reptiles	Scincidae	Ctenotus spaldingi	straight-browed ctenotus		С		2
animals	reptiles	Scincidae	Ctenotus taeniolatus	copper-tailed skink		С		2
animals	reptiles	Scincidae	Lampropholis amicula	friendly sunskink		С		3
animals	reptiles	Scincidae	Lampropholis delicata	dark-flecked garden sunskink		С		8
animals	reptiles	Scincidae	Lygisaurus foliorum	tree-base litter-skink		С		6
animals	reptiles	Scincidae	Morethia taeniopleura	fire-tailed skink		С		1
animals	reptiles	Scincidae	Ophioscincus ophioscincus	yolk-bellied snake-skink		С		1
animals	reptiles	Scincidae	Tiliqua scincoides scincoides	eastern bluetongue		С		2
animals	reptiles	Varanidae	Varanus varius	lace monitor		С		9
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.

Appendix E

Fauna spotter catcher post-clearance services reports (April and August 2023)





April 2023

Fauna Management and Spotter/Catcher Services Report

Herberton Road, South Ripley Report prepared SEE Civil



Report prepared by QLD Fauna Consultancy Pty Ltc Phone: (07) 3376 9780 Email: fauna@qfc.com.au

Date:	03/05/2023
Title:	Fauna Management and Spotter/Catcher Services Report Herberton Road, South Ripley
Author/s:	Bryan Robinson, Willow Sorbello
Reviewed by:	Jasmine Zeleny
Field personnel:	Rebecca Ferris
Status:	Final Report
Filed as:	QFC FMR SEE Civil South Ripley April 2023.doc

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1 Introduction

Qld Fauna Consultancy Pty Ltd has been engaged by SEE Civil to conduct Fauna Spotter/Catcher and Fauna Management activities for works at Herberton Road, South Ripley.

All activities were conducted under the provisions of Rehabilitation Permit (WA0026789) issued to Queensland Fauna Consultancy Pty Ltd by the Department of Environment and Science (DES), approving the observation and relocation of protected animals.

This report covers clearance activities undertaken in April 2023.

2 Methodology

2.1 Clearance Investigations

A standard set of observational and active searching techniques were employed on the day of clearance to ascertain and identify existing fauna values for each location. These include:

- Assessment of terrestrial microhabitats such as ground hollows, rock, burrows, leaf litter, fallen branches and bark exfoliations,
- Observation and assessment of occupancy of arboreal microhabitats such as tree hollows, fissures and exfoliations,
- Direct observation of active or exposed fauna,
- Identification of scats, tracks and scratchings to determine fauna present on the site.

All microhabitats were identified and subsequently inspected during clearance.

2.2 Specific methodology for Koalas Phascolarctos cinereus

Due to the specific requirements relating to the Koala the following techniques were employed at the clearance site to ascertain presence/absence status:

- Use of binoculars to inspect the crown, forks and trunk of trees;
- 'Drip zone' searches at the base of known food trees for the presence of scats to a radius equal to that of the crown of individual trees;
- Inspection of trunks for scratchings indicative of use by Koalas.

Recent changes to Koala management strategies highlighted in the *Nature Conservation (Koala) Conservation Plan 2017* have resulted in particular conditions placed on vegetation clearance involving the removal of Koala food trees.

Further provisions include the restriction of all clearance that may directly interfere with the tree a Koala is residing in. Koalas are to leave via their own volition and may not be interfered with by any means. Only when Koalas have vacated a tree can clearance operations include the host tree and surrounding vegetation.

2.3 Felling Procedures

Trees identified as having potential fauna values (such as hollows, fissures and exfoliating bark) were clearly marked for supervision during felling and inspected once felled. Efforts were made to determine potentially occupant species by way of investigations for indicative signs (scats, scratchings and tracks). Where no signs were found or occupant species undeterminable, machinery operators were instructed to fell trees in a manner directed at minimising the potential risk of injury to fauna.

Limbs were inspected and the direction of felling determined with regards to safety of both machinery and operators. Considerations to potentially occupant fauna were assessed and felling procedures formulated. Felling procedures may have included the following techniques:

- Machinery blades were utilised to shake the tree in an attempt to disturb fauna out of hollows
 or fissures to determine species present.
- If fauna were present, the tree was either left standing overnight to allow the occupant animal(s) time to leave via their own volition, or if species detected were able to be encouraged from the tree by shaking or direct capture by a wildlife spotter(s). The tree was felled with considerations to potentially undetected fauna.
- Where possible potentially occupied trees were felled with the identified microhabitat receiving minimal contact on impact.
- Adjacent felled trees were utilised to absorb the impact of potential fauna bearing trees.

2.4 Communications during Clearance

Each spotter/catcher was equipped with a hand held radio to make positive communications with machinery operators. Communications by radio and positive hand signals were utilised to indicate intentions to machinery operators.

3 Results

The following daily inventory details fauna-based investigation results for the clearing area. Inspection activities, location, habitat values and fauna found are documented where required.

Friday 28th April 2023

- Pre-clearance activities carried out (refer to Methodology) at Herberton Road, South Ripley
- Vegetation clearance carried out at Herberton Road, South Ripley
- 1 tree flagged
- One personnel in attendance

Arboreal Microhabitats: No. flagged tree/s felled: 1 Nest 🖾 Y 🗍 N Hollows 🖾 Y 🗍 N Arboreal termitaria 🗍 Y 🖾 N No. & size of hollow/s (mm): 0-49: 2				
Terrestrial Microhabitats: Hollow logs □Y ⊠N Woody debris □Y ⊠N Rock piles □Y ⊠N Burrows □Y ⊠N Others: Dense Grass				
Aquatic habitat/s: Dam □Y ⊠N Creek □Y ⊠N Wetland □Y ⊠N				
No Fauna Found				

All vegetation clearance was supervised as requested by SEE Civil and in accordance with stipulations as expressed in the *Nature Conservation (Koala) Conservation Plan 2017.*

No koalas were observed during clearance and no other fauna required mitigation during clearing activities.

All supervised clearance activities were conducted with the full co-operation of onsite personnel and machinery operator/s.

5 References

Department of Environment and Heritage Protection (2017) Nature Conservation (Koala) Conservation Plan 2017. Queensland Government.



August 2023

Fauna Management and Spotter/Catcher Services Report

LLC Earthworks Barrams Road/ Cumner Road, South Ripley Report prepared for SEE Civil Pty Ltd



Report prepared by QLD Fauna Consultancy Pty Ltd Phone: (07) 3376 9780 Email: fauna@qfc.com.au

Date:	24/08/2023
Title:	Fauna Management and Spotter/Catcher Services Report LLC Earthworks – Barrams Road/ Cumner Road, South Ripley
Author/s:	Bryan Robinson, Tamara Cantwell
Reviewed by:	Bryan Robinson
Field personnel:	Jaedon Lunt
Status:	Final Report
Filed as:	QFC FMR SEE Civil South Ripley August 2023.doc
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1 Introduction

Qld Fauna Consultancy Pty Ltd has been engaged by SEE Civil Pty Ltd to conduct Fauna Spotter/Catcher and Fauna Management activities for works at LLC Earthworks – Barrams Road/ Cumners Road, South Ripley.

All activities were conducted under the provisions of Rehabilitation Permit (WA0026789) issued to Queensland Fauna Consultancy Pty Ltd by the Department of Environment and Science (DES), approving the observation and relocation of protected animals.

This report covers clearance activities undertaken in August 2023.

2 Methodology

2.1 Clearance Investigations

A standard set of observational and active searching techniques were employed on the day of clearance to ascertain and identify existing fauna values for each location. These include:

- Assessment of terrestrial microhabitats such as ground hollows, rock, burrows, leaf litter, fallen branches and bark exfoliations,
- Observation and assessment of occupancy of arboreal microhabitats such as tree hollows, fissures and exfoliations,
- Direct observation of active or exposed fauna,
- Identification of scats, tracks and scratchings to determine fauna present on the site.

All microhabitats were identified and subsequently inspected during clearance.

2.2 Specific methodology for Koalas *Phascolarctos cinereus*

Due to the specific requirements relating to the Koala the following techniques were employed at the clearance site to ascertain presence/absence status:

- Use of binoculars to inspect the crown, forks and trunk of trees;
- 'Drip zone' searches at the base of known food trees for the presence of scats to a radius equal to that of the crown of individual trees;
- Inspection of trunks for scratchings indicative of use by Koalas.

Recent changes to Koala management strategies highlighted in the *Nature Conservation (Koala) Conservation Plan 2017* have resulted in particular conditions placed on vegetation clearance involving the removal of Koala food trees.

Further provisions include the restriction of all clearance that may directly interfere with the tree a Koala is residing in. Koalas are to leave via their own volition and may not be interfered with by any means. Only when Koalas have vacated a tree can clearance operations include the host tree and surrounding vegetation.

2.3 Felling Procedures

Trees identified as having potential fauna values (such as hollows, fissures and exfoliating bark) were clearly marked for supervision during felling and inspected once felled. Efforts were made to determine potentially occupant species by way of investigations for indicative signs (scats, scratchings and tracks). Where no signs were found or occupant species undeterminable, machinery operators were instructed to fell trees in a manner directed at minimising the potential risk of injury to fauna.

Limbs were inspected and the direction of felling determined with regards to safety of both machinery and operators. Considerations to potentially occupant fauna were assessed and felling procedures formulated. Felling procedures may have included the following techniques:

- Machinery blades were utilised to shake the tree in an attempt to disturb fauna out of hollows or fissures to determine species present.
- If fauna were present, the tree was either left standing overnight to allow the occupant animal(s) time to leave via their own volition, or if species detected were able to be encouraged from the tree by shaking or direct capture by a wildlife spotter(s). The tree was felled with considerations to potentially undetected fauna.
- Where possible potentially occupied trees were felled with the identified microhabitat receiving minimal contact on impact.
- Adjacent felled trees were utilised to absorb the impact of potential fauna bearing trees.

2.4 Communications during Clearance

Each spotter/catcher was equipped with a hand-held radio to make positive communications with machinery operators. Communications by radio and positive hand signals were utilised to indicate intentions to machinery operators.

3 Results

The following daily inventory details fauna-based investigation results for the clearing area. Inspection activities, location, habitat values and fauna found are documented where required. Refer to Appendix A for fauna photos.

Thursday 24th August 2023

- Pre-clearance activities carried out (refer to Methodology) at LLC Earthworks Barrams Road/Cumners Road, South Ripley
- Vegetation clearance carried out at LLC Earthworks Barrams Road/Cumners Road, South Ripley
- Refer to Fauna Register for fauna found
- 1 tree flagged
- One personnel in attendance

Arboreal Microhabitats: No. flagged tree/s felled: 5				
Nest XY IN Hollows YX N Arboreal termitaria XY N Other: Exfoliating bark				
No. & size of hollow/s (mm): 100-149: 1				
Terrestrial Microhabitats:				
Hollow logs \Box Y \boxtimes N Woody debris \boxtimes Y \Box N Rock piles \Box Y \boxtimes N Burrows \Box Y \boxtimes N				
Other: Bark exfoliations, Terrestrial termitaria				
Aquatic habitat/s: Dam XY N Creek YX N Wetland YX N				

4 Fauna Register

			Capture	Location					R	elease Detail	s		Actio	ons				
Collectors Name	Date	Time	Capture Location	Latitude	Longitude	Count Type	Status	Common Name - Scientific Name	Count	Date	Latitude	Longitude	R1	R2	D	I	Release Location Description	Comments
Jaedon Lunt	24/08/2023	07:52	LLC Earthworks – Barrams Road/Cumner Road, South Ripley	-27.6944	152.8329	Alive	Least Concern	Small-eyed Snake Cryptophis nigrescens	2	24/08/2023	-27.7328	152.8325	x				Released into dense grass next to water source	
Jaedon Lunt	24/08/2023	11:38	LLC Earthworks – Barrams Road/Cumner Road, South Ripley	-27.6947	152.8338	Alive	Least Concern	Leaden Delma Delma plebeia	1	24/08/2023	-27.7328	152.8325	x				Released into dense grass next to water source	

5 Conclusion

All vegetation clearance was supervised as requested by SEE Civil Pty Ltd and in accordance with stipulations as expressed in the *Nature Conservation (Koala) Conservation Plan 2017.*

No Koalas were observed during clearance. Other fauna found during clearance works were relocated (or self-relocated) to adjacent localities comprising suitable refugia and feeding resources consistent with individual species requirements.

All supervised clearance activities were conducted with the full co-operation of onsite personnel and machinery operator/s.

6 References

Department of Environment and Heritage Protection (2017) *Nature Conservation (Koala) Conservation Plan 2017.* Queensland Government.

References for nomenclature

Menkhorst, K. & Knight, F. (2011) A Field Guide to the Mammals of Australia. 3rd edn. Oxford University Press, South Melbourne.

Strahan, R. And Van Dyck, S. (2008) *The Mammals of Australia*, 3rd edn Sydney: New Holland Publishers.

Wilson, S. (2015) A Field Guide to Reptiles of Queensland. 2nd edn, Sydney: New Holland Publishers.

7 Appendix A: Fauna Photos



Leaden Delma Delma plebeia



Small-eyed Snake Cryptophis nigrescens

Appendix F

Voluntary Declaration package – Avonvale and Cherry Gully Offset Area





Department of **Resources**

File/Ref number: 2022/002500 Unit: Vegetation Management Unit

21 December 2022

Mr Darren Jonsson c/- One Environment Suite 538 Jubilee Place L5 470 St Pauls Tce Fortitude Valley QLD 4006

Via email only: darren@oneenvironment.com.au

Dear Mr Jonsson

RE: Declaration made on part of lot 1 CSH1549 & 10,4,5,9 SP327519 - Somerset Regional Council

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 21 December 2022. A copy of each of the following certified documents is attached for your records:

- Declaration notice 2022/002500
- Declared area map (DAM 2022/002500)
- Declared area Property Map of Assessable Vegetation (PMAV 2022/002505)
- Cherry Gully & Avonvale Station Declared Area Management Plan; for EPBC2018/8347 – Providence East and South; One Environment, September 2022

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 2022/002500.

Yours sincerely

Maria Wiringi

Maria Wiringi Natural Resource Management Officer



Declaration notice – approval

Sections 19E to 19L of the Vegetation Management Act 1999

1. Details of request

- 1.1. Proponent's name: Somerset Offset Land Pty Ltd
- 1.2. Date request received: 22 August 2022
- **1.3. Request:** declare stated land as an area of high nature conservation value
- **1.4. Property description:** Lot 1 CSH1549 & 10,4,5,9 SP327519– Somerset Regional Council
- **1.5. Land tenure:** Freehold
- **1.6. Decision reference**: 2022/002500

2. Declaration information

2.1. Declaration made:

The Chief Executive of the Department of Resources declares the area identified on Declared Area Map DAM 2022/002500 as an area of high nature conservation value in accordance with section 19F(1) 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 2022/002500)
- Cherry Gully & Avonvale Station Declared Area Management Plan; for EPBC 2018/8347 – Providence East and South; One Environment, September 2022

2.3. Property Map of Assessable Vegetation

In accordance with s20B of the *Vegetation Management Act 1999*, Property Map of Assessable Vegetation PMAV 2022/002505 has been prepared for the declared area.

- 2.4. Date of declaration: 21 December 2022
- 3. Delegated officer's signature Maria Wiringi

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)(a) of the VMA

1. PMAV reference: 2022/002505

2. Decision: to make a PMAV under section 20B(1)(a) of the VMA over part of land described as Lot 1 CSH1549 & 10,4,5,9 SP327519.

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:

An area of land on Lot 1 CSH1549 & 10,4,5,9 SP327519 has been declared (decision reference: 2022/002500) as an area of high nature conservation value in accordance with s19F of the VMA.

In accordance with section 20B(1)(a) of VMA, the decision has been made to make a PMAV over the declared area.

4. Additional information:

Section 20AL(a)(i) of the VMA state that a category A area is an area that is a declared area. The declared area on Lot 1 CSH1549 & 10,4,5,9 SP327519, is shown as a category A area on PMAV 2022/002505.

Subsequent updates of the regulated vegetation management map will also show the declared area as a category A area.

- 5. Date: 21 December 2022
- 6. Decision Maker:

Maria Wiringi

Maria Wiringi Natural Resource Management Officer (VM2) Date: 21 December 2022

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: <u>vegetation@resources.qld.gov.au</u>

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).





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One Environment

Cherry Gully & Avonvale Station Declared Area Management Plan

Cherry Gully & Avonvale – Declared Area Management Plan DAMP v1 – September 2022 EPBC2018/8347 Daleswan Pty Ltd 19th September 2022

Title DAMP Reference EPBC Reference Client Date 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 approved Residential Development at Providence East and South, Ripley (EPBC2018/8347).

As part of the EPBC approval (EPBC2018/8347), the documentation includes an approved Offset Area Management Plan (OAMP) over land located at Avonvale and Cherry Gully Station (refer to **Attachment A**). The purpose of the OAMP 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 approved OAMP and its requirements are referenced throughout and consistently applied across the EPBC Act approval and VMA V-DEC approval.

PROPERTY OWNER DETAILS

The owner of the Avonvale and Cherry Gully Station (Providence East and South Offset) is Somerset Offset Land Pty Ltd. As per **Attachment B**, Somerset Offset Land Pty Ltd have provided consent for the making of this V-DEC to facilitate the legal security of the land included in the EPBC Act approval (EPBC2018/8347). The land parcels subject to this consent include:

- Lot 4 on SP327519
- Lot 5 on SP327519
- Lot 9 on SP327519
- Lot 10 on SP327519
- Lot 1 on CSH1549

PARTIES WITH REGISTERED INTERESTS

There are no registered interests impacted by this V-DEC.

It should be noted that the land parcels subject to this V-DEC contain existing easement, carbon abatement and/or voluntary declaration(s), however, this V-DEC will not impact any of the existing encumbrances. As such, consent is not required from these parties.

DESCRIPTION OF DECLARED AREA

The Avonvale and Cherry Gully Station (Providence East and South Offset) land which will be declared under section 19F(1)(a) of the VMA is shown in **Attachment C** of this V-DEC. The Avonvale and Cherry

Gully Station offset area totals 161.50 ha. Avonvale and Cherry Gully Station is located in the Somerset 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 approved Residential Development at Providence East and South, Ripley (EPBC2018/8347).

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 a large contiguous area of native vegetation. By restoring threatened species habitat and providing a large contiguous area of native vegetation, it will contribute to the long term conservation of the environment.

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 Avonvale and Cherry Gully Station will commence implementation in accordance with the approved OAMP (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 OAMP (refer to **Table 12** of **Attachment A**):

• Environmental Management Zone 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: Vertebrate Pest Management (primarily targeting wild dogs and dingos);
- Action 2: Weeds of National Significance (reduction and management);
- Action 3: Stock Management;
- Action 4: Access Management, Trespass and Neighbouring Stock Mustering Controls;
- Action 5: Wildfire Management;
- Action 6: Native Seed Collection and Propagation; and

• Action 7: Revegetation (habitat creation) Activities.

Refer to **Section 5** of the approved OAMP 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:

- Climate Change Risk 1 Wildfire;
- Climate Change Risk 2 Flooding;
- Climate Change Risk 3 Drought;
- Climate Change Risk 4 Climate Factors Shifting Habitat Range;
- Planting Stock Failure;
- Pest Management (wild dog populations);
- Weed Invasion / Expansion (weeds of national significance Lantana); and
- Stock Management, Unlawful Access and Land Clearing (Cattle Operations Impacts).

Refer to **Section 7** of the approved OAMP (**Attachment A**) for further detail discussion on the abovementioned 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 approved OAMP under the EPBC Act approval (EPBC2018/8347);
- 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

Darren Jonsson Director – One Environment

Attachment A Approved EPBC2018/8347 OFFSET AREA MANAGEMENT PLAN



One Environment

Avonvale and Cherry Gully Station Offset Area Management Plan 2022

Avonvale and Cherry Gully – Offset Area Management Plan

OEs1:v1.1(b) – April 2022 EPBC 2018/8347 Daleswan Pty Ltd 21 April 2022 Title OMP Reference EPBC Reference Client Date





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Glossary / Abbreviations

Commencement of the TBC	
Management Activites	
Conservation Gain EPBC Act Policy – maintains or increases the viability or reduces threats or damage to a prot	ected
matter	
DAF Queensland Government Department of Agriculture and Fisheries	
DAWECommonwealth Government Department of Agriculture, Water and the Environment	
DES Queensland Government Department of Environment & Science	
DEHP Queensland Department of Environment and Heritage (Now DES)	
EPBC Environment Protection & Biodiversity Conservation Act 1999	
EPBC Act Offset Policy Environment Protection & Biodiversity Conservation Act 1999 – Environmental Offset Polocy October 2012 (Australian Government)	licy –
EDQ Queensland Government Department of Economic Development Queensland	
EMZ Environmental Management Zone (The Offset Area is described in 1 EMZ)	
Functional Loss Where habitat is not being directly cleared or removed, however due to barriers, three	ats or
fragmentation will no longer function for the use of the protected matter.	
GHFF Grey-headed Flying-fox	
GHFF FHA Grey-headed Flying-Fox Foraging Habitat Assessment – Hybrid based assessment to	ol for
valuing GHFF foraging habitat at the impact and offset site.	
MNES Matters of National Environmental Significance	
MQHA Modified Quality Habitat Assessment – Tool for assessing koala habitat value based of	on an
amalgamation of the Queensland Government & Commonwealth Government (Offset
Assessment Criteria.	
Offset Provider Somerset Offset Solutions Pty Ltd	
Offset Land Avonvale and Cherry Gully (161.5 ha)	
Offset Area 161.5 ha – portion within the Offset Land committed to the Offset Outcomes	
Offset Period 20 years	
OMP / Offset <u>Avonvale and Cherry Gully – Offset Area Management Plan 2022</u> [Ref: OEs:1.1(b) – c	lated
Management Plan 21/04/22]	
OAAR Offset Area Annual Report	
PDA Priority Development Area (As declared by the Queensland Government)	
PD Preliminary Documentation Submission by the Saunders Havill Group 2020	
Proponent Daleswan Pty Ltd	
SPP State Planning Policy (Queensiand Government)	1.
The Guide Environment Protection & Bioalversity Conservation Act 1999 – Environmental Offset Po	licy –
CTHO	April
	Арш
Providence Fast and Ripley Road Ripley Oueensland (EPBC 2018/8347)	
South Project	
UO University of Oueensland	
VDEC Voluntary Declaration	
VMA Vegetation Management Act 1999	
WONS Weeds of National Significance	



1. Introduction

The Proponent has engaged the Offset Provider to coordinate and deliver a Koala and Grey-headed Flying-fox habitat environmental offset as compensation for significant impacts to Matters of National Environmental Significance (**MNES**) as part of the Ripley Valley PDA Providence East and South, QLD development (**Providence East and South Project**). An offset prepared in accordance with the Commonwealth Government's, Department of Agriculture, Water and the Environment (**DAWE**) *EPBC Act 1999 – Environmental Offset Policy – October 2012* (**EPBC Offset Policy**) is a requested requirement of the Preliminary Documentation submission for EPBC Application 2018/8347.

The Offset Provider will deliver the overall 'conservation gain' for the species as part of a single site offset solution located on Avonvale and Cherry Gully (**Offset Site** – <u>Refer to PLAN 1</u>). The offset site forms part of the Avonvale and Cherry Gully stations which contains the approved EPBC2015/7530 and EPBC2019/8539 offset. Approximately 161.5 ha of the Offset Site will be legally secured as direct compensation for impacts on the Providence East and South Project (161.5 ha – **Offset Area**). The Offset Site is located approximately 5km west of the Toogoolawah Township and 53km north west of Brisbane. The land holding is entirely based within the Local Government jurisdiction of the Somerset Regional Council (Formerly the Esk Shire Council).

This <u>Avonvale and Cherry Gully Offset Area Management Plan 2022</u> dated the 21 April 2022 (**Offset Management Plan / OMP**) outlines the existing values and proposed management actions to be completed at the Offset Site. The OMP does not include detailed analysis on the value or assessment of the actions, risks or threats at the offset land relative to the *Offset Assessment Guide* (**The Guide**). A response to The Guide is provided within the technical chapters of the Providence East and South Project Preliminary Documentation Report (*Saunders Havill Group, 2021*). This OMP focuses on the direct management actions aligning with the principles and structure outlined in the DAWE's *Environmental Management Plan Guidelines* (2014).

The vegetation surrounding the offset site is known to support Koalas, while the offset site retains a number of key existing threats and supports areas with all necessary essential habitat factors for the reinstatement and creation of new high functioning koala habitat. Similarly, the dominant tree species existing and proposed for revegetation on the land are highly ranked as food species for the Grey-headed Flying-fox and located within 16.6km of the Esk and 35km of the Lowood Flying-fox camps, both of which report consistently high numbers (>3,000-4,000) of animals. The portion of the offset landholding proposed for offset in this OMP is predominantly located within the strategically designated bioregional biodiversity corridor of the recently adopted *ShapingSEQ - South East Queensland Regional Plan 2017*, (State of Queensland, 2017). The corridor mapping in this document is non regulatory, however aspirationally is included through the Offset Site to link the *Deongwar State Forest, Esk National Park* in the south to the *Bernarking State Forest* and *Mount Binga National Park* to the north.

The offset area did not form part of the EPBC2015/7530 or EPBC2019/8539 offset solutions, and as such, it is still utilised for cattle grazing. One Environment Pty Ltd (**Offset Provider**) has entered into commercial terms to legally secure, improve and long-term manage 161.5 ha of land at Cherry Gully for the sole purpose of delivering the environmental offset outcomes documented in this OMP.



1.1. Purpose of Offset Management Plan

The Offset Site and Offset Area have been selected and designed to compensate for 100% of the Providence East and South Project significant impact on Koala and 100% of the impact on Grey-headed Flying-fox foraging habitat. The offset proposal is a direct land-based solution which consists entirely of establishment of new habitat. Importantly the Daleswan offset will combined with existing approved and commenced offsets on the land to consolidate a large conservation outcome for a number of protected matters.

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

- 1. Provide details and timing on the legally binding mechanism to secure the Offset Area values at the Offset Site.
- 2. Provide baseline values for a range of key habitat quality indicators in the offset Environmental Management Zone (EMZ) for repetitive use in measuring and monitoring habitat improvement commitments.
- 3. Outline the specific management actions and tasks to be undertaken in the EMZ for managing threats, pests and improving Koala and Grey-headed Flying-fox habitat values.
- 4. Outline restrictions and operational controls on existing agricultural and grazing land uses.
- 5. Establish robust and scientifically driven metrics, monitoring and reporting procedures to ensure the offset delivery achieves the predicted *conservation gain* for the species.
- 6. Assign responsibilities for tasks, actions, operational controls, measuring, reporting, corrective actions and funding for all works at the offset land.
- 7. Identify, account for and manage risks associated with all or part of the offset outcomes not succeeding (Adaptive Management).

1.2. Offset Management Plan Limitations

This document is an Offset Management Plan (OMP). The OMP aligns with relevant principles and sections of the <u>Environmental Management Plan Guideline</u>, 2014, Australian Government, Department of Environment, 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 Preliminary Documentation (Saunders Havill, 2020) submission for the Hunt Road, Burpengary Project. 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 Section 5.0.

Assessment methodologies have remained consistent with this broader approved EPBC offsets. Survey methods deployed over the land incorporate standard practices from the <u>Guide to Determining Terrestrial Habitat Quality: A toolkit for</u> <u>assessing land based offsets under the Queensland Government Offsets Policy</u>, Version 1.2, April 2017, Queensland Government, combined with the specific stocking rate factors from the <u>How to use the offsets assessment guide</u>, Australian Government (Combined in this OMP to be referred to as the Modified Quality Habitat Assessment – MQHA for the Koala.



1.3. Responsible Entities for this OMP

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:

1. Daleswan (Project Proponent)

The Proponent is the developer of the Greater Ripley Master Planned Community Project (**Providence East and South Project**). Responsibilities include:

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

2. <u>One Environment (Offset Provider)</u>

The Offset Provider a purpose-built environmental offset company which is responsible for:

- 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 Offset Area.
- Corrective actions for any non-compliance activities.
- Stakeholder relationships Adjoining grazing operations, Somerset Regional Council, local school and community environmental groups.
- Review, Amendment and Adaptive Management changes of the approved OMP over the life of the offset.

3. <u>Saunders Havill Group (Environmental Consultant)</u>

Saunders Havill Group provide the tertiary trained and experienced field ecologists in support of approval and ongoing compliance for the offset land and Environmental Management Zones. Responsibilities include:

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

1.4. Structure of this OMP

There are seven (7) core chapters to this OMP as highlighted in <u>FIGURE 1 – OMP Structure Diagram</u>. **Chapter 1** outlines background information to the OMP setting the overall principles designed to be achieved at the Offset



Site. **Chapter 2** provides a brief context to the Providence East and South project and the impacts triggering the need for compensation of Koala and Grey-headed Flying-fox habitat.

Chapter 3 and **4** cover the general suitability of the Offset Land and discuss the specific design of Environmental Management Zone within the Offset Area. **Chapter 5** is wholly concerned with 7 separate management action areas itemised through a tabulated format. The management tables have been drafted as a stand-alone template that can be extracted from the broader document for direct implementation on-site.

Chapter 6 outlines the corrective actions to be implemented should the success criteria not be achieved, while **Chapter 7** outlines a number of key risks and threatening processes that were considered in the preparation of the management tables.

The final chapter of this OMP (**Chapter 8**) outlines the adaptive management principles adopted for corrective actions and the specific Offset Area Management Plan Reporting requirements.



Figure 1: OMP Structure Diagram





1.5. OMP Declaration of Accuracy

Declaration of accuracy

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

Signed		
Full name (please print)		
Organisation (please print)	One Environment	
Date	//	

491 P	rovi	ding f	alse 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:	te: Subsection 4B(3) of the Crimes Act 1914 lets a court fine a body corporate up to 5 times the maximum						
amour	nt the	e court	could fine a person under this subsection				



1.6. Legally Securing the Offset Area

Legal certainty on the offset land and actions is provided through the direct ownership of the land by the Offset Provider. A legal agreement has been executed between the Offset Provider and the Proponent which outlines the obligations of each party in relation to funding, legally securing of the offset area, implementation of the Approved Offset Area Strategy, land access, warranties and insurances.

The Offset Area and its values will be legally secured through a *Voluntary Declaration* (V-DEC) declared under the Queensland Government's *Vegetation Management Plan 1999* (VMA). Two (2) existing VDECs have been declared on the property covering over 1200ha of land. 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 (a), (c), (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

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 purposebuilt regulation on the title so all future land owners are aware of the restrictions prior to purchase.


2. Impact Site (Summary)

The impact site is located within the north-eastern portion of the Ripley Valley PDA, approximately 5km south-east of the lpswich Town Centre. The subject site has been historically cleared for agricultural and rural land uses and is located in a landscape that supported similar land uses. However, the surrounding landscape has evolved since the Ripley Valley PDA. The northern subject site boundary is bound by Barrams Road and proposed residential development, while the eastern and western boundaries are bound by current residential developments under construction. To the south of the site, the proposed conservation area adjoins bushland which forms a contiguous movement corridor to the south-east through to White Rock Conservation Area and the Flinders – Karawatha Corridor. The land comprises of the following cadastral allotments (refer to <u>FIGURE 2 – Impact Site Allotments & Aerial</u>):

- Lot 112 / M3174;
- Lot190 / S31349;
- Lot 110 / SP169001;
- Lot 190 / S31349; and
- Part of Lot 7047 / SP307629

The land tenure is freehold and is located in the Ripley Valley Priority Development Area (PDA) within the Ipswich City Council local government area, where it retains an *urban living* and *environmental protection* land use zoning. (refer to <u>TABLE 1 - Impact Site Details</u>).

2.1. Proposed Action

The Providence East and South PDA master planned residential development covers ~136 ha (of which ~28 ha is non-koala habitat) of the 215 ha site and will provide residential, school and neighbourhood centre uses intertwined with passive open space and water sensitive urban design outcomes (refer to FIGURE 3 – Proposed Plan of Development for the Providence East and South Project).

2.2. MNES Impact Summary

The assessment of the construction and operational impacts associated with the proposed development indicate that 131.72 ha of critical koala habitat and 67.72 ha of GHFF foraging habitat will be cleared or functionally lost. Residual impacts will be created from the direct loss and functional loss of approximately 131.72 hectares of critical Koala habitat and 67.72 ha of Grey-headed Flying-fox foraging habitat.

Results of the Modified Habitat Quality Assessment (**MHQA**) tool indicate that the critical Koala habitat on the impact site scored a value of 4 (out of 10), while the results of the Grey-headed Flying-fox Foraging Habitat Assessment (GHFF FHA) tool indicate that the GHFF foraging habitat on the impact site scored a value of 4 (out of 10). Refer the <u>Ripley Valley PDA Providence East and South, QLD – EPBC Act Preliminary Documentation</u>, *Saunders Havill Group*, 2022.



Overall, the Daleswan Pty Ltd Providence East and South Development will see the direct removal or fragmentation of approximately 131.72 hectares of *critical habitat* for the Koala and 67.72 ha of *foraging habitat* for the GHFF. As such, the residual impacts on the Koala as a result of the development will be the <u>loss and 'functional loss' of 131.72 hectares of critical habitat with a MHQA score of 4</u> and the residual impact on the GHFF as a result of the development will be the <u>loss of 67.72 hectares of foraging habitat with a GHFF FHA score of 4</u>.

Attribute	Site Summary Details			
EPBC Reference	2018/8347			
Locality	Ripley – Ripley Valley Priority Development Area			
Lot / Plan	Part of Lot 7047/SP307629, Lot 112/M3174, Lot 110/SP169001, Lot 190/S31349 and Lot 190/S31349			
Land Size	215 hectares			
Proposal Description	The proposed master planned residential development covers approximately 160 ha of the referral area, with ~50 ha retained as conservation and ~32 ha considered non-koala habitat.			
Impact Summary	Removal and functional loss of approximately 131.72 ha of critical Koala habitat and at a MHQA score of 4.			
	Removal and functional loss of approximately 67.72 ha of GHFF foraging habitat at a GHFF FHA score of 4.			
Mean Temperature Range (°C)	13.9 – 27.3℃			
Mean Annual Rainfall (mm)	878.50 mm			
2019 Rainfall (mm)	377 mm			
Topography	The referral area is located on the north-western foot slopes of Spring Mountain, which has a peak of 360 m AHD, with site surface elevations ranging from 150 m AHD in the south-east to 60 m AHD in the north-east The referral area is located within the catchment of Bundamba Creek and is traversed by Lucas Creek, an ephemeral tributary of Bundamba Creek			
Soils (Land Zone Classifications)	Land Zone 3 – Alluvium (river and creek flats) Land Zone 9 – 10 – Undulating country on fine grained sedimentary rocks and sandstone ranges			
VMA Vegetation Classification	Category X (non-remnant) Category B (remnant) ('least concern')			

Table 1:Impact Site (Summary Details)



Broad Vegetation Group Koala Habitat Suitability (Rhodes <i>et al.</i> 2015)	BVG 10b 'low suitability' (majority of impact site)
Dominant Tree Species	<i>Corymbia citriodora</i> (Spotted Gum), <i>Eucalyptus crebra</i> (Narrow-leaved Ironbark) <i>Eucalyptus tereticornis</i> (Forest Red Gum) and <i>Corymbia tessellaris</i> (Moreton Bay Ash).
MHQA Results	Koala Habitat Score of 4 / 10
GHFF FHA Results	Grey-headed Flying-fox Foraging Habitat Score of 4 / 10
Distance to Offset Site	76.50 km



Site DCDB

Figure 2	Daleswan
Site Aerial	Pty Ltd
File ref. 9896 E Figure A2 Site Aerial A	Si saunders
Date 6/07/2021	havill
Project Ripley Road, Ripley	group
0 50 100 200 300 400 m Scale (A4): 1:11,000 [GDA 1994 MGA Z56]	THESS PLANS HAVE BEEN PREMARED FOR THE EXCLUSION USE OF THE CLENT SAN RESERVALE GROUP CANNOT ACCEPT REPORTING THE FOR MAY USE OF ON RELAYCE UPON THE CONTENTS OF THESS DRAWING BY ANY THRID (BRTY.

Figure 3. Proposed Development





Ripley Road, Ripley



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 relations. 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 disclams any lability 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 than. approval states otherwise, this is not an approved plan. Layer Sources © State of Queensland 2021. Updated data available at

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Legend



Proposed Development



Conservation

Residential / School / Neighbourhood Centre Area

Passive Open Space / Water Sensitive Urban Design Area

lssue	Date	Description	Drawn Checked
A	20/07/2021	Preliminary	DL JG
0 Transw	50 100	150 200 250 m	
Addre	ess / RPD: 7 1	7047/SP307629, 112/M3174 11/SP169001, & 190/S3134	, 110/SP169001, 9

20/07/2021 | 9896 E A 1 Proposed Development A



3. Offset Site (Summary)

Avonvale and Cherry Gully forms is located on Littles Road, Toogoolawah. The property is within the Somerset Regional Council and is approximately 5.8 km directly west of the Toogoolawah township. Cherry Gully is balance land within the cadastral boundaries of the Avonvale and Cherry Gully Station EPBC offset approved to compensate for the significant residual impacts associated with EPBC2015/7530 (Refer <u>FIGURE 4 - Offset Site Context</u>). Refer to <u>TABLE 2 - Offset Site Details</u> including the cadastral allotment descriptions. The land tenure of the Cherry Gully is freehold, where it retains a *rural* land use zoning under the Somerset Regional Council planning scheme. The offset site can be accessed via Littles Road from the north which is a rural road off Ivory Creek Road. (refer to <u>PLAN 1 – Offset Site Allotments & Aerial</u>). The Offset Site is located 76.50 km north-west of the impact site (refer to <u>PLAN 2 – Impact / Offset Site Context</u>).

The offset area did not form part of the EPBC2015/7530 or EPBC2019/8539 offset solution, and as such, it is still utilised for cattle grazing.

<u>(Site Photos – Cherry Gully)</u>



Figure 4 Offset Site Local Context





One Environment

Avonvale & Cherry Gully Stations -Offset Management Plan (OEs1)

EPBC 2015/7530

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Offset Site boundaries



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References - © State of Queensland (Department of Natural Resources, Mines and Energy) 2019

PLAN SITE BOUNDARIES _





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CHERRY GULLY & AVONVALE STATIONS

OFFSET SITE ALLOMENTS

EPBC 2018/8347 OFFSET AREA

Existing Cherry Gully & Avonvale Station offset areas

OFFSET SITE EASEMENTS/STRATA





PLAN 2 - IMPACT / OFFSET SITE CONTEXT



FILE NAME: OEs_3 PLAN 2 Impact_Offset Context V2 6/04/2022 CHERRY GULLY & AVONVALE STATIONS -OFFSET MANAGEMENT PLAN (OES3)



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Legend

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SOUTH EAST QUEENSLAND BOUNDARY

IMPACT SITE

aphies, CNES/Airbus DS, USDA, USCS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Carmin,





Attribute **Site Summary Details EPBC Reference** 2018/8347 Suburbs of Biarra / Toogoolawah In the Somerset Regional Council Area Locality Lot / Plan Multiple Lots within the Avonvale and Cherry Gully Station Aggregation **Proposed Offset Size** 161.5 hectares 13.5 – 26°C Mean Temperature Range (°C) Mean Annual Rainfall (mm) 987 mm 431.6 mm (Somerset Region was declared a drought zone in 2019) 2019 Rainfall (mm) Undulating country ranging from a floodplain adjoining lvory Creek, rising Topography to a steeper ridgeline along the eastern boundary. Soils (Land Zone Classifications) Land Zone 11 – Hills and lowlands on metamorphic rocks VMA Vegetation Classification Category X (non-remnant) Broad Vegetation Group Koala Habitat Suitability (Rhodes et al. BVG 13c 'suitable' (majority of offset site) 2015) Eucalyptus crebra (Narrow-leaved Ironbark), Eucalyptus tereticornis (Forest **Dominant Tree Species** Red Gum) and Corymbia erythrophloia (Variable-barked Bloodwood) **Baseline MHQA Results** EMZ 1 – Koala Habitat Score of 3 **Baseline GHFF FHA Results** EMZ 1 – GHFF Foraging Habitat Score of 3 76.50 km **Distance to Impact Site**

Table 2: Offset Site (Summary Details)

3.1. Offset Site Values

The offset land vegetation at Avonvale and Cherry Gully comprises of open grazing, non-remnant vegetation. The non-remnant vegetation consists of cleared grazing land and sapling regrowth patches. Direct and indirect evidence of feral dogs was recorded throughout the offset site.

The open grazing country within Avonvale and Cherry Gully is dominated by cleared cattle grazing land with limited to no canopy trees. The entire 161.5 ha site consists of open grazing country. This non-remnant area extends from the foothills and flat of Ivory Creek to the hills of Cherry Gully in the eastern and western aspects of the site.

Where scattered juvenile regrowth canopy trees were observed, the species consist of *Eucalyptus crebra* (Narrow-leaved Ironbark), *Corymbia erythrophloia* (Variable Barked Bloodwood) and *Eucalyptus tereticornis* (Forest Red Gum). Given the sparse, juvenile nature of the scattered canopy species, the vegetation does not meet the Queensland



Government's definition of 'remnant' or 'high-value regrowth'. Where observed, the species within this vegetation community are representative of 'of concern' RE12.11.14. Further, cross-reference with the pre-clear regional ecosystem mapping indicates that the dominant regional ecosystem across the non-remnant vegetation area is 'of concern' RE12.11.14.

3.2. Koala Offset Values / Suitability

The Offset Site is located within South East Queensland and in the same Bioregional Zone as the impact site. The broader Avonvale and Cherry Gully Stations are known to be utilised by koalas, with four (4) individuals observed during preliminary offset assessment surveys for EPBC2015/7530 in 2019/2020. The koalas were observed in *Eucalyptus tereticornis* (Forest Red Gum), *Eucalyptus crebra* (Narrow-leaved Ironbark) and *Lophostemon confertus* (Brush Box) specimens.

The Somerset Regional Council, particularly the sub area reflected by the former Esk Shire Council is known to support a sizable and healthy Koala population. The *University of Queensland (UQ) Koala Research Unit* has been conducting various bodies of research since 2013 into the region's koala population, with particular interest in its capacity to resist disease and thrive by comparison to most other locations in South East Queensland. Ecological researcher and known koala expert, Dr Bill Ellis is quoted in relation to the Somerset Koala Research findings as saying:

"Finding, identifying and protecting these kinds of populations is probably a key to making sure that we do have koalas in south-east Queensland in the long term" (Wilson, 2013).

The immediate Township of Toogoolawah (approximately 5 km from the Offset Site) has taken a local interest in the future of the region's koala population and using a combination of Government and Private land holders land tenures designated and planted out a new koala corridor on the edge of town. All works and the ongoing maintenance of the corridor is through volunteers including the Local State High School [A.R.R.O.W. (2018)]. One positive result of this level of community interest is the active recording and reporting of koala sightings in the locality. Within the past 11 years (2010 – 2021), 23 records (27 including site records (seven of the records were dead or injured koalas)) of koalas in close proximity to the offset site have been documented.

More broadly the Offset Site and particularly the component committed as the Offset Area is predominantly located within and adjoining the State-Wide Regional Terrestrial Corridor #29 mapped in the *ShapingSEQ - South East Queensland Regional Plan 2017*, (State of Queensland, 2017). The State-Wide Regional Terrestrial Corridor #29 extends south from Emu Creek to Mount Lawson capturing *Deongwar State Forest, Ravensbourne National Park* and *Lockyer National Park* (DEHP 2016). There are no regulatory provisions controlling or achieving this regional biodiversity corridor with the State Government yet to develop a program to incentivise ecological stewardship on large privately-owned farm holdings. This Offsite Site provides a major opportunity to establish this strategic outcome.

Refer to <u>PLAN 3</u> – Showing Contextual and Site Koala Values:

- Location of Bioregional Corridor Extent
- Suitable Habitat and Revegetation Locations for Koalas

• Local and Site Collected Records for the Koala



CONTEXTUAL / SITE KOALA VALUES PLAN 3 -

CHERRY GULLY & AVONVALE

EPBC 2018/8347 Offset area

SEQ REGIONAL PLAN - BIODIVERSITY CORRIDORS

STATIONS

OFFSET CARETAKER & MAINTENANCE COMPOUND



VM REGIONAL ECOSYSTEM MAP VII (REMNANT VEGETATION)

CATEGORY A OR B AREA CONTAINING

ENDANGERED REGIONAL ECOSYSTEMS

CATEGORY A OR B AREA CONTAINING

OF CONCERN REGIONAL ECOSYSTEMS

CATEGORY A OR B AREA THAT IS A

LEAST CONCERN REGIONAL ECOSYSTEM

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Koala Records (DES, 2021)

KOALA FIELD SURVEY RECORD

FILE NAME: OEs_3 PLAN 3 Contextual Site Koala Values V2 6/04/2022



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Koala Records (ALA, 2021) QLD Koala Hospital Records

INJURED

DECEASED

ORPHANED

SICK AND/OR WASTED





3.3. Grey-headed Flying-fox Values / Offset Suitability

By comparison to research and precedence with the Koala, less is known on both impacts and offsets for Greyheaded Flying-fox, particularly when camps or roosting sites are not directly effected. Research notes scarcity of food sources particularly in the Winter and Spring periods as resulting in animal weight loss and seasonal movement of camp numbers (*Eby et al, 2008*). Tree species known to provide nectar, flower or fruit resources for the Grey-headed Flying-fox within 50km of a known population (Camp site) are considered to achieve the definition of *Foraging habitat critical to the survival* of the species.

A number of the dominant tree species existing and proposed to be planted on the Offset Site provide flower and fruit during the Winter and Spring periods (Refer <u>TABLE 3</u>).

Table 3: Winter / Spring Flowering – Fruiting Tree Species – Offset Site

Offset Site Tree Species	FLOWERING	SPRING	WINTER
	PERIOD		
Eucalyptus crebra (narrow-leaved ironbark)	Throughout Year	yes	yes
Eucalyptus tereticornis (forest red gum)	June- Nov	yes	yes
Eucalytpus melanophloia (silver-leaved	Oct-Mar	yes	-
ironbark)			
Lophostemon confertus (brush box)	Sept- Feb	yes	-
Corymbia erythrophloia (variable-barked	Feb-April	-	-
bloodwood)			
Corymbia tessellaris (moreton bay ash)	Nov-Jan	yes	-
Corymbia citriodora (spotted gum)	April- Nov	yes	yes
Angophora subvelutina (broad leaved apple)	Nov-Dec	-	-
Eucalyptus siderophloia (ironbark)	May-Sept	yes	yes

The Offset Site is located 16.6 km from the Esk (156) Camp Site, which on the Department of Environment's National Flying Fox Monitoring Viewer retains one of the larger and consistently recorded colonies of Grey-headed Flying-fox in South East Queensland. The Avonvale and Cherry Gully offset area will result in the legally securing of large tracts of foraging habitat listed as habitat critical to the survival within close proximity to a major known camp site. Additionally, the site already provides winter and spring flowering trees, which will be increased and expanded through rehabilitation and revegetation works. As noted under the koala values the offset site also occurs contextually amongst a large bioregional corridor where existing tracts of like habitat have been mapped.

Refer to <u>PLAN 4</u> for Grey-headed Flying-fox Regional Ecosystems, the Esk (156) Camp site and corridor mapping around the Offset site.

PLAN 4 - GREY-HEADED FLYING-FOX VALUES / CAMP SITES





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3.4. General Suitability EPBC Offset Policy Criteria

Table 4: Offset Site (General Suitability)

No.	Offset Suitability Criteria	Avonvale and Cherry Gully Offset Area		
		The Offset Area delivers a conservation gain for the Koala and Grey-headed Flying-fox through:		
1	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	 a) The creation of new habitat for both protected matters through the revegetation of 161.5 ha. The revegetation is to consist of species known to be utilised by koalas on-site (<i>Eucalyptus tereticornis, Lophostemon confertus</i> and <i>Eucalyptus crebra</i>), along with other endemic species occurring on-site and consistent with the pre-clear regional ecosystem. Combined with the adjoining approved offset area on the land holding to form a total conservation area of 1,359.30 ha of land. b) Providing new connectivity with surrounding habitat for the protected matters. c) Providing new connectivity to the approved EPBC2015/7530 and EPBC2019/8539 offset. d) Introducing, funding and continually improving Offset Area Management Actions to reduce and manage threats (wild dogs, Lantana) in protected and created habitat areas. e) Averting the direct and indirect losses via declaring the land a Voluntary Declaration area for High Value Conservation under the <i>Vegetation Management Act 1999</i>. This removes future wholesale and selective clearing opportunities and through the management plan removes ongoing impacts caused by livestock intrusion into habitat areas. f) Provides a 161.5 ha environmental offset within a regional mapped biodiversity conservation corridor. 		
		Through the achievement of the above, the proposed offset meets the conservation gains listed in the Koala Recovery Plan (2022).		
2	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 Daleswan Pty Ltd Providence East and South Project for GHFF (194.77%) and Koala Habitat (100.13%). The Offset Area is wholly achieved through direct delivery to land.		
3	be in proportion to the level of statutory protection that applies to the protected matter	At the time of the EPBC referral, the Koala and the Grey-headed Flying-fox were listed under 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.		
4	<i>be of a size and scale</i> <i>proportionate to the residual</i> <i>impacts on the protected</i> 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 and the Grey-headed Flying-fox Foraging Habitat Assessment (FHA)		



		methods. Within the Assessment Guide calculator the Quantum Impact for each species is listed as:
		 Grey-headed Flying-fox (27.09 ha) Koala (52.69 ha)
		To achieve an offset for both of these impacts the Offset Area provides a direct land based outcome over 161.5 ha entirely through habitat recreation activities on historically cleared land devoid of native vegetation.
5	effectively account for and manage the risks of the offset not succeeding	The Offset Area forms part of the balance land of the approved EPBC2015/7530 and EPBC2019/8539 offset solutions, which comprise direct large singular land- based outcome in a strategic location known to support both habitat an animals from the impacted protected matters. This Offset Management Plan identifies 8 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 Environmental Management Zone 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 offset land are achieved and risk of the offset not succeeding is mitigated.
		Repetitive monitoring and survey replication is 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.
6	be additional to what is already required, determined by law or planning regulations or agreed to under other schemes or programs	The Daleswan Pty Ltd Providence East and South Project occurs in the Ripley Valley Priority Development Area (PDA) declared by the State Government for the fast-tracking of new housing fronts to ensure South East Queensland can cater for the predicted demand. There are few environmental controls at the impacts site with the Queensland Government's <i>Environmental Offset Act 2014</i> not being applicable. There are no guidelines or controls around offset or rehabilitation for the Grey- headed Flying-fox. The proposed offset area (Cherry Gully) does not form part of the approved EPBC2015/7530 and EPBC2019/8539 and as such, is still utilised for cattle grazing activities, and is not protected or managed for conservation purposes. Further, under the <i>Biosecurity Act 2014</i> , 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 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). Therefore, without the triggering of the EPBC Act and the requirement to obtain the achieved approval the offset as proposed is not required for the protected matters and the offset site would not be protected in perpetuity for conservation purposes. Therefore, without the triggering of the EPBC Act and the Controlled Action Assessment the offset as proposed in the Offset Management Plan is not required for either of the protected matters and the offset site would not be protected in perpetuity for conservation purposes.
7	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 <i>Vegetation Management Act 1999</i> . 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.
8	have transparent governance arrangements including being able to be readily measured, monitored, audited and enforced	The Offset Site is owned by One Environment who have entered into a legal contract to deliver and manage the outcomes listed in the Offset Management Plan and conditioned in EPBC 2018/8347. Clearly articulated goals are set within this Offset Management Plan for each proposed action within the Environmental Management Zone (EMZ). Collectively these goals link directly to the achievement of the overall <i>conservation gain</i> for the protected matters as designed, assessed and calculated through the selection and delivery of the Offset Area. The Management Tables in Section 5.0 of the OMP are designed to be measured, monitored, audited and enforced year upon year during the life of the offset.



4. Offset Area Design

The Offset Area covers the balance of available land in Cherry Gully and a small tranche on Avonvale, adjoining lvory Creek. The offset has been designed to provide north-south connectivity to existing surrounding habitat and east-west connectivity to the approved EPBC2015/7530 and EPBC2019/8539 offset areas. As such, the offset aims to achieve the following:

- Habitat recreation by revegetating cleared land into habitat in logical infill locations to maximise the area and width of dedicated offset land.
- Habitat recovery and re-connection through strategically located restoration and revegetation adjacent to existing habitat and adjoining approved restoration areas. Reinstating and enhancing habitat on the Offset Land provides for direct wildlife connectivity between on / off-site habitat tracts to the north and south and east and west to the lvory Creek corridor.
- Connect the adjacent retained remnant ridgeline vegetation communities with the riparian and alluvial flats being reinstated with Koala and GHFF Habitat through EPBC 2015/7530 and EPBC2019/8539.

For the purposes of management and improvement monitoring the Offset Area has been categorised as one (1) distinct Environmental Management Zone (EMZ) based on existing habitat condition and desired environmental offset principles. Section 4.0 of this OMP provides a brief description of the EMZ and outlines core objectives sought within the EMZ as part of the overall offset outcome. The designation of the Offset Area into an EMZ is specifically linked to Environmental Management Action Tables in Section 5.0 of the OMP allowing itemised tasks to reference specific geographical areas within the Offset Site.

Refer to <u>PLAN 5</u> for the Overall Offset Area Design designating the spatial extent of the Environmental Management Zone (EMZ).

The total Offset Area is 161.5 ha which is categorised into the following management zone:

– <u>Environmental Management Zone 1</u> – Open Grazing Country [Category X Vegetation] (161.50ha)



4.1. Environmental Management Zone 1 – Open Grazing Country (Category X Vegetation)

Environmental Management Zone 1 is defined through its primary role of habitat creation and covers 161.5 ha of the Offset Area. Existing habitat values for the Koala and Grey-headed Flying-fox (GHFF) range from marginal (paddock trees) to non-existing (grass plains). There are disconnected locations throughout EMZ 1 where native vegetation values occur in a cluster or strand of healthy specimens, however these were not observed or considered to be contribute to the functional role of habitat available for koalas and GHFF.

The revegetation and reinstatement of native vegetation throughout EMZ 1 results in Three (3) critical objectives, including:

- Expand available Koala and Grey-headed Flying-fox resources through new habitat;
- Provide north-south and east-west connectivity to surrounding habitat. Importantly the Cherry Gully areas complete the very large Cherry Gully Station environmental offset area and removed the future risk of co-use areas for rural purposes.; and
- Provide east-west connectivity to the approved EPBC2015/7530 EMZ 4 offset area and connect adjacent ridgeline remnant vegetation with reinstated riparian and alluvial rich soils being replanted with habitat trees. This connectivity will ensure that long-term koala movement is provided to the eastern tract of contiguous vegetation.

EMZ 1 occurs predominantly on Land Zone 11 country. This land zone and remnant vegetation community on the broader Avonvale and Cherry Gully Stations is known to support koala usage, and as such, is desirable for habitat recreation. EMZ 1 will achieve its management objectives through:

- 1. Removing weed sources and dense matted pasture grasses from the soil profile in preparation for mass planting of native trees and other species known to support the Koala and Gray-headed Flying-fox.
- 2. Sequential and long-term exclusion of cattle uses through fencing.
- 3. Mass replanting with native tube stock and seedlings endemically collected from site and propagated in the on-site purpose built nursery (associated with EPBC2015/7530).
- 4. Plant maintenance, weed and pest management through the varying stages of revegetation to mature self sustaining regrowth ecosystems.

Further details on specific management actions for EMZ 1 are located in the Tabulated Management Actions in Section 5.0 of this Offset Management Plan.

PLAN 5 - OFFSET AREA DESIGN



FILE NAME: OEs_3 PLAN 5 Offset Area Design V3 21/04/2022

CHERRY GULLY & AVONVALE STATIONS- OFFSET MANAGEMENT PLAN (OES3)						
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THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. ONE ENVIRONMENT GROUP CANNOT ACCEPT REPONSIBLITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY. REFERENCES - © STATE OF QUEENSLAND, 2022

Legend

N

CHERRY GULLY & AVONVALE STATIONS

EPBC 2018/8347 Offset area

Existing Cherry Gully & Avonvale Station Offset Areas

Future Offset Area [Not Part of this Application] OFFSET CARETAKER & MAINTENANCE COMPOUND

OFFSET DESIGN

ENVIRONMENTAL MANANGEMENT ZONE OPEN GRAZING COUNTRY - CATEGORY X VEGETATION [161.5 HA]



FUTURE OFFSET AREA SUBJECT TO EXTERNAL LAND-HOLDER NEGOTIATIONS (NOT PART OF THIS APPLICATION)





5. Offset Land Management Actions

There are 7 categories of actions listed as relevant and required through the Offset Area. Although in many actions there is overlap, primarily the specific tasks can be considered to either reduce or remove an existing threat or improve or create new habitat opportunities. Some actions apply specifically to the Koala species and others are designed to improve habitat and outcomes for both Koalas and Grey-headed Flying Fox. Some actions are limited to acute or specific locations, others apply to the entire Offset Area and selected actions will apply to the entire land holding, inclusive of areas retained for grazing.

Where logical, performance indicators have been transcribed from the Offset Assessment Chapter included in the Preliminary Documentation Submission (*Saunders Havill Group, 2021*). This includes the use of the *Modified Quality Habitat Assessment* (MQHA) method for Koala habitat and the *Grey-headed Flying-fox Foraging Habitat Assessment* (GHFF-FHA) tool for measuring GHFF habitat to set benchmarks and targeted improvements within the EMZ.

Actions to be completed in accordance with this OMP include:

- <u>Action 1:</u> Vertebrate Pest Management (Primarily Targeting Feral Dogs)
- <u>Action 2:</u> Weeds of National Significance (Reduction & Management)
- <u>Action 3:</u> Stock Management
- Action 4: Access Management, Trespass and Neighbouring Stock Mustering Controls
- Action 5: Wildfire Management
- Action 6: Native Seed Collection & Propagation
- Action 7: Revegetation (Habitat Creation) Activities

Each of these management actions is tabulated into a more detailed format. The tables are set out to respond to the following criteria:

Outcome: What is the action / task designed to achieve and why is it necessary?

Action Description: What are the tasks proposed?

Action Location(s): Where on site is the action proposed?

Action Timing: When and how will the action / task be implemented, started, completed?

Responsibility: Who will complete the action and who will provide the funding?

Measured & Monitored By: How will the action be measured, how will the outcome of the action be measured, by what method and timing?

Adaptive Management: What's the procedure for correcting or amending the action if the proposed outcomes are not being achieved?



Avonvale & Cherry Gully Offset Area Offset Management Plan Action Management Tables



5.1. Action 1: Vertebrate Pest Management (Primarily Targeting Feral Dogs)

The Department of Agriculture & Fisheries (DAF) – Biosecurity Queensland maps feral dogs through the Somerset Regional Council Area as 'common'. Feral dogs are listed as a 'class 2' pest in the Somerset Regional Council Pest Management Plan and noted within many contemporary newspaper articles and Council's meeting minutes as increasing in population since 2013 [Ref: Elsome, D (2018)]. Council have introduced a feral dog bounty program providing \$25 for each scalp provided as evidence. Council also provide baiting and training on use of baiting to land holders, however do not retain their own pest management officer.

Historical land holder and farm staff observations on the broader Avonvale and Cherry Gully Stations have antidotally noted feral dogs as an issue for stock and that the problem is shared by all surrounding cattle grazers. Site surveys associated with Avonvale and Cherry Gully Station EPBC2015/7530 offset located feral dogs, through the vegetated and cleared portions of the Offset Area. Additionally, the remnants of a dead koala was recorded on-site with evidence suggesting the mortality was most likely the result of a dog attack. There are 23 local records for koalas of which 7 are noted as severely injured or killed animals.

A core role of the Action 1 Offset Management Tasks will be for the prolonged control and reduction in feral dogs over the offset land for the offset period.

Site Images of Feral Dogs / Koala Carcass and Other Pest Species:





Table 5:Offset Area – Action 1 – Management Actions

Action Description: What are the tasks proposed?	 Reduce the occurrence of Vertebrate pest species (Namely feral dogs) to below 5% of the baseline survey within the Offset Area within 5 years from the commencement of the offset. Reduce koala injury or mortality within the Offset Area to zero (0) within 5 years from the commencement of the offset. Maintain reduced occurrence and koala injury and mortality rates for the life of the offset (20 years – reduction achieved in 5 years maintained reduced rates for 15 years) 		
Action Location(s): Where on site is the action proposed?	 Vertebrate Pest Management is to occur in the Environmental Management Zone of the Offset Area (EMZ 1). Vertebrate Pest Management will be extended to the entire offset area covering retained grazing areas to ensure dispersal and ambush targets are located and controlled. 		
Action Timing: When and how will the action / task be implemented, started, completed?	 Year 1 – Complete Detailed Baseline / Seasonal Pest Management Survey (this will benchmark off base line surveys nearing completion at the date of drafting this OAS) Establish an on-site monitoring program to deliver baseline data for measuring occurrence and incidence reduction of specific control techniques (eg baiting / shooting /trapping). Methods to include: Formal recording of site and surrounding stock losses Remote sensor cameras with baited cages Scat occurrence, age and type surveys Develop and implement an on-site recording protocol for incidental observations of pest management species by Station and Offset Staff. 		
	 Year 1 – Consult with Somerset Regional Council and or Regional Pest Management Representative to discuss best methods and the broader strategy for the region. This consultation is to be in conjunction with the consultation as part of the EPBC2015/7530 offset. Year 1 – Development initial Pest Management Implementation Strategy and consult with adjoining land holders for coordinated approaches to wild dog population reduction. This pest management implementation strategy is to be in conjunction with the EPBC2015/7530. This collaboration will ensure the time lag to implementation is reduced. 		



Years 2 – 5 – Commence Targeted Pest Management Activities	
 Quarterly Spotlight Diurnal Hunting (Shooting) Program. Implement 1080 baiting program in February to May and September to November in accordance with Somerset Regional Council's recommended guidelines. Include annual trapping/baiting/hunting event targeting feral dogs species. 	
<u>Years 2 – 5</u> - Decommissioning and removal of any pest species denning, foraging or breeding features located during the baseline studies	
<u>Year 5</u> – Remobilise and Replicate Detailed Baseline / Seasonal Pest Management Survey – Compare and report on data in year 5 Offset Area Annual Report (OAAR) 5 to demonstrate that completion criteria has been met (less than 5% of the year 1 baseline survey results and zero (0) koala mortalities or injury in the Offset Area), along with proposed adaptive management amendments to the Targeted Pest Management Activities.	
<u>Years 6-10</u> – Continue to implement Pest Management Strategy / Actions – In accordance with any recommended adaptive management changes incorporated in response to Year 5 baseline surveys as documented in the OAAR.	
Year 10 - Remobilise and Replicate Detailed Baseline / Seasonal Pest Management Survey – Compare and report on data in year 10 OAAR to ensure that completion criteria has continued to be met (less than 5% of the year 1 baseline survey results and zero (0) koala mortalities or injury in the Offset Area), along with proposed amendments to the Targeted Pest Management Activities.	
<u>Years 11-15</u> – Continue to implement Pest Management Strategy / Actions – In accordance with any recommended adaptive management changes incorporated in response to Year 10 baseline surveys as documented in the year 10 OAAR.	



	 Year 15 - Remobilise and Replicate Detailed Baseline / Seasonal Pest Management Survey – Compare and report on data in year 15 OAAR (less than 5% of the year 1 baseline survey results and zero (0) koala mortalities or injury in the Offset Area), along with proposed amendments to the Targeted Pest Management Activities. Years 16-20 – Continue to implement Pest Management Strategy / Actions – In accordance with any recommended adaptive management changes incorporated in response to Year 15 baseline surveys as documented in the year 15 OAAR. Year 20 - Remobilise and Replicate Detailed Baseline / Seasonal Pest Management Survey – Compare and report on data in year 20 to demonstrate that completion criteria has been met (less than 5% of the year 1 baseline survey results and zero (0) koala mortalities or injury in the Offset Area).
Responsibility: Who will complete the action and who will provide the funding?	The Offset Provider will establish, resource and fund the pest management components of the Offset Area Strategy. The following tasks will require specific expertise or appointed contractors to complete:
	 Base line and repeat surveys to be completed by a senior tertiary trained ecologist, zoologists or environmental scientist with a minimum of 5 years industry field experience.
	 Use of 1080 or sodium fluoroacetate poisons is regulated under the <i>Health (Drugs and Poisons) Regulations 1996</i>. Deployment and use of this control method to be via a registered contractor holding relevant permits and demonstrated experience.
	 Hunting / Shooting Program to occur in accordance with all relevant Queensland Government permits and regulations.
	 Existing operational farm staff and offset implementation staff to be educated towards the contribution of pest species record keeping.
	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 ACR.



Measured & Monitored By:	Completion of baseline surveys and range estimate of vertebrate pest species populations, seasonal locations, dispersal
How will the action be measured,	patterns and hot spots, including sighting and incidence (death / injury) data. Survey methods and results provided in Year
how will the outcome of the action	1 Offset Area Annual Report (And incorporated in Year 1 Annual Compliance Report for the Approved Action).
be measured, by what method and	
timing?	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 vertebrate pest species on-site (below 5% of the baseline survey results)
	 Vertebrate pest species 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
	 Nil occurrence of injury or mortality of vertebrate pest species on site koala populations
	• Will occurrence of injury of mortality of vertebrate pest species of site koala populations
	Year 5 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 the Department in the Year 5 Appual
	Compliance Report for the Action
	Interim actions and results provided in Year 6-9 Offset Area Appual Report (provided as conditioned in the relevant Appual
	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 below the 5%-year 1 baseline survey results
	verteblate pest species incluence and or occurrence below the 570 year r baseline survey results.



	Or
	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.
	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 below the 5%-year 1 baseline survey results.
	Actions and results provided in Year 11-19 of continuation of Year 10 adaptive management vertebrate pest management strategy (provided as conditioned in the relevant Annual Compliance Report for the Approved Action).
Risks&AdaptiveManagement:what'stheprocedureforcorrectingoramending the action if the proposedoutcomes are not being achieved?	Without intervention and management actions the risk of vertebrate pest species impacts on the koala are assessed as 'High' in Section 7 of this Offset Area Management Plan. This is based on regional and local government data on feral dogs combined with a number of on-site feral dog sightings and koala mortality evidence collected during preliminary surveys. The pest management strategies incorporate intensive implementation methods and three (3) 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 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 Allow the site strategy to assimilate into any new broader threat abatement programs.
The vertebrate pest 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 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.



5.2. Action 2: Weeds of National Significance (Reduction & Management)

Preliminary site surveys and observations over the Cherry Gully land holding recorded a number of weed species, of which three (3) are scheduled as declared weeds under the *Land Protection (Pest and Stock Route Management) Act 2002* or now listed as 'restricted invasive' plants under the *Biosecurity Act 2014*. The most regularly recorded and in locations abundant species are *Lantana camara* and *Lantana montevidensis*. The Queensland Government Department of Agriculture and Fisheries (DAF) maps the Somerset Region as containing widespread common and abundant infestations of Lantana. The Somerset Regional Council 2013-2018 Pest Management Plan schedules Lantana amongst the priority pest species noting it as abundant and widespread through the region with a 'high' capacity to spread and a 'low' capacity for Council to successfully control.

Lantana is a Weed of National Significance under the EPBC Act. In 2006 Lantana was nominated by the **NSW Government Office of Environment and Heritage** to be listed as a key threating process under the EPBC Act:

"The invasion, establishment and spread of Lantana camara impacts negatively on native biodiversity including many EPBC listed species and communities." (Source: Key Threatening Process Nomination Form)

"Lantana is a Weed of National Significance. It is regarded as one of the worst weeds in Australia because of its invasiveness, potential for spread, and economic and environmental impacts. Lantana forms a dense, impenetrable thickets that take over native bushland."

(Source: Weed Management Guide – Weeds of National significance – Lantana – National heritage Trust)

"L. camara may change soil microhabitat through shading, self-mulching, and altered water and nutrient balances. Lamb (1988, cited in Swarbrick et al. 1995) identified an increase in soil nitrate in eucalypt woodland following Lantana invasion, to the benefit of the Lantana and other weeds, and to the detriment of some native species, and a decline in other nutrients. Gentle and Duggin (1998) point to Lantana's ability to aggressively compete for and sequester surface-soil nutrients, such as are made available by disturbance episodes, and verified experimentally Lantana's ability to out-compete and suppress an analogous native coloniser of mesic forests (Choricarpia leptopetala, Myrtaceae)."

(Source: Lantana camara - key threatening process listing - NSW Government)

Lantana occurs on the offset landholding both in open paddock areas as isolated clusters and thickets and as a dominant shrub or creeper through gully areas. 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 site has not been calculated, however conservatively it is estimated that 10% of the land holding is affected by Lantana and this primary occurs in the gully areas forming part of the Offset Area (Approximate estimate of effected areas extrapolated from transect data is 6-10 ha).

Lantana infestations suppress and inhibit the natural regeneration of regrowth vegetation on-site which directly limits the growth rates and regeneration of primary and secondary Koala tree species 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 additionally form a barrier to terrestrial species, which would include limiting the Koalas ability to access areas containing and over-canopy of Koala food trees (many of these areas were impenetrable for human survey).

Site Images of Lantana Infestations





Table 6:Offset Area – Action 2 – Management Actions

Action Description: What are the tasks proposed?	 Removal and control of all major Lantana infestations from within the Offset Area using a variety of mechanical and herbicide methods. Lantana infestations are to be reduced to below 5% of the Offset Area. Ongoing maintenance rotations to retain Lantana extents within the Offset Area at or below the reduced extent achieved through weed management actions. Prevent the further spread or establishing of new Lantana outbreaks within the Offset Area (primarily by excluding cattle from EMZ 1).
Action Location(s): Where on site is the action proposed?	 Management of Lantana is to occur in the entire Offset Area
Action Timing: When and how will the action / task be implemented, started, completed?	 Year 1 – Complete Detailed Baseline / Weed Extent Survey Use an Antenna based GPS system to map the full extent (as description polygons) of all Lantana areas within the Offset Area (achieve a total ha extent of weed infestations / occurrences within the Offset Area). 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 stock (cattle) access from Lantana infestation areas within the Offset Area (grazing cattle provide the most continuous source of Lantana spread. By year 2 the entire Offset Areas will retain cattle exclusion fencing – Refer Stock Restrictions management actions – Action 3)
	Years 2-5 – Commence detailed weed management control activities within the Offset Area. Methods deployed based on extent of infestation, existing native values, topography, waterways and other sensitive receiving environments:
	• 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.
Demonstrate a downward trend in the weed extent, vigor and health annually through years 2-5, achieving a significant reduction in <i>Lantana spp.</i> extent within the Offset Area by year 5, with less than 20% of the Offset Area to contain weed infestations. Actions and downward trend to be reported annually in the OAAR.
<u>Year 5</u> – Replicate Detailed Weed Extent Re-Survey through the Offset Area – Include plans and calculations in the Year 5 OAAR demonstrating less than 20% of the Offset Area contains weed infestations.
<u>Years 6-10</u> – 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 <i>Lantana spp.</i> extent within the Offset Area by year 10, with less than 5% of the Offset Area containing weed infestations. Actions and downward trend to be reported annually in the OAAR.
<u>Year 10</u> - Remobilise and Replicate Detailed Weed Extent Re-Survey through the Offset Area – 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 Offset Area containing weed infestations. Provide an update and next steps and recommendations on the Biological Control area and methods.
<u>Years 11-19</u> – 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.
Repeat of Baseline surveys in year 15 and year 20 to demonstrate a maintenance of year 10 significant reductions to the extent of <i>Lantana spp</i> . below the 5%-of the Offset Area.



	Actions and results provided in Year 11-19 of continuation of Year 10 adaptive management detailed weed management
	control methods (provided as conditioned in the relevant Annual Compliance Report for the Approved Action).
Responsibility: Who will	The Offset Provider will establish resource and fund all weed management components of the Offset Area Strategy. The
complete the action and who will provide the funding?	following tasks will require specific expertise or appointed contractors to complete:
	 Base line and repeat surveys to be completed by a senior tertiary trained ecologist, or environmental scientist with a minimum of 5 years industry field experience.
	 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.
	Preparing and issuing Offset Area Annual Reports to the proponent within contracted timeframes for inclusion in the Approved Project ACR.
Measured & Monitored By:	Completion of baseline Lantana surveys providing an actual mapped extent of infestations and occurrences in hectares to
How will the action be measured, how will the outcome of the action be measured, by what method and	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).
timing?	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 20% of the Offset Area.
	Replicate baseline surveys in year 5 to demonstrate less than 20% of the Offset Area contains Lantana spp. infestations.
	Year 5 OAAR to include repeat survey methods, results data and comparative analysis demonstrating less than 20% of the Offset Area contains <i>Lantana spp.</i> 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 <i>Lantana spp.</i> extent within the Offset Area by year 10, with less than 5%
	of the Offset Area containing weed infestations.
	Year 10 OAAR to include repeat survey methods, results data and comparative analysis less than 5% of the Offset Area contains
	Lantana spp. 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 QAAR for issue to the Department in the Year 10 Annual Compliance Report for the Action
	Year 10 OAAR to include update and recommendations on the Biological Control trial, including outlining next steps of
	actions for years 11-19.
	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 the 5% of the Offset Area. 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 spp. is
	maintained below 5% of the Offset Area.
Risks & Adaptive	The primary weed issue through the Offset Area is Lantana. Mapping of Lantana populations and areas is relatively simple
Management: what's the	enabling the tables in this management plan to set a number of weed reduction and management targets.
procedure for correcting or	
outcomes are not beina achieved?	Periodical repeat survey points are designed to deliver data on outcomes being achieved. If the surveys don't demonstrate
	מוכ נמושבוכם בחבבוויברובאג ווב וחוףובחומווטרו גוומובשי ויווו שב מטוטגובט נט.


 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



5.3. Action 3: Stock Management

Avonvale and Cherry Gully historically forms part of the broader Avonvale and Cherry Gully operational cattle stations. Avonvale retains an active 'Environmental Authority' (Permit F1-0048) under the Queensland Government's *Environmental Protection Act 1994* for the operation of feedlot facilities between 1,000 and 10,000 animals. Both properties have historically retained extensive rotational pasture paddocks and selectively vegetated paddocks for the raising of weaners. Cattle or evidence of recent cattle use was observed in all locations of preliminary ecological surveys, with the level of recent intensity directly correlating to the condition of residual biodiversity values.

The pressure and impacts brought on the land holding's Koala and Grey-headed Flying-fox values include:

- 1) The need for wholesale clearing to periodically expand pasture paddocks.
- 2) Cycle tordening and selective clearing to limit canopy cover of native trees to minimise suppression of grass feed.
- 3) Direct trampling and compacting of regeneration areas.
- 4) Spread of weed species and infestations which are also supported by minimising canopy cover and prevention of regeneration.

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 economical factors, however primarily the rise and fall of the cattle price. Regardless the long term and current highest and best use for the land is the continuation of the feedlot operation. 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 is the ultimate proposed solution for restricting stock from accessing environmental Offset Areas. Importantly, the Cherry Gully portion of the offset will complete offset land uses in the Cherry Gully Station, which removes the current co-location of rural uses adjacent to offset areas. This will decrease risks associated with Stock Management at this location. Fencing is costly and time consuming and is programmed to roll out inline with works within the Environmental Management Zone, and as such, will all be in place within 3 years of the commencement of the action and offset (refer

to <u>PLAN 6</u> for the indicative Offset Area fencing locations). Alternatively, all livestock will be removed from the entirety of the Avonvale and Cherry Gully Stations.



Table 7:	Offset Area – Action 3 – Management Actions
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Action Description: What are the tasks proposed?	 Prevention and management of stock from the Offset Area using fauna friendly stock exclusion fencing OR removal of all livestock from the Avonvale and Cherry Gully Stations. 	
Action Location(s): Where on site is the action proposed?	 Environmental Management Zone 1 is to be fenced – Refer to <u>PLAN 6</u> for the indicative Offset Area fencing locations; OR Livestock is to be removed from the entirety of the Avonvale and Cherry Gully Stations 	
Action Timing: When and how	Years 1-3	
will the action / task be implemented, started, completed?	 Fencing in accordance with the indicative Offset Area Fencing Plan (<u>PLAN 6</u>) will commence immediately and is to be completed by end of Year 3. Alternatively, all livestock is to be removed from Avonvale and Cherry Gully Stations. 	
	 A status update on completed fencing locations will be provided in the Offset Area Annual Report for inclusion in the ACR. 	
	Years 4-20 – All fencing will be inspected annually and reported on in the Offset Area Annual Report.	
	OR	
	Year 4-20 – Annual status update to confirm that livestock have continued to be excluded from Cherry Gully Station. This is to be reported on in the Offset Area Annual Report.	
	Fencing is proposed as a permanent outcome and thus there is no currency on removal.	
Responsibility: Who will	The Offset Provider will establish, resource and fund the construction, monitoring, maintenance and reporting on all fencing	
complete the action and who will provide the funding?	(using fencing contractors where deemed appropriate) OR The Offset Provider will remove all livestock from Avonvale and Cherry Gully Station.	



	The Offset Provider is responsible for preparing and issuing Offset Area Annual Reports to the proponent within contract timeframes for inclusion in the Approved Project ACR.	
Measured & Monitored By: How will the action be measured, how will the outcome of the action be measured, by what method and timing?	 All fencing shown on the indicative Offset Area Fencing Plan (PLAN 6) being in place by year 3 reporting OR all livestock has been removed from the entirety of Avonvale and Cherry Gully Station by year 3 reporting. Nil stock breaches into Offset Areas from year 4-20 (post completion of all fencing). No reporting of stock impacts as justification for not achieving: Habitat quality improvements Weed spread targets Annual documented evidence of fence monitoring and maintenance rectifications in each Offset Area Annual Reporting period from years 4-20. 	
Risks&AdaptiveManagement:What'stheprocedureforcorrectingoramending the action if the proposedoutcomes are not being achieved?	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 Offset Area 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.	



5.4. Action 4: Access Management, Trespass and Neighbouring Stock Mustering Controls

Cherry Gully & Avonvale are surrounded to the north, east and south by large cattle grazing land holdings and a number of smaller agricultural farms. On land holdings at this scale it is common for neighbours to access and muster through un-owned adjoining land parcels to connect fragmented land holdings. Additionally, an adjoining land holder may cut a new access track in adjoining un-owned land without permission because of the perceived benefit to both parties, which is typically the case in farming operations.

The impacts of unlawful access and stock mustering mimic those listed in the 'general stock management' section of this management plan (trampling, compacting, weed spread, fence destruction). Without a system for identifying and preventing or controlling access, trespass and adjoining mustering the actions established for on-site stock management will be undermined.



Table 8:	Offset Area –	Action 4 -	- Management	Actions
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Action Description: What are the tasks proposed?	 Prevention / control of unauthorised access, stock mustering and trespass through the Offset Area.
Action Location(s): Where on site is the action proposed?	 The Environmental Management Zone will be fenced, however particularly targeting EMZ contiguous with adjoining land holder boundaries.
Action Timing: When and how will the action / task be implemented, started, completed?	Years 1 • Inspection and rectification of all external fence boundaries • Notification of Offset Areas, purpose and outcomes to all adjoining land owners. Remaining Actions: • Access gates and signage to be installed where Offset Area fencing crosses tracks required to be maintained for external land holder access (As fencing is installed) • No new access tracks through the Offset Area unless to support offset outcomes
Responsibility: Who will complete the action and who will provide the funding?	The Offset Provider is responsible for funding and undertaking all actions relating to access, trespass and neighbouring stock mustering. 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 ACR.
Measured & Monitored By: How will the action be measured, how will the outcome of the action be measured, by what method and timing?	 Copy of notification letter provided to adjoining land holders. Evidence (photos) or erected signage and gates at Offset Area / existing track fencing conflict points. Fence monitoring as per Stock Management commitments No evidence of stock influence in outcomes scheduled for the Offset Area habitat (Eg no stock impacts on the MHQA).



Risks	lisks & Adaptive		tive	Given there is not legal requirement for access or mustering through the land holding (eg no easement, etc) if necessary
Managem	ent:	What's	the	enforcement options are available, however its considered extremely unlikely this would be required provided alternative
procedure	for	correcting	or	access and mustering points are established which don't conflict offset outcomes.
amending the action if the proposed		osed		
outcomes are not being achieved?		d?		



5.5. <u>Action 5</u>: Wildfire Management

The Queensland Government's State Planning Policy mapping tool shows the site contains areas of areas of Very High, High and Medium Potential for Bushfire intensity (refer to <u>FIGURE 5</u> in section 7.1). Similar mapping is contained within the Somerset Regional Council hazard assessment overlays (refer to <u>FIGURE 5</u> in section 7.1). On ground the fuel was generally observed as lower than the high level mapping as vegetated areas had been thinned out to maxmise grazing grasses on the ground layer which also precluded the build up of loose leaf litter. The Pacific View Offset areas predominantly maintain a modified pasture grass understorey which reduces the current level of bushfire risk.

The last recorded wildfires within the vicinity of the Offset Site occurred in September 2018 and involved the evacuation of some residents of the adjoining Toogoolawah township. Avonvale and Cherry Gully Stations were not effected by these fire events. The land retains only sections of vegetation interspersed with open pasture land and includes a system of firebreaks and access tracks for the protection of stock and farming infrastructure. This fire management system will be maintained and evolved as parts of the site transfer from open pasture to revegetation as part of the offset works.

This offset proposal and the actions in this management plan include a number activities which support the expansion and condition of Koala habitat through removal of cattle grazing uses. One unwanted outcome of this habitat creation will be increased fuel loads and vegetated areas supporting the establishment or potential spread of wildfires. High intensity wildfires scold the biodiversity of bushland and the vast majority of terrestrial species, including the koala, perish. Ultimately burned open Eucalyptus woodland communities will recover from fire, however a major event may set the offset outcomes back by a number of years.

As the changed uses on site increase the potential for bushfire, coupled with increasing fire intensity events generally experienced in South East Queensland the need for ongoing and refined bushfire management is an important component of the Offset Area.



Table 9:Offset Area – Action 5 – Management Actions

Action Description: What are the tasks proposed?	 Manage created bushland habitat within the Offset Area to prevent and / or minimise the impact of high intensity wildfires. This will be achieved through: Conversion of the current on-site bushfire management approach into a management plan supported of the changed environmental offset outcomes. Periodical and controlled low intensity burns occurring in a mosaic configuration every 8-10 years through the Offset Area of the property. Creation and alteration of existing fire breaks in support of habitat improvement, expansion and revegetation areas (consider new tracks and breaks in replanting programs). Monitoring of fuel loads through the Offset Area. Establishment of safety and emergency response protocols for wildfire events.
Action Location(s): Where on site is the action proposed?	 In Year 1-4 the risk of wildfire is limited, however, as the EMZ becomes established, the ability for the vegetation to support the establishment and spread of wildfire is increased.
Action Timing: When and how will the action / task be implemented, started, completed?	 Years 1 Continuation of existing fire break infrastructure maintenance (firebreaks and trails) By Year 4 or in conjunction with EPBC2015/7530, whichever is sooner: Develop Offset Area Wildfire Management Plan, as a minimum plan to include: Results of base line fuel load surveys Method and metric for maintaining fuel loads and decreased risk levels Plan of fire tracks, trails and breaks Program for mosaic low intensity control burns Plan to be endorsed by the Queensland Rural Fire Brigade



	<u>Years 4-20</u>
	 Implement Offset Area Wildfire Management Plan
Responsibility: Whowillcomplete the actionand whowillprovide the funding?	The Offset Provider is responsible for funding appropriate qualified bushfire consultants for fuel load monitoring and preparation of the Offset Area Wildfire Management Plan.
	Plan to be endorsed by the Queensland Rural Fire Brigade / Implementation of the plan, specifically the mosaic low intensity back burns to occur under relevant permits and instruction from the Rural Fire Brigade.
	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 ACR.
Measured & Monitored By: How will the action be measured, how will the outcome of the action be measured, by what method and timing?	 No reported deaths of Koalas from wildfire within the OAAR. No reduction (temporary or permanent) in the available foraging and food trees for Koalas during the offset period as a result of wildfire. Offset Area Wildfire Management Plan included within Year 6 Offset Area Annual Report and incorporated into ACR. All Wildfire Management Plan activities (tracks, burns, fuel load reduction, etc) undertaken to be outlined within relevant Offset Area Annual Report.
Risks&AdaptiveManagement:What'stheprocedureforcorrectingoramending the action if the proposedoutcomes are not being achieved?	As fire is a natural occurrence within open Eucalypt woodland and within time bushland will recover from even major events the risks of the Wildfire Management Plan not preventing a wildfire within the Offset Area low is considered of medium consequence. If a major wildfire event occurs within the Offset Area during the offset period the following adaptive management actions will occur:
	1. An post wildfire audit of the damage and cause of the wildfire (where it commenced, direction and area it moved through, which Environmental Management Zones sustained the greatest damage and why, recommendations on actions which could be incorporated to avoid or minimise any future events)



2.	An Offset Area Recovery Plan would be prepared scheduling actions to expedite the recovery and reinstatement of
	values destroyed by fire.
3.	A revised Offset Area Wildfire Management Plan would be developed adopting recommendations and strategies
	from the post wildfire event audit.



5.6. Action 6: Native Seed Collection & Propagation

One of the key innovative measure incorporated in the Offset Management Plan and approval of EPBC 2015/7530 is the establishment of a site nursery for the collection and harvest of koala and GHFF habitat tree seed and the propagation of locally sourced planting stock. The offset proposed for EPBC 2018/8347 is entirely a 161.5ha replanting solution and will benefit from sourcing local stock from the site established nursery. The offset providers ownership of the site provides unrestricted access to areas of existing remnant and regrowth habitat, known to support Koala and GHFF for the collection of seed in alignment with the seasonal fruiting and flowering events. Winter seed collection has already commenced on the broader offset land holding.

The species being specifically planted to benefit the koala and GHFF included the following:

- Angophora leiocarpa
- Angophora subvelutina
- Corymbia citriodora
- Corymbia intermedia
- Corymbia tessellaris
- Eucalyptus acmenoides
- Eucalyptus crebra
- Eucalyptus melanophloia
- Eucalyptus microcorys
- Eucalyptus propinqua
- Eucalyptus siderophloia
- Eucalyptus sideroxylon
- Eucalyptus tereticornis
- Lophostemon confertus
- Melaleuca bracteata
- Melaleuca linariifolia
- Melaleuca trichostachya



The offset providers ownership of the site provides unrestricted access to areas of existing remnant and regrowth habitat, known to support Koala for the collection of seed in alignment with the seasonal fruiting and flowering events. Winter seed collection has already commenced on the broader offset land holding.

The benefit of utilizing, as much as possible, site seed sources is that the specific mix of plants and animals, particularly within the mature remnant areas, have naturally adapted to survive and thrive within the local environmental characteristics (climate, slope, soils). To maximise the success of replanting areas this Offset Area Strategy proposes to expand and build on the direct collection of site seed to be propagated and germinated in a purpose built on-site nursery being established for EPBC 2015/7530 or at an alternative nursery offsite.

The benefits of using local site seed provenance in habitat creation is widely established through research, including:

- The use of local or site based materials from locally adapted ecosystems to minimise the potential for establishment failure and mortality
- Maintains the local/ sub regional genetic architecture of plant and animal species
- Limits the altering or disruption of local ecosystem variations and segregations (Ecotypes)
- Limits the capacity to import external pathogens through offsite plant and soil stock



Action Description: What are the tasks proposed?	 Sourcing, collecting and storing of local seed provenance from vegetated portions of the site for use in the Providence East & South Project offset replanting works. Minor expansion to the on-site nursery for the storage, propagation and germination of native plant seedlings for use in revegetation areas or organizing for seed collected on-site to be propagated and germinated at an alternative offsite nursery
Action Location(s): Where on site is the action proposed?	 Under EPBC 2015/7530 the onsite nursery is to be established external to the Offset Area, adjoining an existing dam or watering facility with access to other available farm infrastructure (power / equipment / facilities / machinery sheds – A temporary seed harvest storage area has been established in a vacated shed at the Feedlot facilities while the permanent nursery location is finalising design analysis). Seed collection programs are occurring in line with various tree species flowering / fruiting seasons through portions of the broader land holding which retain existing vegetation. Harvested native seedlings to be germinated into tube stock for use in revegetation planting in EMZ1 of the Providence East & South Project Offset Area in accordance with the revegetation program. The Providence East and South Project commits to the replanting of approximately 161.5 ha of land on the Cherry Gully and Avonvale.
Action Timing: When and how will the action / task be implemented, started, completed?	 <u>Year 1</u> Ensure existing seed collection program expands to cover the additional proposed replanting area based on the flowering / fruiting seasons for dominant Koala trees species with priority focus on specimens that are known to be utilized by the local koala population. Consult immediately adjoining land holders for permission to harvest seed from adjoining vegetated areas to maximise year 1 collection volumes. Undertake expanded seed collection program within Year 1 (Collection commences when offset commences)

Table 10: Offset Area – Action 6 – Management Actions



	 Continue seed collection program in year 2 until sufficient stock to complete the full replanting of EMZ1 for the Providence East & South Offset has been germinated and propagated within the on-site nursery. Expand and operate on-site purpose built nursery to cater for collected seed, germination and transition of seedlings to tubestock for reuse in site planting.
Responsibility: Who will complete the action and who will provide the funding?	 The Offset Provider is responsible for: Completing the seed collection program using appropriate qualified experts (Accredited Bushland Regenerators) to determined seed collection timeframes relative to targeted species. Fund any additional expansion or construction at the on-site nursery to cater for the Providence East & South Project Offset EMZ1 area and employ necessary experienced and trained staff to operate and harvest on-site stock. Preparing and issuing Offset Area Annual Reports to the proponent within contracted timeframes for inclusion in the Approved Project ACR.
Measured & Monitored By: How will the action be measured, how will the outcome of the action be measured, by what method and timing?	 Minimum 50% of all replanted stock being sourced from site (target is 100 %) Measured through annual nursery stock take providing data on: Volume of seed collected within the annual period % of collected seed successfully germinated and propagated into tube stock Number of plants distributed from the on-site nursery to revegetation areas (provided as a total number and as a % proportion of total plants replanted). Nursery Stock Take statistics to be included as an appendices to OAAR. *Note: due to sequencing issues with the collection of site seed and the operation of the on-site nursery a volume of site seed has been sent to external nurseries for germination.
Risks&AdaptiveManagement:Whatsthe	Failure to achieve on-site seed propagation will result in the shortfall needing to be purchased from local native plant nurseries (Fernwood and Pine Mountain Nursery are both within 30 km of the offset site). The risk of this outcome primarily



procedure for correcting or	occur in the additional costs with outsourcing this activity and the potential increase in stock mortality and need for
amending the action if the proposed outcomes are not being achieved?	rectification plantings. Additional minor risks which can be managed through warranties and certifications derive from the potential introduction of pathogens through external nursery stock and soil.
	Failure to achieved the minimum 50% sourcing of replanted stock from site will be documented in the given Offset Area Annual Report, including details on:
	 % of plants achieved from site Reasons for failure to achieve site seed source targets Changes to collection program or nursery operations to rectify shortfall in subsequent annual period.



5.7. **Action 7**: Revegetation (Habitat Creation) Activities

The entirety of the offset is to consist of habitat creation. The habitat creation is to:

- Expand the available Koala and Grey-headed Flying-fox resources through infill planting of broad hectare cleared land;
- Complete the Avonvale and Cherry Gully offset, significantly expanding existing offset projects and conservation values at the site.
- Provide north-south connectivity to adjacent offsite remnant habitat and expand the two existing EPBC offsets on the land; and
- Provide east-west connectivity to the approved EPBC2015/7530 EMZ 4 offset area. This connectivity will ensure that long-term koala movement is provided to the eastern and western tracts of contiguous vegetation. Additionally the offset will connect adjacent ridgeline remnant habitat with the reinstated riparian and alluvial rich soils being replanted along lvory Creek.

Revegetation will occur through the transitioning of grassed grazing lands into vegetated ecosystems supporting habitat for the koala and GHFF. In total the entire 161.5 ha is proposed for revegetation / habitat creation. Revegetation is a high cost and high labour intensive task from preparation to commencement through to the first 5 years of establishment. To maximise success revegetation is proposed in four (4) tranches of work (4 x 40.4ha tranches). Only planning and preparation works are proposed within year 1 of the offset while collected site seed is propagated and harvested for use in the on-site nursery. A minimum of 1 tranche per 12 months will be completed within years 2-5.

Where vegetation does occur within the Environmental Management Zone, transects have been completed in accordance with the <u>Modified Habitat Quality</u> <u>Assessment (Koala)</u> and <u>Grey-headed Flying-fox Foraging Habitat Assessment</u> tools to establish a base score. The Environmental Management Zone scored a 3/10 under this system for Koala habitat and a 3/10 for GHFF foraging habitat. As areas are revegetated 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.



Table 11:Offset Area – Action 7 – Management Actions

Action Description: What are the tasks proposed?	 Ceasing grazing uses within areas identified for revegetation. Tilling / cultivating grazing grassed area for treatment of pasture grass seedbank in preparation for planting. Revegetation in accordance with the pre-clear regional ecosystem planting mix inclusive of canopy species dominated by Grey-headed Flying-fox foraging tree species and primary and secondary Koala food tree species. Monitoring and maintaining works to self-sustaining regrowth community. 						
Action Location(s): Where on site is the action proposed?	 The entirety of the EMZ is to be revegetated. 						
Action Timing: When and how will the action / task be implemented, started, completed?	Year 1 - Finalise locations, sequence and timing for revegetation program. - Cultivate and prepare Tranche 1 (40.4 ha) area in preparation for year 2 planting. - Create Tranche 1 water source for revegetation establishment (purpose located dam, temporary tank or broadscale irrigation) - Establish photo monitoring points and protocols for Tranche 1 areas (georeferenced star picket at photo monitoring locations) Year 2 - - Cultivate and prepare Tranche 2 (40.4 ha) - Cultivate and prepare Tranche 2 (40.4 ha) area in preparation for year 3 planting. - Establish photo monitoring points and protocols for Tranche 2 areas (georeferenced star picket at photo monitoring locations)						



Year 3	
_	Complete Tranche 2 revegetation zone (40.4 ha)
-	Cultivate and prepare Tranche 3 (40.4 ha) area in preparation for year 4 planting.
_	Establish photo monitoring points and protocols for Tranche 3 areas (georeferenced star picket at photo monitoring locations)
-	Monitor and maintain Tranche 1 (40.4 ha revegetation zone)
<u>Year 4</u>	
_	Complete Tranche 3 revegetation zone (40.4 ha)
-	Cultivate and prepare Tranche 4 (40.4 ha) area in preparation for year 5 planting.
-	Establish photo monitoring points and protocols for Tranche 4 areas (georeferenced star picket at photo monitoring locations)
_	Monitor and maintain Tranche 1 & 2 (80.8 ha revegetation zone)
Year 5	
_	Complete Tranche 4 revegetation zone (40.3 ha)
_	Monitor and maintain Tranche 1, 2 & 3 (121.2 ha revegetation zone)
Voar 6 20	
<u>1ear 0-20</u>	
_	Monitor and maintain Tranche 1 - 4 (161.5 ha revegetation zone) inclusive of rectification and replacement works for failed areas or plant dieback.
<u>Year 10</u>	



	 Complete transect surveys in accordance with the <u>Modified Habitat Quality Assessment (Koala)</u> and <u>Grey-headed Flying-fox Foraging Habitat Assessment</u> tools within established revegetation zones. Undertake Koala Spot Assessment Technique to derive koala occurrence category for revegetation zones. Report on results of both surveys within the Year 10 Offset Area Annual Report inclusive of any adaptive management changes.
	Year 15 o Complete transect surveys in accordance with the <u>Modified Habitat Quality Assessment (Koala) and Grey-headed Flying-fox Foraging Habitat Assessment</u> tools within established revegetation zones. o Undertake Koala Spot Assessment Technique to derive koala occurrence category for revegetation zones. o 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 <u>Modified Habitat Quality Assessment</u> (Koala) and <u>Grey-headed Flying-fox Foraging Habitat Assessment</u> tools within established revegetation zones. Undertake Koala Spot Assessment Technique to derive koala occurrence category for revegetation zones. Report on results of both surveys within the Year 20 confirming targeted improvements in the quality condition scoring has been achieved.
Responsibility: Who will complete the action and who will provide the funding?	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. Preparing and issuing Offset Area Annual Reports to the proponent within contracted timeframes for inclusion in the Approved Project ACR. 					
Measured & Monitored By: How will the action be measured, how will the outcome of the action be measured, by what method and timing?	 Achievement of the completion criteria for Year 5, Year 10, Year 15 and Year 20 as outlined in Table 12 and Table 13. Evidence within photo monitoring of established habitat containing Koala food and habitat trees and Grey-headed Flying fox foraging trees. Plan of completed revegetation extent in Years 2-5 Offset Area Annual Reports demonstrating sequential completion of all 4 tranches of revegetation. 					
	Spot Assessment Techniques (SAT) surveys showing the establishment of koala usage within the habitat creation zones (presently no habitat so no usage)					
	Reporting on revegetation activities will occur with each 12 month Offset Area Annual Report with major surveys results a adaptive management changes documented at Year 10, 15 & 20.					
Risks&AdaptiveManagement:what'stheprocedureforcorrectingoramending the action if the proposedoutcomes are not being achieved?	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:					



 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). 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.

Assessment Unit - Regional Ecosystem											EMZ 1 - Open Grazing Country				
					1				1	1					T
CITE CONDITION	RE12.11.14	Transect 1	Transect 2	Transect 3	Transect 4	Transect 5	Average of Transect(s)	% Benchmark	Baseline 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	1	00	0	0 33	3	0 S	0 16.60	16.	.60	0	0	3	3		s
Native plant species richness - trees		6	1	1 3	3	0	2 1.40	23.	33	0	s	s	s		5
														_	of the recruitment of woody perennial species in EDL
Native plant species richness - shrubs		7	0 (0 0	D	0	0.20	2	.86	0	0	2.5 Recruitment of two koala food tree species (20% of recruitment of woody perennial species in EDL	the 2.5 Maintain recruitment of two koala food tree species (20% of the recruitment of woody perennial species in	2.	5 benchmark)
Native plant species richness - grasses		8	5	5	4	4	6 4.80	60.	.00	2.5 2	2.5	2.5 benchmark)	2.5 EDL benchmark)	2	.5 Maintain a minimum of rix tree merier (100% of the
Native plant species richness - forbs		23	2	3 3	3	4	4 3.20	13.	91	0	0	2.5 Maintain a minimum of six koala food tree specie	2.5 Maintain a minimum of six koala food tree species	2	tree species richness benchmark)
Tree canony beinht (Canony)*		24	0 1	2		0 1	2 480	20		0		(100% of the tree species richness benchmark)	(100% of the tree species richness benchmark)		c Maintain a minimum of two shurb species (28.5% of the
										-		Establishment of a minimum of two shurb species	Maintain a minimum of two shurb species (28.5% of th	e	shrub species richness benchmark)
rree canopy neight (sob-canopy)-		13	0	4	0	u.	4.00	30.		3	3	3 (28.5% of the sindo species richness benchmark)	3 sindo species riciniess benchmark)		Maintain a minimum of six forb species (30.4% of the
			1	T	1	-	*Ave	erage tree canopy heig	ght	0 1	species (100% of the tree species richness	3 Establishment of a minimum of six forb species (3	4% 3 Maintain a minimum of six forb species (30.4% of the		5
Tree canopy cover (Canopy)**		39	0	0	D	0	o a	0.	.00	0	0 Koala food tree merier plantings to be a minimum of	2	5		5 Tree species plantings to be a minimum of 16.8m height
Tree canopy cover (Sub-canopy)**		21			D	0	0.00	a.	.00	0	0 3.25m height (25% of the tree sub canopy height	Koala food tree species plantings to be a minimum 2 6m height (25% of the tree canopy height benchm	of Koala food tree species plantings to be a minimum of rk) 5 6m height (25% of the tree canopy height benchmark)		5
											Denchinark)				. (70% of the tree sub-canopy height benchmark)
		1				1	***A	verage tree canopy cov	ver	0	Organic Litter to be 3% of 1m X 1m quadrats (10% of	2 Tree canopy cover to be a minimum of 3.9m (10% the tree canopy cover (canopy) benchmark)	5 Tree canopy cover to be a minimum of 14.5m (50% of the tree canopy cover (canopy) benchmark)	-	5
Shrub canopy cover		4	0	0 0	0 0	17	0.14	3.	.50	0	5 the organic litter benchmark)	5	s		5 Maintain a minimum tree canopy cover of 14.5m (50% of the tree canopy cover (canopy) benchmark)
Native grass cover*		45 84	4.8 4:	s 93.4	4 10	8 00	9 82.44	183.	20	5	s	5 of the tree canopy cover (sub-canopy) benchmark	5 of the tree canopy cover (sub-canopy) benchmark)	,	5 Maintain a minimum tree sub-canony cover of 10 Sm
Oroanic litter*		30			0	0	0.50		67		2	2 Maintain organic litter at 3% of 1m X 1m quadrats	10% A Maintain organic litter at 3% of 1m X 1m quadrats (10%	×	(50% of the tree canopy cover (sub-canopy) benchmark)
						0					-	of the organic litter benchmark)	of the organic litter benchmark)		Organic Litter to be 15% of 1m X 1m quadrats (50% of
Large trees (euc plus non-euc) (per ha)		33	0 (0 0	D	0	0.00	u.	.00	0	0	0 Weed coverage to be less than 5% of the entire of	vet Maintain weed coverage at less than 5% of the entire		the organic litter benchmark)
Coarse woody debris (per ha)	2	50 10	1.5 1.1	8 12.4	4 23	1.4 3	12 16.02	6	16	0	5	5 area (baseline weed coverage to be established in	(ear 5 offset area (baseline weed coverage to be established		5 Maintain weed coverage at less than 5% of the entire
Non-native plant cover		0	40 2	5 31	5 3	30 2	31.60	6	33	5	s	10	10	1	offset area (baseline weed coverage to be established in Year 1)
Quality and availability of food and foraging habitat	,	44	1	1 1		1	1 1.00			1	1	s	10	1	10
Quality and availability of shelter	,	44	1	1 1	1	1	1 1.00	0		1	1	s	10	,	10
							Si	te Condition Score (/10	00)	14	34	58.5	71.5		77.5
							Overall Site C	ondition score - out o	r3 0.	42	1.02	1./6	2.15		233
SITE CONTEXT															
Size of patch		10	10 11	0 10	0 1	10 1	0 10			10	10	10	10	,	10
Connectedness		s	4	4 4	4	4	4 4			4	4	4	Maintain less than 5% of the year 1 baseline survey		Maintain less than 5% of the year 1 baseline survey
Contraction		_											Offset Area		Presults and zero (0) koala mortalities or injury in the Offset Area
Context						4					Less than 5% of the year 1 baseline survey results and	4 Maintain less than 5% of the year 1 baseline surve results and zero (0) koala mortalities or injury in the	Tree canopy cover to be a minimum of 14.5m (50% of		Tree species plantings to be a minimum of 16.8m height
ecological composis		-	-	-		-				-	o pero (u) koala mortalities or injury in the Offset Area	0 Offset Area	the tree canopy cover (canopy) benchmark)		(70% of the tree canopy height benchmark)
Kole of site location to species overall population in the state		5	5	5 1		2	5			5	5	5	5 Tree sub-canopy cover to be a minimum of 10.5m (50)	6	5 Tree species plantings to be a minimum of 9.1m height
Threats to the species		15	1	1 1	1	1	1 1			1	15	15	15 of the tree canopy cover (sub-canopy) benchmark)	1	.5 (70% of the tree sub-canopy height benchmark)
Species mobility capacity		10	4	4 4	4	4	4 4			4	4	4	4		7
								Site Context Score (/S	56)	34	48	48	48		51
							Overall Site	e Context Score - out o	f3 1.	82	2.57	2.57	2.57		2.73
SPECIES STOCKING RATE				1								KON A DETECTED ON OTH AD			
			1				1					KOALA DETECTED ON-SITE = 10/10	KOALA DETECTED ON-SITE = 10/10		KOALA DETECTED ON-SITE = 10/10
			1	1			1					KOALA FORAGING ON-SITE = 10/15	KOALA FORAGING ON-SITE = 10/15		KOALA FORAGING ON-SITE = 10/15
Koala Stocking Rate (utilising SSR & SSR Supplementary Table(s)		70	5	5 5	5		5 5			5	S	30 KOALA SAT SURVEY RESULTS (LOW) = 10/30	30 KOALA SAT SURVEY RESULTS (LOW) = 10/30	7	30 KOALA SAT SURVEY RESULTS (LOW) = 10/30
							Species	Stocking Rate Score (/	70) 5.	.00	5	30	30		30
							Uverall Species Stoc	King Hate Score - out o	r4 0.	29	0.29	1.71	1.71		1./1
Overall Assessment Unit Score									2	53	3.88	6.04	643		6.77

1

Species Stocking Rate (SSR)									
Presence detected on or adjacent to site (neighbouring property with	Score	0		5	ذ				
connecting habitat)		No	Yes - adjacent		Yes - on site				
Consists upper of the site (hebitet type 8 middement upper)	Score	0	5	10		15			
apecies usage of the site (natival type & evidenced usage)		Not habitat	Dispersal	Foraging	Breeding				
Annrovimate depaity (per ba)	Score	0	10	20		30			
reprovinate denaity (per na)		0%	low	med	high				
Pole/importance of species population on site*	Score (Total from	0	5		10	15			
resemperance of appeness population on and	supplementary table	0	5 - 15	20 - 35		40 - 45			
Total SRR score (out of 70		30							
000 0	4 34 400 534 4								

_

*SSR Supplementary Table									
*Kan anna ann dation far breading	Sco	e (10						
Rey source population for breeding		No	Yes/ Possibly						
*Kau anuma ann dation (ar diseasad	Sco	e (
Rey source population for dispersal		No	Yes/ Possibly						
the maintaining and the discussion	Sco	e (15						
Necessary for maintaining generic diversity		No	Yes/ Possibly						
things the limit of the analysis serves	Sco	e (15						
rear are innicor are species range		No	Yes						

Assessment Unit - Regional Ecosystem	AU 1 - non-remnant RF12 9-10 2																
Site Reference		Transect 1 Transect 2			Tra	nsect 3	Tran	sect 4	Transect 5		Average		Vear 5	Vear 10	Vear 15	Vear 20	
	Ray	v Data	Raw	Data	Ray	w Data	Raw	Data	Raw	Data	Score	AU Score	Score	Score	Score	Score	(X/X)
				2444		Dutu				Jutu	000.0	10 00010	000.0	00010	000.0	000.0	(1914)
Vegetation Condition	c	at X	са	it X	(at X	Ca	at X	са	tX	5	5	5	5	10	10	20
Species Richness		1		1		3		0		2	1.40	5	10	10	20	20	20
Flower Score		0		0		0		0		0	0.71	8	8	8	8	8	10
Timing of Biological Shortages	of the versatistion pope		of the versitation, none r		of the veretation some		of the versetation name of		of the vegetation perces		10	10	10	10	10	10	10
Ouality of Foraging Habitat		0		0		0		0		0	1	5	10	10	20	20	20
Non-native Plant Cover	4	10%	2	5%		35%	3	0%	28	3%	37.58%	5	10	20	20	20	20
Site Condition Score	2			1					•			38	53	63	88	88	X
MAX Site Condition Score	e											100	100	100	100	100	Х
Site Condition Score - out of	4											1.52	2.12	2.52	3.52	3.52	Х
																í l	
	Patch siz	e is greater	Patch size	e is greater	Patch siz	ze is greater	Patch size is	greater than	Patch size is	greater than						1	
Size of patch	thar	200ha	than	200ha	thar	n 200ha	20	0ha	20	0ha	10	10	10	10	10	10	10
	There ar	There are 4-6 active		There are 4-6 active		There are 4-6 active		There are 4-6 active		There are 4-6 active						1	
Connectedness	camps w	ithin 20km	camps wi	thin 20km	camps v	vithin 20km	camps within 20km		camps within 20km		0	0	0	0	0	6	10
Context	31	-75%	31-75%		31-75%		31-75%		31-75%		6	6	6	6	6	6	10
Ecological Corridors	w	ithin	Within		Within		Within		Within		6	6	6	6	6	10	10
Role of site location to species overall population in the state	1-3 active	level 3 GHFF	1-3 active l	evel 3 GHFF	1-3 active level 3 GHFF		1-3 active level 3 GHFF		1-3 active level 3 GHFF		0	0	0	0	0	5	10
Threats to the species		10	1	10		10	1	10	1	.0	10	10	10	10	10	10	10
Site Context Score												32	32	32	32	47	X
MAX Site Context Score	e											60	60	60	60	60	X
Site Context Score - out of	3			-					-			1.60	1.60	1.60	1.60	2.35	X
																L	
																L	
GHFF Foraging Tree Density		0		0		0		0		0	0	1	1	2	5	5	10
		I		1	L	I			L					_		<u>⊢ </u>	
Species Stocking Rate Score	-											1	1	2	5	5	X
MAX Species Stocking Rate Score												10	10	10	10	10	X
Species Stocking Rate Score - out of	5											0.30	0.30	0.60	1.50	1.50	X
Tota												3 4 2	4 02	472	6.62	7 37	

	PE12 11 1/
Score	Stem Density Results (T1
1	0 – 200 stems per hectare
2	201 – 250 stems per hectare
5	251 – 300 stems per hectare
7	301 – 325 stems per hectare
10	326 – 350 stems per hectare
7	351 – 375 stems per hectare
5	376 – 400 stems per hectare
4	401 – 450 stems per hectare
2	450 + stems per hectare

PLAN 6-INDICATIVE OFFSET AREA FENCING



FILE NAME: OEs_3 PLAN 6 Fencing V3 21/04/2022



THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. ONE ENVIRONMENT GROUP CANNOT ACCEPT REPONSIBILITY FOR ANY USE OF OR RELIANCE UPON THE CONTENTS OF THESE DRAWING BY ANY THIRD PARTY. REFERENCES - © STATE OF QUEENSLAND, 2022

Legend

N

CHERRY GULLY & AVONVALE STATIONS



EXISTING CHERRY GULLY & AVONVALE STATION OFFSET AREAS



OFFSET CARETAKER & MAINTENANCE COMPOUN MAINTENANCE COMPOUND

OFFSET DESIGN

ENVIRONMENTAL MANANGEMENT ZONE OPEN GRAZING COUNTRY - CATEGORY X VEGETATION [167.0 HA]

OFFSET CARETAKER & MAINTENANCE COMPOUND FENCE (FAUNA EXCLUSION TYPE)

EXISTING PROPERTY FENCE & APPROVED OFFSET AREA FENCE LOCATIONS

NEW FENCE LOCATIONS FOR PROPOSED OFFSET

* NEW FENCING TO BE FAUNA FRIENDLY CATTLE EXCLUSION FENCING





5.8. Summary Monitoring Schedule

Monitoring Year	Report	Responsibility
Year 1	Offset Area Annual Report	Offset Provider (One Environment)
Year 2	Offset Area Annual Report	Offset Provider (One Environment)
Year 3	Offset Area Annual Report	Offset Provider (One Environment)
Year 4	Offset Area Annual Report	Offset Provider (One Environment)
Year 5	Independent Offset Area Report (major milestone report)	Suitably qualified professional
Year 6	Offset Area Annual Report	Offset Provider (One Environment)
Year 7	Offset Area Annual Report	Offset Provider (One Environment)
Year 8	Offset Area Annual Report	Offset Provider (One Environment)
Year 9	Offset Area Annual Report	Offset Provider (One Environment)
Year 10	Independent Offset Area Report (major milestone report)	Suitably qualified professional
Year 11	Offset Area Annual Report	Offset Provider (One Environment)
Year 12	Offset Area Annual Report	Offset Provider (One Environment)
Year 13	Offset Area Annual Report	Offset Provider (One Environment)
Year 14	Offset Area Annual Report	Offset Provider (One Environment)
Year 15	Independent Offset Area Report (major milestone report)	Suitably qualified professional
Year 16	Offset Area Annual Report	Offset Provider (One Environment)
Year 17	Offset Area Annual Report	Offset Provider (One Environment)
Year 18	Offset Area Annual Report	Offset Provider (One Environment)
Year 19	Offset Area Annual Report	Offset Provider (One Environment)
Year 20	Independent Offset Area Report (major milestone report)	Suitably qualified professional



6. Corrective Actions

Table 14 outlines a number of triggers and corrective actions which are to be implemented in instances of noncompliance 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).

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 	 Engage the suitably qualified professional within three months of detection
	• Apply recommended mitigation measure/s to improve growing conditions (as recommended by the suitably qualified	• Implement recommended mitigation measures within six months of detection
	 professional) Remove ill or dead plantings, undertake any remediation works and re-establishment planting 	 Remove ill or dead plantings and undertake remediation works within six months of detection
Weed re- establishment	 Immediately treat all WoNs, particularly <i>Lantana camara</i>, 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 	• Within six months or the next appropriate planting period (whichever comes first) of detection

Table 14: Triggers and Corrective Actions (including timeframes)



	identify the likely cause of plant		Within month of dataction
	failure		
	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	The selective removal of limbs,	٠	At the 5, 10, 15 and 20 year
is failing to become	shrubs, or trees (particularly		monitoring events
present naturally	from the shrub layer were		
	forming dense thickets)	•	At the 5, 10, 15 and 20 year
•	Importation of felled native		monitoring events
	timber from known impact		
	areas where it would ordinarily		
	be mulched and sent to land fill		
Growth rates not as	Engage a suitably qualified	•	Within three months of
expected	professional to review the		detection
	plantings and advise on		
	rates through other		
	interventions	•	Within three months of
	Undertake soil testing to		detection
	determine what rate of soil		
	ameliorants or fertilizers may be		
	required to improve the		
	chemical balance of the soils for	•	Within 12 months of detection
	improved plant growth	•	Within 24 months of detection
٠	Revise management actions for		if the corrective actions have
	Olisel		not amended the slowing
	Agriculture Water and the		Within 24 months of detection
	Environment to negotiate	•	if the corrective actions have
	changes to timeframes to meet		not amended the slowing
	the completion criteria		growth rates
·	Revise OMP and submit to		5
	Minister for the Environment for		
	approval		
Stochastic or nuisance	While such events (eg. Fire,	•	Within six months of the event
events	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 issued to the DAWE within three months 	• Within six months of rectification
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	 Engage a suitably qualified professional to review the plantings and advise on methods to increase growth rates through other 	• Within three months of detection
management timeframe and other corrective actions are failing to progress the achievement of the	 Interventions Undertake soil testing to determine what rate of soil ameliorants or fertilizers may be required to improve the 	• Within three months of detection
KPI	 chemical balance of the soils for improved plant growth The proponent / approval holder will request an extension to the 20 year management 	• Within 24 months of detection if corrective actions have not amended the slowing growth rates
	timeframe from the MinisterRevise the management actions for the offset	• Within 24 months of detection if corrective actions have not amended the slowing growth rates
	Extend timeframes to meet completion criteria	• Within 24 months of detection if corrective actions have not amended the slowing growth rates



- Revise the OMP and submit to the Minister for the Environment for approval
- Within 24 months of detection if corrective actions have not amended the slowing growth rates



7. Risk Assessment & Management

A limited number of risks associated with climate change, pest control, large scale rehabilitation and grazing land uses are evaluated for the Offset Site. 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:

- 1. Climate Change Risk 1 Wildfire
- 2. Climate Change Risk 2 Flooding
- 3. Climate Change Risk 3 Drought
- 4. Climate Change Risk 4 Climate Factors Shifting Habitat Range
- 5. Planting Stock Failure
- 6. Pest Management (Feral Dog Populations)
- 7. Weed Invasion / Expansion (Weeds of National Significance Lantana)
- 8. Stock Management, Unlawful Access & Land Clearing (Cattle Operations Impacts)

7.1. Climate Risk 1 – Wildfire

The offset land retains little to no existing vegetation, however, its proximity to surrounding vegetation increases the risk of wildfire on the site, and as such, it is reflected as medium to high and very high-risk fuel loads for wildfire in both State Government and Somerset Regional Council Mapping (Refer FIGURE 5 for Wildfire Hazard Mapping). The last recorded wildfires within the vicinity of the Offset Site occurred in September 2018 and involved the evacuation of some residents of the adjoining Toogoolawah Township. Cherry Gully was not affected by these fire events. The offset land 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 and evolved as parts of the site transfer from open pasture to revegetation as specific Offset Works are sequentially completed.

The overall assessment of Wildfire Risks is that their occurrence is possible within the life of the offset and consequences of such an event would be moderate. Without intervention and management Wildfire is evaluated as a <u>MEDIUM Risk</u> to this offset project.



Climate Risk 1 – Wildfire: Risk Evaluation

Qualitative measure of likelihood (how likely is it that this event/issue will occur after control strategies have been put in place)

Possible

Might occur during the life of the project

Qualitative measure of consequences (what will be the consequence/result if this issue does occur rating)

Moderate

Isolated but substantial instances of environmental damage that could be reversed with intensive efforts

	Consequence				
	Minor	Moderate	High	Major	Critical
Possible	Low	Medium	Medium	High	Severe

Climate Risk 1 – Wildfire: Risk Management Actions (Refer TABLE 9 for Detailed Wildfire Management Actions)

- Maintain the existing bushfire breaks between adjacent land holders and access tracks through and around areas of mature and regrowth vegetation.
- Establish new tracks and fire breaks as necessary as part of the increased vegetation cover created through revegetation and rehabilitation.
- Establish an Offset Area Wildfire Management Plan which caters for excessive dry periods and or high risk build up of wildfire fuel loads. If necessary undertake mosaic understorey low intensity back burning exercises to reduce fuel load risks.
- Work with local Qld Rural Fire Brigade, Somerset Regional Council Representatives and adjoining land owners to minimise wildfire risks at the regional scale.
- Consider taking out insurance for plant stock replacements.

Figures 5:Somerset Regional Council – Bushfire Hazard Area and Queensland GovernmentState Planning – Natural Hazard Risk and Resilience Mapping







7.2. Climate Change Risk 2 - Flooding

The local township of Toogoolawah and surrounding creek and river catchments are known for periodical flooding. The offset land retains only small sections located directly along lvory Creek which is mapped or known for any level of even minor flooding (Refer <u>FIGURE 6</u> for <u>Potential Flood Hazard areas mapped by State and Local Government</u>). The area affected by the minor flooding is not associated with this offset. The lvory Creek corridor is included as part of the EPBC2015/7530 approved offset. As the entirety of the offset is outside of potential flood prone areas, the potential flood risk is considered low and more applicable to impacting replanting efforts associated with EPBC2015/7530.

Climate Change Risk 2 - Flooding: Risk Evaluation

Qualitative measure of likelihood (how likely is it that this event/issue will occur after control strategies have been put in place)

Possible	Might occur during the life of the project
Qualitative measure of consequences (what will b	e the consequence/result if this issue does occur
rating)	

Minor Minor incident of environmental damage that can be reversed

	Consequence					
	Minor	Moderate	High	Major	Critical	
Possible	Low	Medium	Medium	High	Severe	



Climate Change Risk 2 - Flooding: Risk Management Actions

- Include stabilization matting, tree stakes, etc for plantings within higher risk zones of erosion from rising flood waters or fast movement channel or embankment flows.
- Consider taking out insurance for planting stock located within adjacent to the flood zone to cover the cost of replacement works should a damaging rain / flood event occur.

Figure 6:Somerset Regional Council – Modelled Flood Hazard Levels and QueenslandGovernment State Planning – Flood Hazard Mapping







7.3. Climate Change Risk 3 - Drought

In March 2017 the Queensland Government declared the Somerset Region amongst a number of Local Government Areas as a drought area for the purposes of accessing funding and concessions for rural land holders. This declaration remains in 2020 despite several localised recent rain events. The average rainfall in in 2019 at the nearest rain gage to the offset site recorded 431.60 mm. This is down on the 81 year mean rainfall for the region of 987.7mm by 556.10 mm. Review of historical rainfall data indicates that the last time Toogoolawah experienced annual rainfall less than 430 mm was in 1977 (annual rainfall of 366 mm), further supporting the unprecedented impacts of the drought.

Contrastingly, to date in 2020 (up to June), Toogoolawah has received 538.8 mm of rain, which is on track to exceed to annual rainfall amount.

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 site maintains rainfall similar to the optimal range to support koala presences.

Climate Change Risk 3 - Drought: Risk Evaluation

Qualitative measure of likelihood (how likely is it that this event/issue will occur after control strategies have been put in place)

Likely

Will probably occur during the life of the project

Qualitative measure of consequences (what will be the consequence/result if this issue does occur rating)

Minor	Minor incident of environmental damage that can be				
winor	Consequence				
	Minor	Moderate	High	Major	Critical
Possible	Low	Medium	Medium	High	Severe

Climate Change Risk 3 - Drought: Risk Management

- Ensure offset design includes replanting and connection to higher moisture content soils associated with alluvial and riparian areas of the site.
- Maintain site dams and waterbodies for use in offset rehabilitation works and as water sources for native animals.
- 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.


Figure 7:2019 Mean Rainfall (Drought Declared Period) / 82 Year Mean Rainfall

(Source: BOM Website - http://www.bom.gov.au/jsp/ncc/cdio/cvg/av_ - Date Searched 16/04/19)



Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years
Mean rainfall (mm) for years 1936 to 2020	131.9	142.8	113.2	67.8	63.6	50.5	44.7	33.3	37.6	85.0	84.3	127.6	982.4	83
Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years
Rainfall (mm) for year 2019	6.2	26.8	153.8	73.6	22.2	41.0	17.2	7.0	1.6	28.6	6.4	47.2	431.6	1



7.4. Climate Change Risk 4 – Climate Factors – 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 climate related threats already well documented. More recently both species and their habitat have been effected nationally by the 2019-2020 bushfires. GHFF are also considered to be effected 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 easterward. 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 offset land average rainfall in 2019 was 431.60 mm down on the 82-year average of 987.7mm, however these results have occurred while the LGA was declared in a drought situation, with the last time the region experienced rainfall this low being 42 years prior. Additionally, the mean recorded minimum and maximum temperatures for the region are 13.5 to 26 degrees, thus even with predicted temperature increases the offset land would remain around the noted 27 degree 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). Refer to <u>FIGURE 8</u> for estimated location of the Offset Site based on predicted changes in habitat distributions in 2070.

At the site scale the offset design is founded in the re-establishment of connected koala habitat along riparian creeks and drainage lines and through higher moisture content alluvial soils. The design will connect existing low range and foothill habitat with creek flats and riparian vegetation communities.

Climate Change Risk 4 – Climate Factors – Shifting Habitat Range: Risk Evaluation

Qualitative measure of likelihood (how likely is it that this event/issue will occur after control strategies have been put in place)

Likely

Will probably occur during the life of the project

Qualitative measure of consequences (what will be the consequence/result if this issue does occur rating)



	Consequence							
	Minor	Moderate	High	Major	Critical			
Likely	Low	Medium	High	High	Severe			
Minor	Minor incident of environmental damage that can b							
WIIIO			reversed					

Climate Change Risk 4 – Climate Factors – Shifting Habitat Range: Risk Management

• Actions listed in the Risk Management sections for Wildfire, Flood and Drought (Tables 4, 5 and 6 of Section 5.0)



Figure 8:Modelled Habitat Distribution (2011 V 2070)

(Source: Adams-Hosking, et al, 2011)







7.5. Planting Stock Failure

The entirety of the Cherry Gully Offset Area design requires significant wholesale replanting. In projects which include large areas of wholesale planting 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
- 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 economical impact for this project as the Offset Area will not achieve committed condition improvement and habitat expansion targets without rectification of planting works. An important component of the offset proposal is the utilization of the established on-site nursery and the direct harvesting of tree species seedlings form vegetated zones within the offset land.

Planting Stock Failure: Risk Evaluation

Qualitative measure of likelihood (how likely is it that this event/issue will occur after control strategies have been put in place)

······································	
Possible	Might occur during the life of the project
Qualitative measure of consequences (what will b rating)	be the consequence/result if this issue does occur
Minor	Minor incident of environmental damage that can be reversed

Planting Stock Failure: Risk Management

	Consequence						
	Minor	Moderate	High	Major	Critical		
Possible	Low	Medium	Medium	High	Severe		

- Source plant seed stock and base soil from the Offset Site. Germinate and propagate site seed stock into tube stock at purpose built Offset Site nursery.
- 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.
- Undertake planting during warmer frost-free months.



7.6. Pest Management (Feral Dog Populations)

The Queensland Government Department of Agriculture & Fisheries (DAF) – Biosecurity Queensland map feral dogs through the Somerset Regional Council Area as 'common'. Feral dogs are listed as a 'class 2' pest in the Somerset Regional Council Pest Management Plan and noted with in many newspaper articles and Council's minutes as increasing in population and incidence since 2013. Council have introduced a feral dog bounty program providing \$25 to private land holders per wild animal scalp delivered as evidence. Council also provides baiting and training on use of baiting to land holders, however do not retain their own pest management officer.

Site surveys located feral dogs, throughout the broader Avonvale and Cherry Gully Stations. Additionally, the remnants of a dead koala was recorded on-site with evidence suggesting the mortality was most likely the result of a dog attack.

Data shows 23 records within 10km of the Offset Site (primarily between the site and the Toogoolawah Township). Seven (7) of these records list the animals as either dead or injured. While the data does not provide a cause for the injury 6 of the 7 death / injury records based on location are considered to be the result of either feral dog or domestic dog attack. One (1) of the records is located immediately adjacent to the Brisbane Valley Highway and thus is assumed as vehicle strike. The remaining 6 records occur within large partially vegetated rural land holdings without evidence of recent clearing thus increasing the likelihood of dog attack as death or injury cause.

Evidence collected from the Offsite Site and regional and local records show without intervention feral dogs are likely within the Offset Area. The consequences of wild dog and koala interactions are well documented and thus the impact and risk of uncontrolled feral dogs through the Offset Area is evaluated as a <u>High Risk</u>.

Pest Management (Wild Dog Populations): Risk Evaluation

Qualitative measure of likelihood (how likely is it that this event/issue will occur after control strategies				
have been put in place)				
Likely	Will probably occur during the life of the project			
Qualitative measure of consequences (what will	be the consequence/result if this issue does occur			
rating)				
High	Substantial instances of environmental damage that			

could be reversed with intensive efforts

	Consequence					
	Minor	Moderate	High	Major	Critical	
Likely	Low	Medium	High	High	Severe	



Pest Management (Wild Dog Populations): Risk Management

- Undertake baseline and periodical surveys and monitoring of feral dog populations, locations and dispersal
 patterns within the Offset Site (Survey methods to include direct observation / remote sensor camera
 and infra-red drone / sand traps for print record). Develop a base line of wild dog populations and 'hot
 spots' and key activity periods (eg dusk).
- Develop a purpose built offset site 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 site.
- Undertake stakeholder engagement with immediate land holders to foster joint sub regional scale action plan.
- Establish contact and recommended approaches with relevant Council staff (or contractors) undertaking similar works within the broader Somerset Region.

7.7. Weed Invasion / Expansion - Lantana

Preliminary site surveys and observations over the Cherry Gully offset area recorded a number of weed species, three (3) of which are scheduled as declared weeds under the *Land Protection (Pest and Stock Route Management) Act 2002* or now listed as 'restricted invasive' plants under the *Biosecurity Act 2014*. The most regularly recorded and in locations abundant species are *Lantana camara* and *Lantana montevidensis*. The Queensland Government Department of Agriculture and Fisheries (DAF) maps the Somerset Region as containing widespread common and abundant infestations of Lantana. The Somerset Regional Council 2013-2018 Pest Management Plan schedules Lantana amongst the priority pest species noting it as abundant and widespread through the region with a 'high' capacity to spread and a 'low' capacity for Council to successfully control.

Lantana is a Weed of National Significance under the EPBC Act. In 2006 Lantana was nominated by the **NSW Government Office of Environment and Heritage** to be listed as a key threating process under the EPBC Act:

"The invasion, establishment and spread of Lantana camara impacts negatively on native biodiversity including many EPBC listed species and communities."

(Source: Key Threatening Process Nomination Form)

Lantana infestations suppress and inhibit the natural regeneration of regrowth vegetation on-site which directly limits the growth rates and regeneration of primary and secondary koala tree species and Grey-headed Flying Fox foraging 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 be resulting in a progressive increase as local climatic events align with optimal germination and seeding periods. In areas blanket layers of Lantana additionally form a barrier to terrestrial species, which would include limiting the koala's ability to access areas containing and over-canopy of koala food trees (many of these areas were impenetrable for human survey).



Weed Invasion / Expansion - Lantana: Risk Evaluation

Qualitative measure of likelihood (how likely is it that this event/issue will occur after control strategies have been put in place)

Likely

Will probably occur during the life of the project

Qualitative measure of consequences (what will be the consequence/result if this issue does occur rating)

Moderate

Isolated but substantial instances of environmental damage that could be reversed with intensive efforts

	Consequence						
	Minor	Moderate	High	Major	Critical		
Likely	Low	Medium	High	High	Severe		

Weed Invasion / Expansion - Lantana: Risk Management

- Use an Antenna based GPS system to map the full extent (as description polygons) of all Lantana areas within the Offset Area (achieve a total ha extent of weed infestations / occurrences within the Offset Area).
- Exclude stock (cattle) access from Lantana infestation areas within the Offset Area (grazing cattle provide the most continuous source of Lantana spread).
- Undertake detailed weed management control activities within the Offset Area. Methods deployed based on extent of infestation, existing native values, topography, waterways and other sensitive receiving environments:
 - 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 generating within and surrounding Lantana patches.
- Undertake periodical weed maintenance rotations for removal / suppression of Lantana regeneration.
- Incorporate adaptive management principles into weed management methods to streamline overall management to the most effective control types.
- Explore the introduction of biological Lantana control measures to provide a long term (20 year plus) solution for management



7.8. Stock Management, Unlawful Access & Land Clearing (Cattle Operations Impacts)

As noted throughout this OMP Cherry Gully forms part of the Avonvale and Cherry Gully Stations which are operational cattle stations retaining an active 'Environmental Authority' (Permit F1-0048) under the Queensland Government's *Environmental Protection Act 1994* for the operation of feedlot facilities between 1,000 and 10,000 animals. Both properties have historically retained extensive rotational pasture paddocks and selectively vegetated paddocks for the raising of weaners. The impacts of this operation on the environment occur at both acute (land clearing) and chronic (tordening for cattle grass cover) timeframes.

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 economical factors, however primarily the rise and fall of the cattle price. Regardless the long term and current highest and best use for the land is the continuation of the feedlot operation. 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 and the offset outcome established through EPBC 2015/7530).

The Offset Site is surrounded to the north, east and south by large cattle grazing land holdings and a number of smaller agricultural farms. On land holdings at this scale the it is common for neighbours to access and muster through un-owned adjoining land parcels to connect fragmented land holdings. Additionally, an adjoining land holder may cut a new access track in adjoining unowned land without permission because of the perceived benefit to both parties, which is typically the case in farming operations.

The impacts of unlawful access and stock mustering mimic those listed in the 'general stock management' section of this management plan (trampling, compacting, weed spread, fence destruction).

Stock Management, Unlawful Access & Land Clearing (Cattle Operations Impacts): Risk Evaluation

Qualitative measure of likelihood (how likely is it that this event/issue will occur after control strategies have been put in place)

LikelyWill probably occur during the life of the projectQualitative measure of consequences (what will be the consequence/result if this issue does occur
rating)

```
Minor
```

Minor incident of environmental damage that can be reversed

	Consequence						
	Minor	Moderate	High	Major	Critical		
Likely	Low	Medium	High	High	Severe		



Stock Management, Unlawful Access & Land Clearing (Cattle Operations Impacts): Risk Management

- Two important controls which significantly reduce the risk of Stock Management, Unlawful Access & Land Clearing (Cattle Operations Impacts) on the Offset Area are:
 - The land is being is owned by the Offset Provider (any residual grazing uses will be secondary land uses to the approved offset outcomes)
 - The Voluntary Declaration (VDEC) provides a legally binding mechanism for the protection of existing and created values. The VDEC 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.
- Progressive stock exclusion fencing is to be installed to the extent of the Offset Area (Refer to <u>PLAN 10</u> for Indicative Offset Area Fencing Plan).
- Consultation on the Offset Area and third party access for mustering / access will occur with adjoining land holders.



8. Adaptive Management / Reporting

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 Cherry Gully Offset site 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.

"Adaptive management is a systematic approach for improving environmental management by learning from management outcomes. We believe that protected areas management can benefit greatly from this approach which allows management to proceed despite uncertainty, and reduces this uncertainty through a systematic process for learning."

(Murray, 2019 - http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.137.9484)

Figure 9: Adaptive Management Model

(https://essa.com/approach/)





8.1. Offset Management Plan Reporting Structure

As part of the commercial agreement between Daleswan Pty Ltd and One Environment all surveys, results, management activities statuses, alterations or amendments are recorded within an <u>Offset Area Annual Report</u> (OAAR) By executed contract each <u>Offset Area Annual Report</u> is to be completed by the Offset Provider (One Environment) and issued to the Proponent (Daleswan Pty Ltd) 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 <u>Offset Area Annual Report</u> in preparing the Approved Action Annual Compliance Report. Although the reports precise inclusion in the ACR will be dictated by the proponent it is forecasted the <u>Offset Area Annual Report</u> will be an appendices to the ACR with specific aspects relevant to conditioned offset outcomes extracted and referenced within the compliance tables.



Figure 9: Offset Actions Reporting Structure





9. References

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ESSA (2017) Adaptive Management Approach – ESSA Technologies [Accessed via - https://essa.com/approach/]

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Attachment OC2 Offset Site MHQA and GHFF FHA Results and Data Records



Assessment Unit - Regional Ecosystem	EMZ 1 - Open Grazing Country									
		Transact 1	Transact 2	Transact 3	Transact 4	Transact 5	Average of Transact(s)	% Benchmark	Score	Offset Improved Score
SITE CONDITION		Transect	Transect 2	Hanseet 5	Transect 4	Hallseet 5	Average of Transect(s)	70 Denchinark	Score	onset improved Score
Recruitment of woody perennial species in EDL	100	0	(33	0	50	16.60	16.60	0	5
Native plant species richness - trees	6	1		1 3	0	2	1.40	23.33	0	5
Native plant species richness - shrubs	7	0	(0	0	1	0.20	2.86	0	2.5
Native plant species richness - grasses	8	5		5 4	4	6	4.80	60.00	2.5	2.5
Native plant species richness - forbs	23	2		3 3	4	4	3.20	13.91	0	2.5
Tree canopy height (Canopy)*	24	0	12	2 0	0	12	4.80	20.00	0	
Tree canopy height (Sub-canopy)*	13	6	(8	0	6	4.00	30.77	3	
							*Ave	rage tree canopy height	1.5	5
Tree canopy cover (Canopy)**	39	0	(0 0	0	0	0	0.00	0	
Tree canopy cover (Sub-canopy)**	21	0	(0 0	0	0	0.00	0.00	0	
	·						**Av	erage tree canopy cover	0	5
Shrub canopy cover	4	0	(0 0	0.7	0	0.14	3.50	0	5
Native grass cover*	45	84.8	4	5 93.4	100	89	82.44	183.20	5	5
Organic litter*	30	0	0.	5 0	0	2	0.50	1.67	0	5
Large trees (euc plus non-euc) (per ha)	33	0	(0 0	0	0	0.00	0.00	0	0
Coarse woody debris (per ha)	260	10.5	1.8	3 12.4	23.4	32	16.02	6.16	0	5
Non-native plant cover	0	40	2	5 35	30	28	31.60	31.60	3	10
Quality and availability of food and foraging habitat	NA	1		1 1	1	1	1.00	-	1	10
Quality and availability of shelter	NA	1		1 1	1	1	1.00	-	1	10
							Sit	e Condition Score (/100)	14	77.5
							Overall Site C	ondition Score - out of 3	0.42	2.33
<u>SITE CONTEXT</u>							ľ			
Size of patch	10	10	10	0 10	10	10	10	-	10	10
Connectedness	5	4	4	4 4	4	4	4	-	4	4
Context	5	4	4	4 4	4	4	4	· -	4	4
Ecological Corridors	6	6	(5 6	6	6	6	-	6	6
Role of site location to species overall population in the state	5	5		5	5	5	5	-	5	5
Threats to the species	15			1	1	1	1	-	1	15
Species mobility capacity	10	4	4	4 4	4	4	4		4	/
								Site Contract Corner (/EC)	24	51
							0	Site Context Score (/56)	34	21
							Overall Site	Context Score - out of 3	1.82	2.73
SPECIES STOCKING BATE										
ST LCLS STOCKING MALE Koala Stocking Rate (utilising SSR & SSP Supplementary Table/s)	70	Ę		5 5	5	5	5		E	20
	70	5		د ۱		5	Chocies 6	Stocking Bate Score (/70)	5 00	30 00
							Overall Species Steel	ving Rate Score out of A	0.00	1 71
							overall species Stoci	are score - out of 4	0.29	1.71
							Overa	Il Assassment Unit Coore	2 5 2	6 77
							Overa	in Assessment onit Score	2.33	0.77

Species Stocking Rate (SSR)						
Presence detected on or adjacent to site (neighbouring property with	Score	0		5		10
connecting habitat)		No	Yes - adjacent		Yes - on site	
Spacing upage of the site (hebitet type & syldeneed upage)	Score	0	5	10		15
Species usage of the site (habitat type & evidenced usage)		Not habitat	Dispersal	Foraging	Breeding	
	Score	0	10	20		30
Approximate density (per ha)		0%	low	med	high	
Polo/importance of apocide population on cito*	Score (Total from	0	5		10	15
	supplementary table	0	5 - 15	20 - 35		40 - 45
Total SRR score (out of 70)		5				
SRR Score (out of 4) 0.285714286						

5	10
0	10
0	10
0	0

*SSR Supplementary Table	SSR Supplementary Table								
*Key source population for breeding	Score	0	10	0	0				
Rey source population for breeding		No	Yes/ Possibly						
*Kou course population for dispersel	Score	0	5	0	0				
Rey source population for dispersal		No	Yes/ Possibly						
*Necessary for maintaining genetic diversity	Score	0	15	0	0				
Necessary for maintaining genetic diversity		No	Yes/ Possibly						
*Near the limit of the apopter range	Score	0	15	0	0				
		No	Yes						

Assessment Unit - Regional Ecosystem		EMZ 1 - Open Grazing Country												
Site Reference	Tran	sect 1	Trans	ect 2	Trar	nsect 3	Tran	isect	Tran	sect 3	Average		OUT OF	Improved
	Raw	Data	Raw	Data	Rav	Raw Data		Raw Data		Data	Score	AU Score	(X/X)	Offset
Vegetation Condition	cat X		cat	t X	С	cat X		cat X		t X	5	5	20	10
Species Richness		1	1	L		0		0		0	1	5	20	20
Flower Score		0	()		0		0		0	0	0	10	8
Timing of Biological Shortages	f the veget	ation, none	of the vegeta	ition, none o	f the veget	tation, none	of the vegeta	ation, none o	of the veget	ation, none o	0	0	10	10
Quality of Foraging Habitat		0	0)		0		0		0	0	0	20	20
Non-native Plant Cover	4	0%	25	5%	(H)	35%	30	0%	2	3%	37.58%	5	20	20
Site Condition Score												15	X	88
MAX Site Condition Score	2											100	X	100
Site Condition Score - out of 4	Ļ											0.60	X	3.52
Size of patch	h size is gre	eater than 2	ch size is gre	ater than 20	h size is gr	eater than 20	ch size is gre	ater than 20	ich size is gre	ater than 20	10	10	10	10
Connectedness	e 4-6 active	e camps wit	withe 4-6 active camps withe 4-6 active camps with re 4-6 active camps within re 4-6 active camps with							6	6	10	6	
Context	31-	-75%	31-75%		31	-75%	31-75%		31-75%		6	6	10	6
Ecological Corridors	Wi	thin	Within		Within		Within		Within		10	10	10	10
Role of site location to species overall population in the state	level 3 GH	FF camps w	level 3 GHFF camps wit		e level 3 GHFF camps wi		te level 3 GHFF camps wit		tle level 3 GHFF camps wit		5	5	10	5
Threats to the species		10	1	0		10		10		10		10	10	10
Site Context Score												47	X	47
MAX Site Context Score												60	X	60
Site Context Score - out of 3												2.35	X	2.35
GHFF Foraging Tree Density		0	0)		0		0		0	1	1	10	5
Species Stocking Rate Score												1	X	5
MAX Species Stocking Rate Score	1											10	X	10
Species Stocking Rate Score - out of 3												0.30	X	1.50

Total Mean

l

RE12.11.14							
Score	Stem Density Results (T1 and T2)						
1	0 – 200 stems per hectare						
2	201 – 250 stems per hectare						
5	251 – 300 stems per hectare						
7	301 – 325 stems per hectare						
10	326 – 350 stems per hectare						
7	351 – 375 stems per hectare						
5	376 – 400 stems per hectare						
4	401 – 450 stems per hectare						
2	450 + stems per hectare						

3.25 7.37

Attachment B owner consent

CHERRY GULLY & AVONVALE APPLICATION

Department of Resources VDEC Application – Attachment B

Somerset Offset Land Pty Ltd, as the owner of the premises identified below consent to the making of this Voluntary Declaration needed to facilitate the legally securing of land included in a Commonwealth Government EPBC Act Offset Approval.

Premises Details

- Lot 4 on SP327519
- Lot 5 on SP327519
- Lot 9 on SP327519
- Lot 10 on SP327519
- Lot 1 on CSH1549

Yours Sincerely,

105

Darren Jonsson **Sole Director** Somerset Offset Land Pty Ltd 22nd August 2022

Attachment C Avonvale station declared area PLAN



Appendix G

Offset Area Annual Report (Year 1) prepared by One Environment Pty Ltd







Avonvale and Cherry Gully Station

Offset Area Annual Report EPBC2018/8347 December 2023



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APPENDICIES

- A Sample pest management results
- B Letter confirming livestock removed from approved Offset Area
- C Sample weed management results
- D Approved VDEC and supporting email



1.0 Background

The purpose of this Offset Area Annual Report (OAAR) is to provide an update on the status of the offset obligations under the EPBC2018/8347 approval issued by the Department of Climate Change, Energy, the Environment and Water (DCCEEW) on 21 December 2022.

The offset site forms part of the Avonvale and Cherry Gully stations and was secured to deliver a koala and grey-headed flying-fox habitat environmental offset as compensation for significant impacts to Matters of National Environmental Significance (MNES) as part of the Ripley Valley PDA Providence East and South, Queensland development (Providence East and South Project). This offset was developed in accordance with the Commonwealth Government's, Department of Climate Change, Environment, Energy and Water (DCCEEW) *EPBC Act 1999 – Environmental Offset Policy – October 2012* (EPBC Offset Policy) and is a requested requirement of the Preliminary Documentation submission for EPBC Application 2018/8347.

The historic Avonvale and Cherry Gully Station is a privately owned 1,718 ha property that dates back to the early 1900s, where early land uses included cattle grazing and timber harvesting. In recent history, the property has been home to a successful cattle grazing and beef farming enterprise, with an active feedlot permit allowing between 1,000 to 10,000 animals. The Avonvale and Cherry Gully Station is located on Littles Road, Toogoolawah. The property is within the Somerset Regional Council (SRC) and is approximately five kilometres west of the Toogoolawah township.

As per the updated Offset Area Management Plan (OAMP), the annual reporting anniversary for the Offset Area is 21 December. It is important to note this OAAR covers the period from 21 December 2022 until 21 December 2023 (herein referred to as 'offset reporting period').





2.0 Action snapshot - year one



183 ha legally secured via Voluntary Declaration for the purposes of conservation.



Updated OAMP to include baseline survey results and detailed program to monitor and report on progress of ecological outcomes.



Removed all livestock from the entirety of the Cherry Gully and Avonvale Stations.



Implemented intensive weed management activities.



Implemented wildfire mitigation measures in accordance with the Queensland Rural Fire Service recommendations.



Routine feral animal control, involving baiting and trapping.



Consulted with adjoining landholders on offset activities.



Planted approximately 96 ha of offset area in accordance with the approved OMP.



Fencing replacement and repair on shared property boundaries.

Icons sourced from Noun Project artists: Hafiz Nur Lutfianto, Yandi Rs, faisalovers, Juicy Fish, Laymik, Jono, Alina Oleynik, Asianson Design, Azam Ishaq.



3.0 Offset commitments and management actions

The offset has been designed to provide north-south connectivity to existing surrounding habitat and east-west connectivity to the approved EPBC2015/7530 and EPBC2019/8539 Offset Areas. As such, the offset aims to achieve the following:

- Habitat recreation by revegetating cleared land into habitat in logical infill locations to maximise the area and width of dedicated offset land
- Habitat recovery and re-connection through strategically located restoration and revegetation adjacent to existing habitat and adjoining approved restoration areas. Reinstating and enhancing habitat on the Offset Land provides for direct wildlife connectivity between on/off-site habitat tracts to the north and south and east and west to the lvory Creek corridor
- Connect the adjacent retained remnant ridgeline vegetation communities with the riparian and alluvial flats being reinstated with Koala and GHFF Habitat through EPBC 2015/7530 and EPBC2019/8539.

There are seven categories of actions listed as relevant and required through the Offset Area. Although in many actions there is overlap, primarily the specific tasks can be considered to either reduce or remove an existing threat or improve or create new habitat opportunities. Some actions apply specifically to the Koala species and others are designed to improve habitat and outcomes for both Koalas and Grey-headed Flying Fox. Some actions are limited to acute or specific locations, others apply to the entire Offset Area and selected actions will apply to the entire land holding, inclusive of areas retained for grazing.

Management actions to be completed in accordance with the OMP include:

- Action 1: Vertebrate pest management (primarily targeting feral dogs)
- Action 2: Weeds of national significance (reduction and management)
- Action 3: Stock management
- Action 4: Access management, trespass, and neighbouring stock mustering controls
- Action 5: Wildfire management
- Action 6: Native seed collection and propagation
- Action 7: Revegetation (habitat creation) activities.



4.0 Achievements

During the offset reporting period, the offset provider achieved the following milestones:

- Legally secured Offset Area: The Avonvale and Cherry Gully Offset Area (183 ha) for EPBC 2018/8347 was legally secured via Voluntary Declaration on 21 December 2022.
- Baseline surveys and updated OAMP: Baseline surveys were completed on 27 February 2023 and the updated Offset Area Management Plan (OAMP) was submitted on 15 May 2023.
- **Planting:** In late-April/early-May 2023, approximately 96 hectares of Offset Area was planted in accordance with the OMP. At time of writing, these new trees are already 1 metre to 1.5 metres tall.
- Targeted feral animal control: Routine targeted feral animal control exercises were undertaken over the past 12 months across the Offset Area. The intent of these exercises is to remove the threat of wild dogs to the koala, and other feral animals (such as pigs), which compromise viability of the restoration works.
- Targeted weed control: Intensive targeted weed control occurred in the first quarter of 2023 and primarily targeted Lantana and other dormant groundcover weeds, which have grown since the removal of the cattle from the Offset Area. Pre and post-plant spraying activities also occurred around the April/May 2023 planting period to support new tree growth.
- Fence repair and replacement: The shared property boundary with the adjoining landholders was repaired and replaced, where necessary, to ensure neighbouring livestock do not breach the fence and harm the Offset Area.
- Wildfire mitigation measures: To ensure best-practice wildfire management and to mitigate any catastrophic event occurring during what was predicted to be a high-risk bushfire season (2023/2024), firebreaks along the property boundary and within the property have been restored and maintained to allow for potential back burning positions and efficient access.
- Neighbour consultation: Consultation with the adjoining landholders on the offset management actions and potential collaboration is ongoing, in particular for wildfire management and pest management.



In late-April/early-May 2023, approximately 96 hectares of Offset Area was planted in accordance with the OMP.

5.0 Planned activities: 2023/24

	2023																								2024		
Action	Early- Jan	End- Jan	Early- Feb	End- Feb	Early- Mar	End- Mar	Early- Apr	End- Apr	Early- May	End- May	Early- June	End- June	Early- July	End- July	Early- Aug	End- Aug	Early- Sept	End- Sept	Early- Oct	End- Oct	Early- Nov	End- Nov	Early- Dec	End- Dec	Early- Jan	End- Jan	Early Feb
Planting																											
Targeted burn and seed areas (steeper land areas) Native seed collection and propagation Assisted native regeneration and revegetation management Revegetation (habitat creation) - rip lines and pre-spraying Revegetation (habitat creation) -															Ongoir	ng											
planting Neighbour consultation																											
Consultation with adjoining land owners on property activities (ongoing) Fire management																											
Bushfire management planning																											
Controlled cool burns																											
Firebreaks cut - 50m perimeter and 30m internal Maintain internal and perimeter firebreaks																											
Property access and stock																											
Maintain internal access tracks through Offset Areas Fence (including cattle exclusion) monitoring Fencing CAPEX																											
Weed management																											
Weed spraying fence lines and firebreaks and internal access tracks																											
Spraying weeds of national significance (ie lantana) Revegetation (habitat creation) -															*Too d	lry to spra	ay for maj	iority of y *Too d	vear dry to spra	ay for ma	ajority of y	/ear					
Integrated vertebrate pest									-									-									
management Wild dog, dingoes, pig, deer, rabbit					_						_																
snooting Erosion, flood and settlement																											
management Maintain storm water diversion																											
bunds on perimeter fire tracks Maintain areas revegetated for erosion control																											



/-	End- Feb	Early- Mar	End- Mar	Early- Apr	End- Apr	Early- May	End- May	Early- June	End- June
								Plannec	I





6.0 Offset management action milestone tracking

A summary outlining the status of management action implementation as per the management actions in the OMP (15 May 2023) are provided below:

Management action 1: Vertebrate pest management (primarily targeting feral dogs)

Management action requirement	Year	Comments
	required	
Consult with Somerset Regional Council	Year 1	Consulted Somerset Regional Council (SRC) Pest Management Specialist (PMS). A 1080 baiting program was initially implemented, however, the results were marginal and due to immediate neighbour concerns, an alternative and intensive trapping and shooting program was established through adaptive management practices.
Commence targeted pest management activities	Year 1	Targeted pest management has been undertaken in accordance with the Feral Animal Register. A monthly cycle of trapping and shooting targeting feral dogs, foxes and wild cats was undertaken. Pig trapping also took place to protect newly ripped and planted areas. Rabbits, hare and deer were also targeted to limit damage to regrowth and newly planted areas. Refer to Appendix A for a sample of the pest management activities.
Commence targeted pest management activities	Year 2	
Commence targeted pest management activities	Year 3	
Commence targeted pest management activities	Year 4	
Commence targeted pest management activities	Year 5	
Decommissioning and removal of any pest species denning, foraging or breeding features	Year 1 - 5	Year 1 – No pest species denning, foraging or breeding features observed Year 2 - Year 3 – Year 4 – Year 5 -
Replicate detailed baseline surveys	Year 5	



Management action requirement	Year	Comments
	required	
Continue to implement pest management	Year 6	
strategy/actions		
Continue to implement pest management	Year 7	
strategy/actions		
Continue to implement pest management	Year 8	
strategy/actions		
Continue to implement pest management	Year 9	
strategy/actions		
Continue to implement pest management	Year 10	
strategy/actions		
Replicate detailed baseline surveys	Year 10	
Continue to implement pest management	Year 11	
strategy/actions		
Continue to implement pest management	Year 12	
strategy/actions		
Continue to implement pest management	Year 13	
strategy/actions		
Continue to implement pest management	Year 14	
strategy/actions		
Continue to implement pest management	Year 15	
strategy/actions		
Replicate detailed baseline surveys	Year 15	
Continue to implement pest management	Year 16	
strategy/actions		
Continue to implement pest management	Year 17	
strategy/actions		
Continue to implement pest management	Year 18	
strategy/actions		
Continue to implement pest management	Year 19	
strategy/actions		
Continue to implement pest management	Year 20	
strategy/actions		
Replicate detailed baseline surveys	Year 20	





Management action 2:

Weeds of national significance (reduction and management)

Management action requirement	Year	Comments
	required	
Exclude stock from lantana infestation areas within the Offset Area and by end of year one completely remove all cattle from Offset Area	Year 1	As per Condition 14, confirmation was provided on 12 April 2023 that no livestock has been kept by the property owner on any land obtained for the Offset Area. Refer Appendix B.
Detailed weed management control activities	Year 1	Intensive targeted weed control occurred in the first quarter of 2023 and primarily targeted Lantana and other dormant groundcover weeds, which have grown since the removal of the cattle from the Offset Area. Pre and post-plant spraying also occurred around the April/May 2023 planting period. Refer to Appendix C for a sample of the weed control activities.
Detailed weed management control activities	Year 2	
Detailed weed management control activities	Year 3	
Detailed weed management control activities	Year 4	
Detailed weed management control activities	Year 5	
Replicate detailed baseline surveys	Year 5	
Detailed weed management control activities	Year 6	
Detailed weed management control activities	Year 7	
Detailed weed management control activities	Year 8	
Detailed weed management control activities	Year 9	
Detailed weed management control activities	Year 10	
Replicate detailed baseline surveys	Year 10	
Detailed weed management control activities	Year 10	
Detailed weed management control activities	Year 10	
Detailed weed management control activities	Year 11	
Detailed weed management control activities	Year 12	
Detailed weed management control activities	Year 13	
Detailed weed management control activities	Year 14	
Detailed weed management control activities	Year 15	
Replicate detailed baseline surveys	Year 15	
Detailed weed management control activities	Year 16	
Detailed weed management control activities	Year 17	
Detailed weed management control activities	Year 18	
Detailed weed management control activities	Year 19	
Detailed weed management control activities	Year 20	
Replicate detailed baseline surveys	Year 20	





Management action 3: Stock management

Management action requirement	Year	Comments
	required	
All livestock to be removed from the Offset Area	Year 1	As per Condition 14, confirmation was
		provided on 12 April 2023 that no
		livestock has been kept by the property
		owner on any land obtained for the
		Offset Area. Refer Appendix B.
Confirm all livestock have continued to be excluded	Year 2	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 3	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 5	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 6	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 7	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 8	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 9	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 10	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 11	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 12	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 13	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 14	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 15	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 16	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 17	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 18	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 19	
from the Offset Area		
Confirm all livestock have continued to be excluded	Year 20	
from the Offset Area		



Management action 4:

Access management, trespass, and neighbouring stock mustering controls

Management action requirement	Year required	Comments
Inspect and rectify all external fence boundaries and notify adjoining landowners of the Offset Area and its intended outcomes	Year 1	External fence boundaries were inspected and the shared property boundary with an adjoining landholder was repaired and replaced to ensure neighbouring livestock do not breach the fence and harm the Offset Area.
Access fates and signage to be installed where Offset Area fencing crosses tracks required to be maintained for external landholder access (as fencing installed)	Year 2-20	
No new access tracks through the Offset Area unless to support offset outcomes	Year 2 - 20	




Management action 5:

Wildfire management

Management action requirement	Year	Comments
	required	
Continue existing fire break infrastructure	Year 1	Existing firebreaks and fire regimes have been
maintenance (firebreaks and trails)		undertaken during Year 1. External property
		boundaries and internal fire breaks have been
		cleared to maintain fire management lines.
Develop and implement Offset Area Wildfire	Year 1	Wildfire mitigation measures such as
Management Plan		firebreaks, fire management lines and low-
		intensity burns have been implemented in
		accordance with the direction of the
		Queensiand Rural Fire Service (QRFS)
		measures will continue to be implemented
		and best practice utilised to inform any future
		mitigation measures. The Offset Area Wildfire
		Management Plan has been developed and
		implemented in accordance with
		recommendations.
Implement Offset Area Wildfire Management Plan	Year 2	
Implement Offset Area Wildfire Management	Year 3	
Plan		
Implement Offset Area Wildfire Management	Year 5	
Plan		
Implement Offset Area Wildfire Management	Year 6	
Plan		
Implement Offset Area Wildfire Management Plan	Year /	
Implement Offset Area Wildfire Management	Year 8	
Plan		
Implement Offset Area Wildfire Management	Year 9	
Plan Implement Offset Area Wildfire Management	Voor 10	
Plan	Teal TU	
Implement Offset Area Wildfire Management	Year 11	
Plan		
Implement Offset Area Wildfire Management	Year 12	
Implement Offset Area Wildfire Management	Year 13	
Plan		
Implement Offset Area Wildfire Management	Year 14	
Plan		
Implement Offset Area Wildfire Management	Year 15	
Plan		
Implement Offset Area Wildfire Management	Year 16	
Plan	rear 17	
Plan		



Management action requirement	Year	Comments
	required	
Implement Offset Area Wildfire Management Plan	Year 18	
Implement Offset Area Wildfire Management Plan	Year 19	
Implement Offset Area Wildfire Management Plan	Year 20	





Management action 6:

Native seed collection and propagation

Management action requirement	Year	Comments
	required	
Ensure existing seed collection program extends to cover the additional proposed re-planting area based on the flowering/fruiting season for dominant koala tree species with priority focus on specimens known to be used by the koala population	Year 1	Collection of seed has been prioritised based on a radius of koala observations on- site. Where a koala has been observed on- site, priority seed collection areas have been identified. Priority of seed collection is as follows: High Priority - 100m of koala observation
		Medium Priority - 500m of koala observation Low Priority - >500m of koala observation
Consult immediately adjoining landholders for permission to harvest seed (where necessary)	Year 1	Owing to adequate seed supplies on site there is no requirement to harvest seed from adjoining landholders was not necessary in Year 1.
Undertake expanded seed collection program within Year 1	Year 1	Priority seed collection areas have been identified and an expanded seed collection program will continue into Year 2.
Continue seed collection program until sufficient stock to complete the full replanting of EMZ1 for the Offset Area has been germinated and propagated within the on-site nursery	Year 2	
Expand and operate on-site purpose-built nursery to cater for collected seed, germination and transition of seedlings to tubestock for reuse in site planting	Year 2	

Management action 7:

Revegetation (habitat creation) activities

Management action requirement	Year required	Comments
Finalise locations, sequence and timing for revegetation program	Year 1	In March 2023 planting areas and seedling quantities were identified, and timing for the revegetation program scheduled.
Cultivate and prepare Tranche 1 (45.75 ha) area in preparation for Year 2 planting	Year 1	It was not necessary to split the planting areas into tranches. Therefore, the entire Offset Area has been planted in one single tranche. In April 2023 the revegetation area was cultivated and prepared in readiness for planting. Planting was completed in May 2023.
Create Tranche 1 water source for revegetation establishment	Year 1	The Offset Area is predominantly located along waterways or creek lines, and as such, water sources already exist. Where necessary, irrigation connections were created.
Establish photo monitoring points and protocols for Tranche 1 areas	Year 1	Photo point monitoring locations have been GPS located within Offset Area.



Management action requirement	Year required	Comments
Complete Tranche 1 revegetation zone (45.75	Year 2	This was undertaken in Year 1, ahead of
ha)		schedule, and saw 96 ha of planting works undertaken.
Cultivate and prepare Tranche 2 (45.75 ha) area in preparation for Year 3 planting	Year 2	As per Year 1, planting was completed in May 2023.
Establish photo monitoring points and protocols	Year 2	Photo point monitoring locations have
for Tranche 2 areas		been GPS located within Offset Area.
Complete Tranche 2 revegetation zone (45.75 ha)	Year 3	As per Year 1, planting was completed in May 2023.
Cultivate and prepare Tranche 3 (45.75 ha) area in preparation for Year 4 planting	Year 3	As per Year 1, planting was completed in May 2023.
Establish photo monitoring points and protocols	Year 3	Photo point monitoring locations have
for Tranche 3 areas		been GPS located within Offset Area.
Monitor and maintain Tranche 1 (45.75 ha	Year 3	As per sequencing program, post-plant
revegetation zone), inclusive of rectification and		spraying will be undertaken in March
replacement works		2024, ahead of schedule, and will continue
		on a regular basis along with any
		necessary rectification/replacement works.
Complete Tranche 3 revegetation zone (45.75 ha)	Year 4	As per Year 1, planting was completed in May 2023
Cultivate and prepare Tranche 4 (45.75 ha) area	Year 4	As per Year 1, planting was completed in
in preparation for Year 5 planting		May 2023.
Establish photo monitoring points and protocols	Year 4	Photo point monitoring locations have
for Tranche 3 areas		been GPS located within Offset Area.
Monitor and maintain Tranche 1 & 2 (91.50 ha	Year 4	As per sequencing program, post-plant
revegetation zone), inclusive of rectification and		spraying will be undertaken in March
replacement works		2024, ahead of schedule, and will continue
		on a regular basis along with any
		necessary rectification/replacement works.
Complete Tranche 4 revegetation zone (45.75 ha)	Year 5	As per Year 1, planting was completed in May 2023.
Monitor and maintain Tranche 1, 2 and 3 (137.25	Year 5	As per sequencing program, post-plant
ha revegetation zone), inclusive of rectification		spraying will be undertaken in March
and replacement works		2024, ahead of schedule, and will continue
		on a regular basis along with any
		necessary rectification/replacement works.
Monitor and maintain Tranche 1 - 4 (183 ha	Year 6 -20	As per sequencing program, post-plant
revegetation zone), inclusive of rectification and		spraying will be undertaken in March
replacement works		2024, aneda of schedule, and will continue
		on a regular basis along with any
Complete transect surveys in accordance with	Year 10	
the Modified Habitat Quality Assessment (Koala)		
(MHOA) and Grev-Headed Elving-Fox Foraging		
Habitat Assessment (GHFF FHA) tools within		
established revegetation zones. Undertake Koala		
Spot Assessment technique to derive koala		
occurrence category for revegetation zones.		
Replicate MHQA and GHFF FHA transect surveys	Year 15	
Replicate MHQA and GHFF FHA transect surveys	Year 20	



7.0 EPBC2015/7530 conditions compliance

Condition	Condition requirements	Compliant/	Due date	Completion date	Comments
number		Non-compliant			
13.	Legally secure 183ha prior to the	Compliant	Prior to commencement	21 December 2022	See Appendix D
	commencement of the action		ofaction		
13b.	Notify the Department within 20 business	Compliant	23 January 2023	23 December 2022	See Appendix D
	days of legally securing the offset (VDEC)				
14.	End Year 1 provide written confirmation all	Compliant	21 December 2023	21 December 2023	See Appendix B
	livestock has been removed from the area				
15.	Within three months of approval, complete	Compliant	22 March 2023	15 March 2023	Baseline surveys
	baseline surveys to determine: vegetation				completed 15 March 2023.
	condition attributes for each regional				Calculation sheets created
	ecosystem, the extent of weed cover,				
	seasonal feral animal abundance and rate of				
	koala mortality due to feral animals				
16 & 17.	Within two months of baseline surveys	Compliant	22 May 2023	15 May 2023	Updated OMP submitted
	(Condition Number 15.) submit updated				15 May 2023
	Offset Management Plan (OMP)				
18.	New OMP to be approved by Minister within	-	15 May 2024	Waiting on variation	A variation extension
	12-months			extension response	application was submitted
					by the Proponent in July
					2023
28.	Undertake independent audit of outcomes	-			
	required by Condition 13 within 3 months				
	prior to:				
	Year 5		21 September 2027	-	
	Year 10		21 September 2032	-	
	Year 15		21 September 2037	-	



Appendices



Appendix A

Sample pest management results

Pest control sample images























Koala:































Appendix B

Letter confirming livestock removed from approved Offset Area



Mr Dave Franklin Project Director Stockland C/o Saunders Havill Group 9 Thompson Street Bowen Hills Qld 4006

12 April 2023

Mr Darren Jonsson Director One Environment GPO Box 1365 BRISBANE QLD 4001

Dear David,

EPBC2019/8539 Offset: Confirmation livestock removed from approved offset area

As per Condition 14 of the EPBC2018/8347 approval, we confirm no livestock has been kept by the property owner on any land obtained for approved offsets.

If you have any questions, please do not hesitate to contact me.

Your sincerely,

105-

Darren Jonsson Director



Appendix C

Sample weed management results

Daily Record and Herbicide Distribution Sheet

Site Name:	Che Ivor	rry Gu v Ck. (Illy, 482 Littles QLD, 4313	Rd,	Date:		08-09/	06/2023		Work Re No.	Work Request/ Purchase Order No.					
Client:	Sor	nerset	Ag Services	Pty Ltd	Start time	:	8.00am			Finish tim	e:	5.00pm				
		Stop a	nd think through	the task	Y / N / N/A			Descri in site	be Haz JSA)	zard (not de	escribed	Risk Rating	List Cor risk/Rel	ntrols evant	used to reduce SOP/SWMS	Risk rating
	Α.	Is there	e are procedure for	r this task (SOP, SWMS, JSA)	Y	1	Isolate	ed site, 4wd aco	cess on	ly to some se	ections	М	Radios+PL	B in us	e, maintain site lines	L
	В.	Is there	e a change to a pro	ocess, procedure?	Ν	2							accesss	er, use		
WHS/	C.	Do we	have the correct e	quipment and PPE for the task	(s Y	3							ections			
ENVI	D.	Are we	trained, competer	nt and authorised for this task	Y	4										
MENT	E.	Do we	Do we have a clear plan in mind													
AL	F.	Do we	have a site emerg	ency plan in place	Y	6										
	G.	Pre-use undertak	visual inspection o ken	f plant, & equipment	Y	7										
	Name Signed							Environmer	ital Co	nditions						
								Clear	х	Dry	х	Mild			Temp	10-27
Personnel:	Call	um Mo	cGichen	C McGichen				Overcast		Showers		Humid			Wind Speed/ Direction	0-10 NNW
	Carr	rie Doy	/le	CDoyle		Zone Vegetation Type										
								Dry Euc		Rain Fore	st	Wetla	ands		Dunes	
0								Wet Euc		Riparian		Coas	stal		Other	x
Equipme	nt Us	ed	Chemicals U	Jsed (add trade name)	Total quanti	ity ap	oplied or	n site		Rate:	Plants	Treated	ļ	Metho	bd	
Knapsack	х		Dichlorpop	Lantana 600	Amount use	ed	1.85L			50ml per	10L	Lantan	a camara	F	oliar Spray	
Power spray			Penetrant	Pulse	Amount use	ed	740ml			2ml perL						
			Metsulfuron	Associate	Amount use	ed	37G			1g per 10)L					
					Tot. volume	e of r	mixture:			370L						
Knapsack					Amount use	ed										
Power spray					Amount use	ed										
					Amount use	ed										
				1	ot. volume o	of mi	ixture:									

	ZONE	Restoration - Initial	Resorationt - Follow up	Prep	Planting	Establishment/ maintenance	Ad hoc						
Work						x		Foliar spray Lar	ntana i	n and around plantings;			
Completed: (description													
of work undertaken)													
Follow-up Comments													
& Site Notes:													
	<u> </u>												
	L							Reportab incidents	le s				
WH&S (accide	nts, near miss	es, safety is	sues)						No No	Access issues and illegal access (broken gates/fences, track blockage/erosion/drainage issues, motorbikes, cars, mtn bikes, camping) No			
Environmenta	al Issues and	lllegal Dum	ping (signific	cant eros	sion, fires, g	garden waste,	cars, ru	bbish etc.)	Xs/ No	Restricted matter (Weeds) (Category 1	or 2 species present)		Xs/ No
Significant flo	ra and fauna	sightings							Xs(No	Public interaction (Public comments)			∭s/ No
Name:	Callum N	IcGiche	n			Signatu	re:C	McGichen			Date	09/06/2023	

Spray Plan and Application Record for TSME Services

Client Business Name		Somerse	t Ag Services	Pty	Ltd		Date	6.3	5.73				
Property Addres	ss	452 - 48	6 Little's Roa	d, I\	VORY CREEK QLD	431	13						
Operator's Nam	ne	Travis Er	nks										
Phone: 043	4 550	768			Email:	mail: tsmeservices@gmail.com							
Description of v	vhere	pesticide v	vas applied:		Lantana Spraying								
				1									
PPE used		Applicat	ion Equipmen	nt	Pest Type	101	Applicat	tion Detail	s				
Overalls	x	Backpac	k		Weed	×	Spraying speed (km/l	n)					
Rubber gloves x Spraytank/Ha			nk/Hand gun	x	Insect		Water Volume (L/ha)						
Respirator/Mas	k x	Boom Sp	oray		Disease	100	Nozzle						
Goggles	X	Drench	zun		Vertebrate pest		Pressure		1				
Hat	×	Other:		-	Other:		Pre-op Check OK?	Yes	No				
Other:					· Weathat		Signs used to notity public	r Yes	NO				
No spray zone	N/A	Yes	Neighbou	urs	Notified		Date Notified						
Treatment com	ments	/Instructio	ns:										
Spray Mix	turo Ir	gradiante			Patch Number	-	An	plication B	ate				
Spray IVIIX	ture ii	igreatents		-	Product Used:	1000	Ab	plication	ale				
Trade Name:				-	rioduct oscu.								
A: Grazon E	xtra			-	Ment 12	in al	a antecnook	500ml/100L					
B: 🗌 Starane A	dvand	ed			Delta 1;			600ml/100L					
C:					Measure	-	a time pecals @ start	mue:					
Active Constitut	:e:												
A: Triclopyr, Pic	loram,	Aminopy	alid										
B: Fluroxypyr		4			The second								
C:		4			Missel Es	10.91	1.8. dire tioni:						
	r:			-	Delta T-	-							
APVMA Numbe													
APVMA Numbe A: 60830/10507	7					. 90	d Timle details @ start	time:					
APVMA Numbe A: 60830/10507 B: 62287/11797	'7 '3				Observa Wigather	nor Nor	is: d Time details @ start	Indes.					
APVMA Numbe A: 60830/10507 B: 62287/11797 C:	7 73				Temp: Observa Wicather	Ser Ser	s. d Time Jetzilis @ start	time:					
APVMA Numbe A: 60830/10507 B: 62287/11797 C:	77 73	4 			Openae Openae Jeute Diluent:	190 1901	d Time Jetzilis @ start	S K	64				
APVMA Numbe A: 60830/10507 B: 62287/11797 C:	77 73	4 			Diluent:	an 50 million	2.216 - 18 operation): 7.5 5. 9 1 Time fetzilis @ start	inne:	<u>6</u> 41				
APVMA Numbe A: 60830/10507 B: 62287/11797 C:	77				Diluent: Wetting Agent:	1 90 30 1 90	22-6 C 18 develope): 7.5 S. 9 S. 9 Time fetzilis @ start	n S K time:	54				
APVMA Numbe A: 60830/10507 B: 62287/11797 C: SP700	77 73	000			Diluent: Wetting Agent:		d Time fetalls @ start 22-6 2 - 6 2 - 9 2 - 10 2 -	350ml/100	6h				
APVMA Numbe A: 60830/10507 B: 62287/11797 C: SP700	77 73	000			Diluent: Wetting Agent: Other Ingredients	101 100 100 100 100	a d Time feralls @ start 2.2.46 2.2.46 2.09 2.04 2.09 2.00 2.04 2.04 2.04 2.04 2.04 2.04 2.04	350ml/100	5th				
APVMA Numbe A: 60830/10507 B: 62287/11797 C: SP700 Reactor Red Dye	27 23 e	000			Diluent: Wetting Agent: Other Ingredients	190 S	6 2 a Ime fetalls @ start 2.2-6 5 5 5 5 5 5 5 5 5 5 5 5 5	350ml/100 1L/600L	5.h				
APVMA Numbe A: 60830/10507 B: 62287/11797 C: SP700 Reactor Red Dye	27 73 e				Diluent: Wetting Agent: Other Ingredients		t & direction): 6 k 6 2 1 Ime tetails @ start 2 2 6 2 6	350ml/100 1L/600L	<u></u>				
APVMA Numbe A: 60830/10507 B: 62287/11797 C: SP700 Reactor Red Dye	e	046			Diluent: Wetting Agent: Other Ingredients		5 2 6 2 6 2 6 2 6 2 6 2 6 2 6 2 7 2 7 2 7 2 7 2 7 2 7 2 7 2 7	350ml/100 1L/600L					

Tank Distribution Details:

Tank 1 volume: 600L	Weather and Time details @ start time: 6.30				
	Delta T: 20 2				
	Wind (speed & direction): 6KPH				
Reactor Red Dye	Temp: 262				
Other b	Observations:				
Tank 2 volume: 600C	Weather and Time details @ start time: 8.45				
and the second	Delta T: 22.6 2				
D	Wind (speed & direction): 15.5 KPJ				
E.	Temp: 30.42				
B: 03383A175833	Observations:				
Tank 3 volume:	Weather and Time details @ start time:				
APVMAN bumbor	Delta T:				
	Wind (speed & direction):				
B. Furenginge	Temp:				
ALTHODAYC Pulanan, Amiliapyralia	Observations:				
Tank 4 volume:	Weather and Time details @ start time:				
8: D Startane Advanced	Delta T: eooual\700r				
A: Carazon Estra	Wind (speed & direction):				
Trade Name:	Temp:				
Spray Mixture Ingredients Batch	Observations:				
Tank 5 volume:	Weather and Time details @ start time:				
	Delta T:				
	Wind (speed & direction):				
11 CROMMERT COLUMNICATION OF TAXABLE	Temp:				
No spray zone N/A Yes Neighbours Notified	Observations:				
Tank 6 volume:	Weather and Time details @ start time:				
politiez xi pusucu finu i Acurer	Delta T:				
Respirator/Mask x Boom Spray Diseas	Wind (speed & direction):				
United Toxes al gateshare and an in jurger	Temp:				
PPE used Application Equipment Per	Observations:				

Additional Notes:	4'zhes		
	198		
Signature:	Name	DAVI	Date: 6.2.23

preversion and Application Record for 15ME Service

Spray Plan and Application Record for TSME Services

Client Bus Name	iness	-	Somerset	Ag Services	Pty	Ltd	21			Date	13-	2-23			
Property A	Address		452 - 486	Little's Road	d, I\	VORY CRI	EEK QLD	43:	13						
Operator'	s Name	0	Travis Enk	5			14								
Phone:	0434 5	50 7	768	SUN	3	Email:	Email: tsmeservices@gmail.com								
Descriptio	on of whe	re p	esticide wa	s applied:		Lantana Spraying									
PPE	used	1	Applicatio	n Equipmer	nt	Pest	Туре	01	2	Applicatio	n Details				
Overalls		X	Backpack			Weed	(aub)	X	Spraying speed (km/h)						
Rubber gi	oves	X	Spraytank,	Hand gun	X	Discaso	annin (al-		Water volun	ie (L/na)					
Goggles	I/IVIASK	×	Drench gu	n	-	Vertebr	ate nest	-	Pressure						
Hat		x	Other:		-	Other:	are pest		Pre-on Check OK2		Yes	No			
Other:	nula:	1^	other.			other.	Weather	90	Signs used to no	tify public?	Yes	No			
No spray z	one N	/A	Yes	Neighbou	irs	Notified	OPPOLAT		Date Notified	4					
Treatmen	t comme	nts/	Instructions	:			Temp:								
Sora	Mixture	o In	aredients		-	Batch	Number		d Time define	Annli	cation Ra	ate			
Spra	IVIIXCUI	enq	greaterits		-	Produ	ct Used:	1016		Арри	cation ne	ice .			
Trade Nan	ne:	2					Temp	-							
A: 🛒 Gra	zon Extra	a					Aging (sb	6.61	s & direction):	50	0ml/100L				
B: 🗌 Star	rane Adva	ance	ed				Dolta T:			60	0ml/100L				
C: 🗌	nius:	1			-	Weather a			d Time details	@ 355 m					
Active Cor	nstitute:														
A: Triclopy	yr, Piclora	am,	Aminopyral	id	-		(Jacobier	-	50						
B: Fluroxy	pyr						1.0114354	-		STON	7.1-				
C:					-		Hiteriq (20	200	A dire tionle	3.00					
APVMA N	umber:	~	222				Dulks T.	-	6						
A: 60830/	105077	2	DV				Weather	913	d Time Tstalls						
B: 62287/	117973				11		Observa	OL	12						
C:							Temp:	C.	23						
						Dilu	uent:	60	a calectrau):	2.54	16rf				
							DEIG C		26.1.5						
SP700	enner 🤅	1	200		Tic.	Wettin	g Agent:	90	d These Setuits	35	0ml/1001	12.000			
		-			Cettin	Other In	gredients	GL	121		South Commission				
Reactor Re	ed Dye	A CHILL				a crief in	o, e arento.		2416	1	L/600L				
							AANIO DA	-	a se en se recult	12	×67	1000			
									12.91						
			000												

Tank Distribution Details:

Tank Distribution Details:

Tank 1 volume: 0004	Weather and Time details @ start time: 6.48 sn
Reactor Red Dye	Delta T: 23.6 c
	Wind (speed & direction): (, 9 KPH)
	Temp: 29,42
	Observations:
Tank 2 volume: 6002	Weather and Time details @ start time: Q15 em
	Delta T: 24.52
	Wind (speed & direction): 2.5 KPL
	Temp: 32.2
	Observations:
Tank 3 volume: 6000	Weather and Time details @ start time: 11.45 and
	Delta T: 222
	Wind (speed & direction): 7.01004
	Temp: 330
A. Teleboyn, Picloran, Ambiopyralid	Observations:
Tank 4 volume:	Weather and Time details @ start time:
B: Starane Advanced	Delta T: 2004/1007
A. 😿 Grazon Extra	Wind (speed & direction):
Trade game:	Temp:
Spray Mixture Ingredients	Observations:
Tank 5 volume:	Weather and Time details @ start time:
	Delta T:
	Wind (speed & direction):
	Temp:
No spray zone N/A Yes Neighbours Notil	Observations:
Tank 6 volume:	Weather and Time details @ start time:
Goggees x Drench gun 1 ver Hist X Other	Delta T:
Respirator/Nack x Boom Spray Dist	Wind (speed & direction):
gnepet Bloves x Sprayburg from a per	Temp:

Additional Notes:

8hr3

Signature: _

2

Name: DAVE

Date: 13.2.23

oray Plan and Application Record for TSIME Service



Appendix D

Approved VDEC and supporting email

From: Laura Thorley Sent: Friday, 23 December 2022 8:49 AM To: 'epbcmonitoring@dcceew.gov.au' <<u>epbcmonitoring@dcceew.gov.au</u>> Cc: 'postapproval@dcceew.gov.au' <<u>postapproval@dcceew.gov.au</u>> Subject: FW: EPBC 2018-8347 Ripley Valley PDA Providence East and South Qld

Good Morning,

In accordance with Condition 13a of the approval conditions for EPBC 2018/8347 Ripley Valley PDA Providence East and South Qld, the Avonvale and Cherry Gully Offset Area (183 ha) was legally secured via voluntary declaration on 21 December 2022.

The following evidence has been provided in accordance with condition 13b:

- 1. Offset attributes excel file
- 2. Supporting evidence from the Queensland Department of Resources zip
- 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 <u>laurathorley@saundershavill.com</u> phone 1300 123 SHG web <u>www.saundershavill.com</u> head office 9 Thompson St Bowen Hills Q 4006



Department of **Resources**

File/Ref number: 2022/002500 Unit: Vegetation Management Unit

21 December 2022

Mr Darren Jonsson c/- One Environment Suite 538 Jubilee Place L5 470 St Pauls Tce Fortitude Valley QLD 4006

Via email only: darren@oneenvironment.com.au

Dear Mr Jonsson

RE: Declaration made on part of lot 1 CSH1549 & 10,4,5,9 SP327519 - Somerset Regional Council

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 21 December 2022. A copy of each of the following certified documents is attached for your records:

- Declaration notice 2022/002500
- Declared area map (DAM 2022/002500)
- Declared area Property Map of Assessable Vegetation (PMAV 2022/002505)
- Cherry Gully & Avonvale Station Declared Area Management Plan; for EPBC2018/8347 – Providence East and South; One Environment, September 2022

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 2022/002500.

Yours sincerely

Maria Wiringi

Maria Wiringi Natural Resource Management Officer



Declaration notice – approval

Sections 19E to 19L of the Vegetation Management Act 1999

1. Details of request

- 1.1. Proponent's name: Somerset Offset Land Pty Ltd
- 1.2. Date request received: 22 August 2022
- **1.3. Request:** declare stated land as an area of high nature conservation value
- **1.4. Property description:** Lot 1 CSH1549 & 10,4,5,9 SP327519– Somerset Regional Council
- **1.5. Land tenure:** Freehold
- **1.6. Decision reference**: 2022/002500

2. Declaration information

2.1. Declaration made:

The Chief Executive of the Department of Resources declares the area identified on Declared Area Map DAM 2022/002500 as an area of high nature conservation value in accordance with section 19F(1) 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 2022/002500)
- Cherry Gully & Avonvale Station Declared Area Management Plan; for EPBC 2018/8347 – Providence East and South; One Environment, September 2022

2.3. Property Map of Assessable Vegetation

In accordance with s20B of the *Vegetation Management Act 1999*, Property Map of Assessable Vegetation PMAV 2022/002505 has been prepared for the declared area.

- 2.4. Date of declaration: 21 December 2022
- 3. Delegated officer's signature Maria Wiringi