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Quality, Integrity, Experience

External Offset Management Plan

Paradise Waters Residential Estate

Prepared for Stockland Development Pty Ltd

Prepared by

Green Tape Solutions

and

Crossroads Rural and Environment Pty Ltd

Report Number: PR16085_OMPExternal_VerE

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In preparing this report we have assumed that all information and documents provided to us by the Client, or as a result of a specific request or enquiry, were complete, **accurate** and up-to-date. Where we have obtained information from a government register or database, we have assumed that the information is accurate. Where an assumption has been made, we have not made any independent investigations with respect to the matters the subject of that assumption. We are not aware of any reason why any of the assumptions are incorrect.

In this note, a reference to loss and damage includes past and prospective economic loss, loss of profits, damage to property, injury to any person (including death) costs and expenses incurred in taking measures to prevent, mitigate or rectify any harm, loss of opportunity, legal costs, compensation, interest and any other direct, indirect, consequential or financial or other loss.

Document Records - Quality

TITLE	External Offset Management Plan - Paradise Waters Residential Estate
FILED AS	SC004-1_OMPExternal_VerE

Revision	Date	Prepared by (Name/title)	Reviewed by (Name/Title)	Approved by (Name/Title)
Version A	20/10/2016	Steve Cupitt / Crossroad Consulting	Kelly Matthews, Director / Principal Ecologist	Kell Cronin, Stockland Development Pty Ltd
Version B	25/09/2017	Steve Cupitt / Crossroad Consulting	Kelly Matthews, Director / Principal Ecologist	Kell Cronin, Stockland Development Pty Ltd
Version C	10/12/2017	Steve Cupitt / Crossroad Consulting	Kelly Matthews, Director / Principal Ecologist	Kell Cronin, Stockland Development Pty Ltd
Version D	4/4/2018	Anthony Dunn / Steve Cupitt / Jordan Buchnann	Kelly Matthews, Director / Principal Ecologist	Kell Cronin, Stockland Development Pty Ltd
Version E	25/05/2018	Steve Cupitt, Crossroads Rural & Environment	Kelly Matthews, Director / Principal Ecologist	Kell Cronin, Stockland Development Pty Ltd

TABLES

FIGURES

PLATES

Signed declaration of accuracy

I declare that:

1. To the best of my knowledge, all the information contained in, or accompanying this External Offset Management Plan – Paradise Waters Residential Estate is complete, current and correct.

2. I am duly authorised to sign this declaration on behalf of the approval holder.

3. I am aware that:

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

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

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

Signed _____

Full name (please print) DAVID LANER

Organisation (please print) STOCKLAND

Date 25/5/18

Glossary of Terms

Term	Definition
Biodiversity	The biological diversity of life is commonly regarded as being made up of the following three components: Genetic diversity – the variety of genes (or units of heredity) in any population; Species diversity – the variety of species; and Ecosystem diversity – the variety of communities or ecosystems.
Ecological Community	An assemblage of species occupying a particular area.
Endangered	Designated as Endangered under the EPBC Act, NC Act and/or VM Act. Refer to definitions of EPBC Act conservation status, NC Act conservation status and VM Act conservation status for meaning of Endangered under each Act.
Environmental Protection Biodiversity Conservation (EPBC) *Act 1999* Conservation Status	Under the Federal EPBC Act 1999, listed threatened species and ecological communities are as a conservation status of Extinct in the Wild, 'Critically Endangered', Endangered or Vulnerable. Definitions of these terms under the EPBC Act are as follows: <u>Extinct in the Wild</u> It is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or It has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form. <u>Critically Endangered</u> It is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria. <u>Endangered</u> It is not critically Endangered; and It is facing a very high risk of extinction in the wild in the near future as determined in accordance with the prescribed criteria. <u>Vulnerable</u> It is not Critically Endangered or Endangered; and It is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
Essential Habitat	Vegetation in which a species that is Endangered, 'Vulnerable', or Near threatened under the *Nature Conservation Act 1992* (NCA) has been known to occur, and has been mapped as essential habitat by the Department of Environment and Heritage Protection (DEHP).
Habitat	An area or areas permanently, periodically or occasionally occupied by a species, population or ecological community, including any and all biotic and abiotic features of the area or areas occupied.

Term	Definition
Nature Conservation Act 1992 (NC Act) Conservation Status	Under the State NC Act 1992, protected species are as a conservation status of Extinct in the Wild, Endangered, Vulnerable, Near threatened, or Least Concern. Definitions of these terms under the NC Act are as follows: <u>Extinct in the wild</u> There have been thorough searches conducted for the wildlife; and It has not been seen in the wild over a period that is appropriate for the life cycle or form of the wildlife. <u>Endangered</u> There have not been thorough searches conducted for the wildlife and the wildlife has not been seen in the wild over a period that is appropriate for the life cycle or form of the wildlife; The habitat or distribution of the wildlife has been reduced to an extent that the wildlife may be in danger of extinction; The population size of the wildlife has declined, or is likely to decline, to an extent that the wildlife may be in danger of extinction; or The survival of the wildlife in the wild is unlikely if a threatening process continues. <u>Vulnerable</u> Its population is decreasing because of threatening processes; Its population has been seriously depleted and its protection is not secured; Its population, while abundant, is at risk because of threatening processes; or Its population is low or localised or depends on limited habitat that is at risk because of threatening processes. <u>Near threatened</u> The population size or distribution of the wildlife is small and may become smaller; or The population size of the wildlife has declined, or is likely to decline, at a rate higher than the usual rate for population changes for the wildlife; or The survival of the wildlife in the wild is affected to an extent that the wildlife is in danger of becoming Vulnerable. <u>Least Concern</u> The wildlife is common or abundant and is likely to survive in the wild. Native wildlife may be prescribed as Least Concern wildlife even if: The wildlife is the subject of a threatening process; The population size or distribution of the wildlife has declined; or There is insufficient information about the wildlife to conclude whether the wildlife is common or abundant or likely to survive in the wild.
Near Threatened	Designated as Near threatened under the NC Act. Refer to definition of NC Act conservation status for meaning of Near threatened under the NC Act
Project Area	The Project site covers the area within the site boundaries as illustrated in **Figure 1**.

Term	Definition
Regional Ecosystem (RE)	A vegetation community, within a bioregion, that is consistently associated with a particular combination of geology, landform and soil. Regional Ecosystem may be classified under schedules 1–3 of the Vegetation Management regulation as Endangered, Of Concern or Not Of Concern. Refer to VM Act conservation status for meaning of Endangered, Of Concern or Not Of Concern under the VM Act.
Threatened	A term used with reference to ecological communities, REs or species of that are Endangered, Vulnerable or Of Concern as listed under the NC Act, the VM Act or the EPBC Act (refer to NC Act conservation significance, the VM Act conservation significance and EPBC Act conservation significance for more details).
Vegetation Management Act 1999 (VM Act) Conservation Status	Under the State VM Act, REs may be classified as Endangered, Of Concern or Not Of Concern. Definitions of these terms under the VM Act are provided below. <u>Endangered</u> • Less than 10% of pre-clearing extent of remnant vegetation (see following definition) exists in the bioregion, or 10 to 30 % of pre-clearing extent remains and the remnant vegetation is less than 10 000 hectares. • In addition, for biodiversity planning purposes the DEHP also classifies a regional ecosystem as Endangered if: • Less than 10% of its pre-clearing extent remains unaffected by severe degradation and/or biodiversity loss; or • 10-30% of its pre-clearing extent remains unaffected by severe degradation and/or biodiversity loss and the remnant vegetation is less than 10,000 hectares; or it is a rare regional ecosystem subject to a threatening process. <u>Of Concern</u> • 10 to 30% of pre-clearing extent of remnant vegetation exists in the bioregion, or more than 30% of pre-clearing extent remains and the remnant vegetation is less than 10 000 hectares. • In addition, for biodiversity planning purposes the DEHP also classifies a regional ecosystem as Of Concern if: • 10-30% of its pre-clearing extent remains unaffected by moderate degradation and/or biodiversity loss. <u>Not Of Concern</u> • More than 30% of pre-clearing extent of remnant vegetation exists in the bioregion, and it is greater than 10, 000 hectares. • In addition, for biodiversity planning purposes the DEHP also classifies a regional ecosystem as Not Of Concern if the degradation criteria listed above for Endangered or Of Concern regional ecosystems are not met.
Vulnerable	Designated as Vulnerable under the EPBC Act and/or NC Act. Refer to definitions of ‘EPBC Act conservation status’ and ‘NC Act conservation status’ for meaning of Vulnerable under these Acts.

1. Introduction

1.1. Background Information

Stockland Development Pty Ltd (Stockland) proposes to develop the "Paradise Waters" residential estate at Grampian Drive, Deebing Heights, Queensland (Qld) to the South of Ipswich. The Site is approximately 339 ha in area and is on land described as Lot 207 on CH31135, Lot 3 on RP179314, Lot 4 on RP179314 and Lot 210 on CH31207 (Site). It is proposed that residential development be confined to Lot 207 on CH31135 (Northern Lot) and that the balance of the lots (Southern Lots) be dedicated to Ipswich City Council for conservation purposes.

An analysis of the development reveals that 92ha of the existing Koala habitat is being nominated for removal as part of the new development layout or will become inaccessible to Koalas because of dog exclusion fencing (RPS, 2012; RPS, 2013). The vegetation to be removed on site is described as 12.9-10.2/12.9-10.7 (*Corymbia citriodora*, *Eucalyptus crebra* open forest on sedimentary rocks / *Eucalyptus crebra* woodland on sedimentary rocks).

As part of Approval for the Paradise Waters Residential Development, Deebing Height, QId (EPBC 2103/6864), Stockland is required to offset the loss of the 92ha of Koala habitat. 40% of the required offsets will be provided onsite (113.20 ha) and the remainder provided from an external offset. An offset management plan (this document) has been developed to provide details of the **external sites' attributes,** BioCondition scores, risks and risk management, reporting requirements, management costs and timeframe of on-ground works.

NOTE: The internal offset management plan for the internal site is provided in a separate report.

Condition of Approval

This management plan was developed to comply with the EPBC conditions of approval (EPBC 2013/6864). The approval condition requirements and summary of how this management plan complies with each condition is tabled in **Appendix 1**.

Condition 3 of the Approval requires Stockland to secure and manage as Koala habitat a minimum of 106 hectares that is mapped as category X within Lot 1 RP12394 (Cannon Creek). In addition, Condition 4 requires the development and approval of an Offset Management Plan (OMP). The external offset site must be legally secured in accordance with Queensland legislation.

The offset calculations in which the offset area has been based in accordance with the *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy (Offsets Policy), and detailed in RPS, 2014.

1.2. Purpose of the Offset Management Plan

The external offset site is required to partly meet the offset requirements resulting from the residual impact of 92 hectares of Koala habitat.

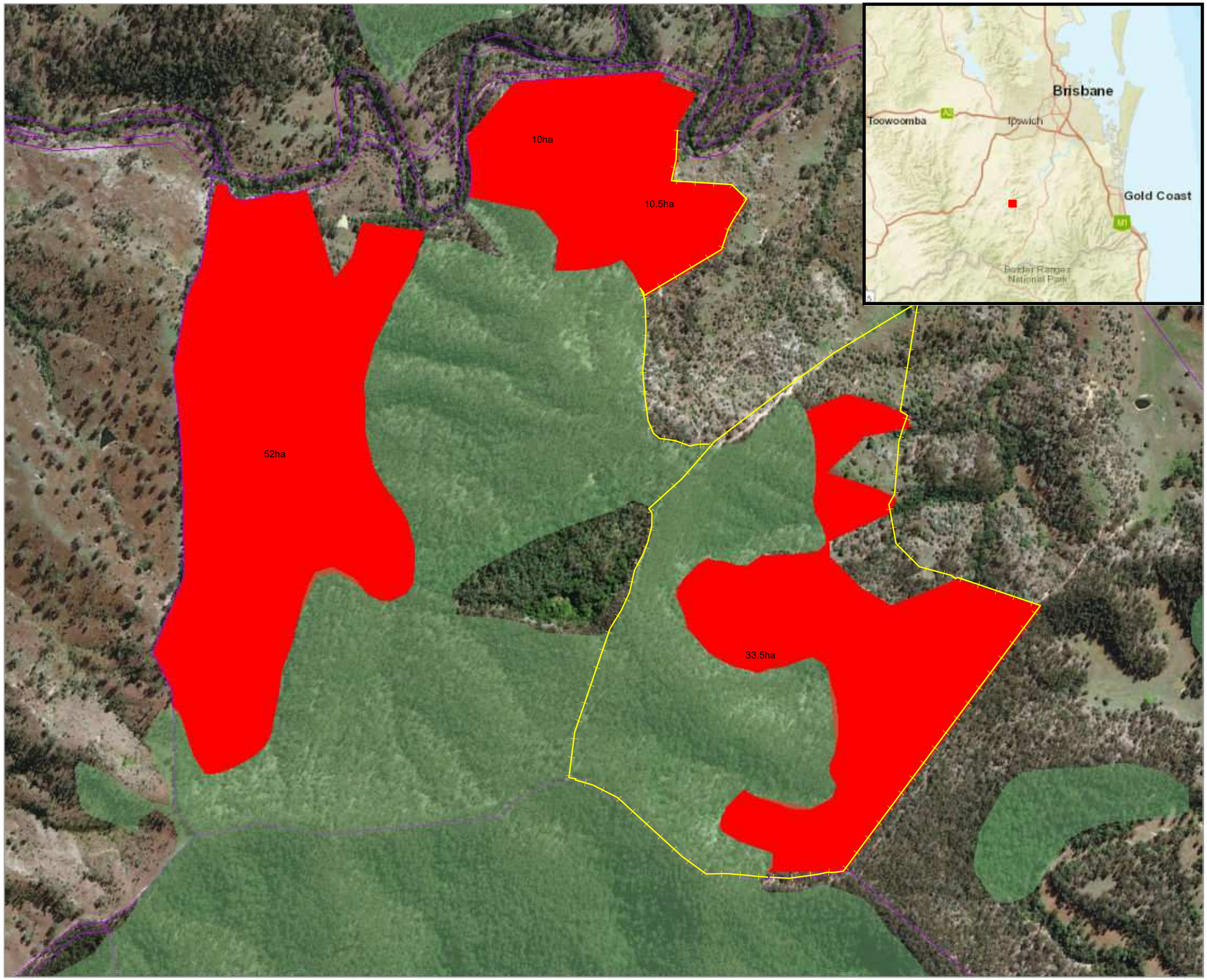
Management of the offset will be conducted by an accredited environmental company during the first 5 years of the management plan, then by the Landowner for the duration of the approval (5 January 2045). Any additional management costs after the first 5 years will be paid for by Stocklands. Periodic checks of the site will be conducted by an experienced ecologist to ensure the management actions are effective and being conducted in accordance with this management plan.

Habitat condition surveys will be conducted to ensure the site attains and maintains its desired condition and a report provided to the landowner, client and the Department. In the event management issues are identified that are preventing management of the site from attaining and/or maintaining the desired habitat condition, Stockland will take necessary corrective and financial actions, including initially engage the Department to identify satisfactory corrective actions.

The approved versions of the management plans will be accessible to the public on the website of the approval holder for the duration of the EPBC 2013/6864 approval.

FIGURE 1: SITE LOCATION AND EXTERNAL OFFSET AREAS

Paradise Water External Offset Management Plan



Fence
Cadastre
External_Offset

Mapped Regional Ecosystems

12.9-10.2

Notes:
-Data by Green Tape Solutions 2018
-Base map Copyright (c) Esri and its data suppliers.
-Regional Ecosystems and QTopo Base map Copyright (c) State of Queensland (DNRM)

0 190 380 Meters

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Ref: Paradise Water 2017
Author: KM
Date:04/12/2017

2. Description of the Offset Management Areas

2.1. Property and Ownership Details

Table 1: Property details

Name of Registered Owner(s) / Licensee/s or Trustee/s	Brian Michael Dunn and Dunkerry Investment Pty Ltd ATF Dunn Investment Trust
Postal Address	'Echo Hills' Wallumbilla Q 4428
Real Property Description	Lot 1 RP 12394
Property Name	Cannon Creek
Area of Property (ha)	560 ha
Local Government Area	Scenic Rim Regional Council
Tenure Type*	Freehold

Table 2: Registered interests

Parcel (Lot and plan)	Type of Registered Interest*	Registered interest holder's name and contact details
Lot 1 RP 12394 (Estate in Fee Simple)	Rights and interests reserved to the Crown by Deed of Grant No. 10754120 (POR 11)	
	Vegetation Notice 715692777 Lodgment Date: 2 April 2014	Status: Current
	Vegetation Notice 716349772 Lodgement Date: 6 March 2015	Status – Current

Offset Location

Table 3: Bounding coordinates for offset area.

Coordinates Identifying Offset Location on the "Cannon Creek" Property Lot 1 RP12394 (GDA UTN)		
N 28°01'04.99"	E 152o46'50.72"	South-western corner
N 28°01'04.99"	E 152o46'50.72"	North-western corner
N 28°00'17.39"	E 152o47'32.24"	Northern edge
N 28°00'43.03"	E 152o47'51.94"	Eastern central point
N 28°00'55.76"	E 152o48'19.83"	South-eastern edge
N 28°01'17.99"	E 152o47'40.82"	Southern edge

2.2. Legally Secured Offset Details

The landowner has agreed for the area to be legally secured by a Voluntary Declaration (Vdec) under the *Vegetation Management Act 1999* (VMA) over the offset site to enable the protection and management of the prescribed environmental matter on the offset site. **Appendix 2** contains the completed Vdec document.

Currently the offset land is mapped as Category X or non-remnant vegetation and therefore not protected by the strict provisions of the VMA. This categorisation is despite the offset area already retaining native vegetation of a structure and maturity to provide functioning ecological values. The ultimate objective of nominating the land as an environmental offset area is to bring the existing values under the long-term protection of the VMA, therefore restricting the capacity to clear vegetation in perpetuity. For the area to be protected by the VMA the vegetation on the land must achieve remnant status and be mapped as "Regulated Vegetation" which has been measured and documented to occur within the next 5 years.

The interim legal protection measure for the offset area is to apply and have the land declared as an offset area through the Vdec process also facilitated and approved through the provisions of the VMA. The purpose of the Vdec is to apply interim restrictions on the clearing of vegetation while it is transitioning towards achieving remnant thresholds (i.e. apply strict vegetation clearing controls where they currently do not exist).

Whilst site vegetation achieves remnant status the offset area will be mapped as Category A vegetation or "Regulated Vegetation" under the VMA. Once remnant status is achieved after 5 years, the Vdec is revoked and the values protected through the full provisions of VMA in perpetuity. A Vdec can be surrendered by a land holder under specific circumstances, however provided the land is mapped as regulated vegetation the full provisions of the VMA apply indefinitely.

Table 3 provides a list of coordinates which defines the offset areas location on the property. Please

note that the location of fences (as per the management plan) will not be erected following the outline of the offset area as it is not financially practical, or possible, to erect a fence following all the curves and deep gullies of the offset area. The fence will be erected in the most practical location for ease of erection, management and stock exclusion / control, whilst ensuring the offset area is, in its entirety, fenced for stock exclusion and/or management.

2.3. Site Description

Map – Refer to Figure 1 for the map showing location of the offset management area and where it occurs on the property in relation to property boundaries. In addition, electronic digital mapping data will be supplied for suitable use in a Geographic Information System (GIS) with the application for Voluntary Declaration. The data will be projected:

- using the Map Grid of Australia 1994;
- file formats for line-work, polygons and points (vector data sets) in:
    - ESRI shape file or coverage; and / or
    - PMAV – GPS Points of the property boundary and offset boundary are provided electronically and as a hardcopy for the purpose of a PMAV. Additionally, a completed and PMAV form is included.

Land tenure – Freehold

Registered owners – Brian Michael Dunn and Dunkerry Investment Pty Ltd ATF Dunn Investment Trust

Property Name – "Cannon Creek"

Management Area Location and Size – The management area will consist of approximately 106ha and is located approximately12 km east of Boonah in the SE QLD Bioregional Corridor.

Land zone / Geology – LZ9 (undulating landscapes of fine grained sedimentary rocks) and LZ10 (Plateaus, scarps and ledges with shallow soils).

Soils – Soils are predominantly shallow sandy soils of low – medium fertility.

Description of Vegetation within Management Area – The offset management area **comprises** Eucalypt woodland on low hills and scarps on shallow rock soils. RE 12.9-10.2 is described in **Table 4.**

Table 4: Regional ecosystem

RE	Description	Status	
		VM Status	Biodiversity Status
12.9/10.2	Open forest or woodland of *Corymbia citriodora*, *Eucalyptus tereticornis, C. intermedia, E. crebra, C. tessellaris* and *Lophostemon confertus* (whip-stick form). Understory be grassy and shrubby. Occurs on	Least Concern	Least Concern

	hills, plateaus, scarps, ledges of Cainozoic and Mesozoic sediments.		

2.4. Existing Vegetation

The proposed external offset area is currently mapped as having Category X vegetation (non-remnant vegetation) under the VM Act. The offset site contains advanced regrowth vegetation (close to remnant status). The area is also mapped within the Flinders Karawatha Corridor (BPA) and Koalas have been recorded within close proximity (10km) to the property (Wildlife Online).

RE12.9/10.2 was found to occur over most of the property (watercourses excepted) in association with low ranges, hills, plateaus and scarps. These land zones rise from an undulating plain and riparian area around (Alan's Creek) in the north to areas with an elevation of 300+m.

Around this elevation, slopes are steeper, and the land-zone alternates between Land-zone 9 and 10. The vegetation (regrowth and remnant) was found to be consistent with RE 12.9-10.2 open forest of *Corymbia citriodora*, *Eucalyptus tereticornis, E. crebra, C. tessellaris,* and occasional *Lophostemon confertus (*whip-stick form*).*

The condition of the vegetation varies from lightly disturbed remnant (grazing) to 40-year-old regrowth vegetation. All the vegetation is in good condition with good structure and diversity consistent with the characteristic regional ecosystems (RE) 12.9/10.2. Weed species were uncommon in the ground layer with occasional patches of *Lantana camara* and *Lantana montevidensis* (creeping lantana) in the more disturbed areas. One small *Opuntia stricta* (Prickly Pear) was present but didn't appear to have spread or become invasive. Occasionally small occurrences of *Melinis repens* (Red Natal Grass), *Gomphocarpus physocarpus* (Balloon Cotton bush) were observed but were not in sufficient density to significantly impact the integrity of the site.

Plate 1: Example remnant spotted gum / ironbark woodland

2.5. Offset Site Overview

The proposed 106 ha offset site provides connectivity between existing remnant vegetation on the property in addition to remnant vegetation on properties to the north and south. Vegetation on the offset site is near remnant status with canopy height and cover 50-75% of surrounding remnant vegetation. The major factors in differentiating between remnant and regrowth is the smaller Diameter Breast Height (DBH) of the Eucalypts, the lack of habitat trees with hollows, and lack of mature habitat trees for Koala. Uncontrolled fire is a concern from surrounding properties which has the potential to impact on the area; however, leaf litter, grasses and the shrub layer has not been impacted as a result of fire with densities equal to, or exceeding, DEHP's benchmark data. Fire management is detailed in section 5.2. Lack of tussock grasses and herbs / forbs, as noted during BioCondition assessments is likely the result of grazing by domestic stock.

No Koala or evidence of Koala was confirmed during the field investigations; however, it should be noted that while a comprehensive, dedicated Koala search was not conducted within the surrounding areas, Koalas have been recorded within close proximity to the property (Wildlife Online) and scratches were observed on a number of Koala trees during the site assessment.

Plate 2: Regrowth vegetation in the offset area

3. Offset Baseline Condition Assessment

3.1. Koala Habitat Assessment

As part of the EPBC preliminary documentation, the habitat quality was determined using the Koala Habitat Assessment Tool (DotE, 2014). Results of the Koala Habitat Assessment Tool are used to calculate the starting quality of the offset site, to monitor attainment of future condition targets and to estimate the future quality, given proposed offset/management interventions.

Table 5 illustrates the calculation of the habitat quality. In its current form, the offset area is considered to contain a start quality value of 7. As discussed in Section 2.5, the external offset area contains remnant vegetation; however, portions of the area are infested by weeds or non-remnant and non-regrowth native regeneration. The area has a high potential to support Koala movement and usage in its current state; however, the lack of canopy vegetation and the infestation of weed species reduce its value. The current habitat quality score was calculated as 7 as no Koalas or evidence of Koala confirmed during the site investigation.

Table 5: Koala habitat assessment tool

Attribute	Coastal*	Attributed Score	Score of External offset areas	Score of External offset areas - After 5 years of management
Koala Occurrence	Evidence of one or more Koalas within the last 2 years	2	Koalas have been recorded within close proximity to the property (Wildlife Online) but not directly within the site. **Score 1**	The proposed management actions will improve the habitat quality of the offset site by improving the habitat quality through weed management, stock control and predator reduction programs. Scoring will be based on the evidence of one or more Koalas using the offset site following the first five years of management of the site. **Score 2**
	Evidence of one or more Koalas within 2km of the edge of the impact area within the last 5 years	1		
	None of the above	0		
Vegetation Composition	Has forest or woodland with 2 or more known Koala food tree species in the canopy, OR 1 food tree species that alone accounts for >50% of the vegetation in the relevant strata	2	Section of the offset site contains a number of Koala food tree species including *Corymbia citriodora*, *Eucalyptus crebra* and *Eucalyptus tereticornis.* **Score 2**	This value remains unchanged. The number of Koala food trees species will be maintained. We will use the BioCondition assessment tool to evaluate the vegetation composition and condition over the time. The results of this first BioCondition assessment (undertaken in 2015) will be compared to those of subsequent monitoring events in order to assess the overall success of current management practices and to track the overall progress of the offset in relation to the OMP objective and maintain/improve habitat condition. **Score 2**
	Has forest or woodland with only 1 species of known Koala food tree present in the canopy	1		
	None of the above	0		
Habitat Connectivity	Area is part of a contiguous landscape >500ha	2	The site is contiguous with native remnant vegetation contained in the SEQ Bioregional Corridor which is >3,000ha. **Score 2**	This value remains unchanged. The site is contiguous with vast tracts of remnant vegetation contained in the SEQ Bioregional corridor which is >3,000ha. **Score 2**
	Area if part of a contiguous landscape <500ha, but >300ha	1		

Attribute	Coastal*	Attributed Score	Score of External offset areas	Score of External offset areas - After 5 years of management
	None of the above	0		
Key Existing Threats	Little or no evidence of Koala mortality from vehicle strike or dog attack at present in areas that score 1 or 2 for Koala occurrence.	2	There is no evidence of Koala mortality within the site. **Score 2.**	This value remains unchanged. The offset site is located many kilometres from any type of development. The Koala friendly fence / cattle proof fencing will allow free movement of Koala across the offset site and will minimise any Koala mortality within the offset site. The cattle proof fencing is a wildlife friendly approved fence designed by Greening Australia QLD in 1999 whereby the bottom wire is a plain wire set 500m from the ground. The 2 middle wires are barbed to control cattle while the top wire is plain to avoid hang-ups of microbats, fruit bats and gliders. **Score 2**
	Evidence of infrequent or irregular Koala mortality from vehicle strike or dog attack at present in areas that score 1 or 2 for Koala occurrence.	1		
	Evidence of frequent or regular Koala mortality from vehicle strike or dog attack in the study area at present, or Areas which score 0 for Koala occurrence and have a significant dog or vehicle threat present.	0		
Recovery Value	Habitat is likely to be important for achieving the interim recovery objectives for the relevant context, as outlined in the Koala Assessment Tool.	2	The Koala Population Analysis revealed that the site contains Koala population but is not critical to conserve Koala within the broader landscape. **Score 0**	This value remains unchanged. The Koala Population Analysis revealed that the site contains Koala population but is not critical to conserve Koala within the broader landscape. **Score 0**
	Uncertainty exists as to whether the habitat is important for achieving the interim recovery objectives for the relevant context, as outlined in the Koala Assessment Tool.	1		
	Habitat is unlikely to be important for achieving the interim recovery objectives for the relevant context, as outlined in the Koala Assessment Tool.	0		
Total habitat quality score			**7**	**8**

3.2. Baseline Condition Assessment Methodology

Five BioCondition assessments within the 106ha offset site were conducted on the 25th – 26th November 2015 and compared to the QLD Governments benchmark for RE 12.9-10.2 at https://www.qld.gov.au/environment/plants-animals/biodiversity/benchmarks/. Each transect had five photographs taken at the 50 m point of the transect, facing North, South, East, West and ground to avoid biased photographic representation of the site. At the start of the transect (0 m), a landscape photograph was taken down the 100 m tape line.

Following data collection from each site, calculations were performed to provide a "score" to define each transect site condition against a benchmark. BioCondition methodology and the associated calculations followed the 'BioCondition: A Condition Assessment Framework for Terrestrial Biodiversity in Queensland. Assessment Manual. Version 2.2 (Eyre *et al*. 2015)'.

The BioCondition Score (BC Score) for the assessment site is determined by adding the scores for each site-based and landscape level attribute and dividing by the maximum possible score for the RE (i.e. 100 for wooded REs, 50 for grassland REs, 65 for shrub-land RE or 85 for mangrove REs).

Calculations were then performed to classify the BioCondition score for each site according a classification system and to derive the final BC class and functionality rating. These classes and the final BC class for each BioCondition site is provided in **Table 6**.

Table 6– Classification of BioCondition Scores

BioCondition (BC) Class	BC Score	BC Score as (%)	Rating Description	Total habitat quality score (as per EPBC calculator)
1	> 0.90	> 90%	Highly functional	10
2	0.80 - 0.89	80% - 89%	Functional - Highly functional	9
3	0.70 - 0.79	70% - 79%	Functional	8
4	0.60 - 0.69	60% - 69%	Dysfunctional – Functional	7
5	0.50 - 0.59	50% - 59%	Dysfunctional	6
6	0.40 - 0.49	40% - 49%		5
7	0.30 - 0.39	30% - 39%		4
8	0.20 - 0.29	20% - 29%		3
9	0.10 - 0.19	10% - 19%		2
10	<0.09	<10%		1

3.3. Baseline Condition Assessment Results

One of the main objectives of this work is to increase the current total Koala habitat quality score from 7 to 8. To achieve this objective, we propose to undertake a series of management activities

within the offset site and increase the BC value to a functional ecosystem which will support increasing the current habitat quality from 7 to 8 as required under the EPBC conditions.

While course woody debris, litter cover and grass species/cover is not directly critical for viable Koala habitat, it is an indicative component of a healthy, functioning ecosystem and aids in determining if the Koala habitat being offered is part of a functional ecosystem suitable as Koala habitat or is degraded to the extent that it should not be considered for Koala habitat.

Table 7 provides the results of the baseline BioCondition Assessments undertaken in October 2016. These results have been referenced against the benchmark values provided within the most current BioCondition benchmark (Queensland Herbarium, 2016). Not all the BioCondition criteria are considered relevant to the Koala requirement and the benchmark has been adapted to address Koala requirement on site. The following criteria will be recorded and measured to illustrate improvement of the habitat quality for Koala:

- One of the most important factors influencing the distribution and numbers of Koalas in any area is the presence and density of their food tree (Office of Environment and Heritage, 2016). Percentage cover of Koala food trees canopy cover across the offset area was recorded using the BioCondition Assessment. This included the presence of large trees, tree canopy median height, recruitment of dominant canopy species richness and tree canopy cover.

- Natural Resource Management Ministerial Council (2009) demonstrated that the destruction of mid-story shelter trees and the introduction of weed species were some of the major threats to Koalas. Reducing weed infestation will contribute to improving Koala habitat on site. The percentage of non-native plant cover was estimated through the BioCondition Assessment.

- Provide suitable vegetation composition to allow Koala movement across the landscape. Currently the site contains sparse areas of Lantana. The OMP provides measures to control Lantana as far as practical. In addition, QLD's recently enacted biosecurity measures requires the landowner to provide ongoing weed control programs for this species. It is not possible to eradicate lantana as surrounding properties, Council owned land and Government owned land are infested with Lantana species and seeds are dropped continually on site by birds.

- Landscape context attributes are scored using different attributes depending on whether the assessment is within a fragmented or intact landscape. Sub-regions considered to have fragmented landscapes include South East Queensland, therefore each site has been scored for the patch size, connectivity and context attributes. Landscape context attributes were assessed and scored using GIS data.

Five BioCondition transects were established within the offset area to determine the condition of the offset sites in comparison to the published benchmark for the same Regional Ecosystem (RE) (Department of Science, Information Technology and Innovation (DSITI, 2015). Four of the transects scored between 50 – 59 (Condition Class 6) with one of the transects was 62.4 (Condition Class 7).

Table 7 – Amended BioCondition Scores relative to the maximum score for site-based and landscape attributes relevant to Koala habitat.

BioCondition Assessment Attributes (Relevant to Koala)	Benchmark Values (RE12.9-10.2)	Highest Possible Score for Attribute	BC1		BC2		BC3		BC4		BC5 - Control Site		Target BioCondition (End of approval period)	
			BC Value	BC Score	BC Value	BC Score	BC Value	BC Score	BC Value	BC Score	BC Value	BC Score	BC Value	BC Score
Site-based attributes														
Large Koala food trees DBH (cm)	61	24	0	0	4	1.58	6	2.36	2	0.79	TBD	TBD	12	4.72
Koala tree canopy median height (m)	21	8	15	5.71	15	5.72	12	4.58	14	5.3	TBD	TBD	16	6.09
Recruitment of dominant Koala canopy species (%)	100	8	100	8	100	8	100	8	100	8	TBD	TBD	100	8
Tree canopy cover (%)	64	8	36.6	4.58	62.3	7.8	35	4.37	41.4	5.18	TBD	TBD	60	7.5
Native shrub cover (%)	6	8	5	6.7	9.7	8	5	7	10.1	8	TBD	TBD	6	8
Native plant species richness – Trees	6	8	5	6.7	4	5.3	5	6.7	4	5.3	TBD	TBD	5	6.7
Non-native plant cover / Weed (%)	1	16	15	1	10	7	9	6	7	6	TBD	TBD	1	16
TOTAL FOR ATTRIBUTES	**-**	**80**	**-**	**32.62**	**-**	**43.40**	**-**	**38.62**	**-**	**38.57**	**TBD**	**TBD**	**-**	**58.32**
Landscape Attributes														
Patch size		10	-	10	-	10	-	10	-	10	TBD	TBD	-	10
Connectivity		5	-	5	-	5	-	5	-	5	TBD	TBD	-	5

BioCondition Assessment Attributes (Relevant to Koala)	Benchmark Values (RE12.9-10.2)	Highest Possible Score for Attribute	BC1		BC2		BC3		BC4		BC5 - Control Site		Target BioCondition (End of approval period)	
			BC Value	BC Score	BC Value	BC Score	BC Value	BC Score	BC Value	BC Score	BC Value	BC Score	BC Value	BC Score
Context		5	-	4	-	4	-	4	-	4	TBD	TBD	-	4
TOTAL FOR LANDSCAPE ATTRIBUTES		**20**	**-**	**19**	**-**	**19**	**-**	**19**	**-**	**19**	**TBD**	**TBD**	**-**	**19**
TOTAL FOR ALL ATTRIBUTES (%)		100	-	**52.62**	-	**62.4**	-	**57.61**	**-**	**57.57**	TBD	TBD	**-**	**77.32**
BC CLASS		**1**	-	**5**	-	**4**	-	**5**	**-**	**5**	TBD	TBD	**-**	**3**
HABITAT QUALITY SCORE (refer Table 6)		**10**	-	**6**	-	**7**	-	**6**	**-**	**6**	TBD	TBD	**-**	**8**
OFFSET CONPLETION CRITERIA (HABITAT QUALITY SCORE)		**10**	-	**8 (>70%)**	-	**8 (>70%)**	-	**8 (>70%)**	**-**	**8 (>70%)**	**TBD**	**TBD**	**-**	**8 (>70%)**

TBD – To be determined during the first BioCondition assessment monitoring

As outlined in the above table, to achieve habitat quality of 8 (>70%), management measures are to increase tree canopy height and tree cover by retaining all vegetation on offset site (except when undertaking fire management as outlined in this report) as well as undertaking weed management of the site.

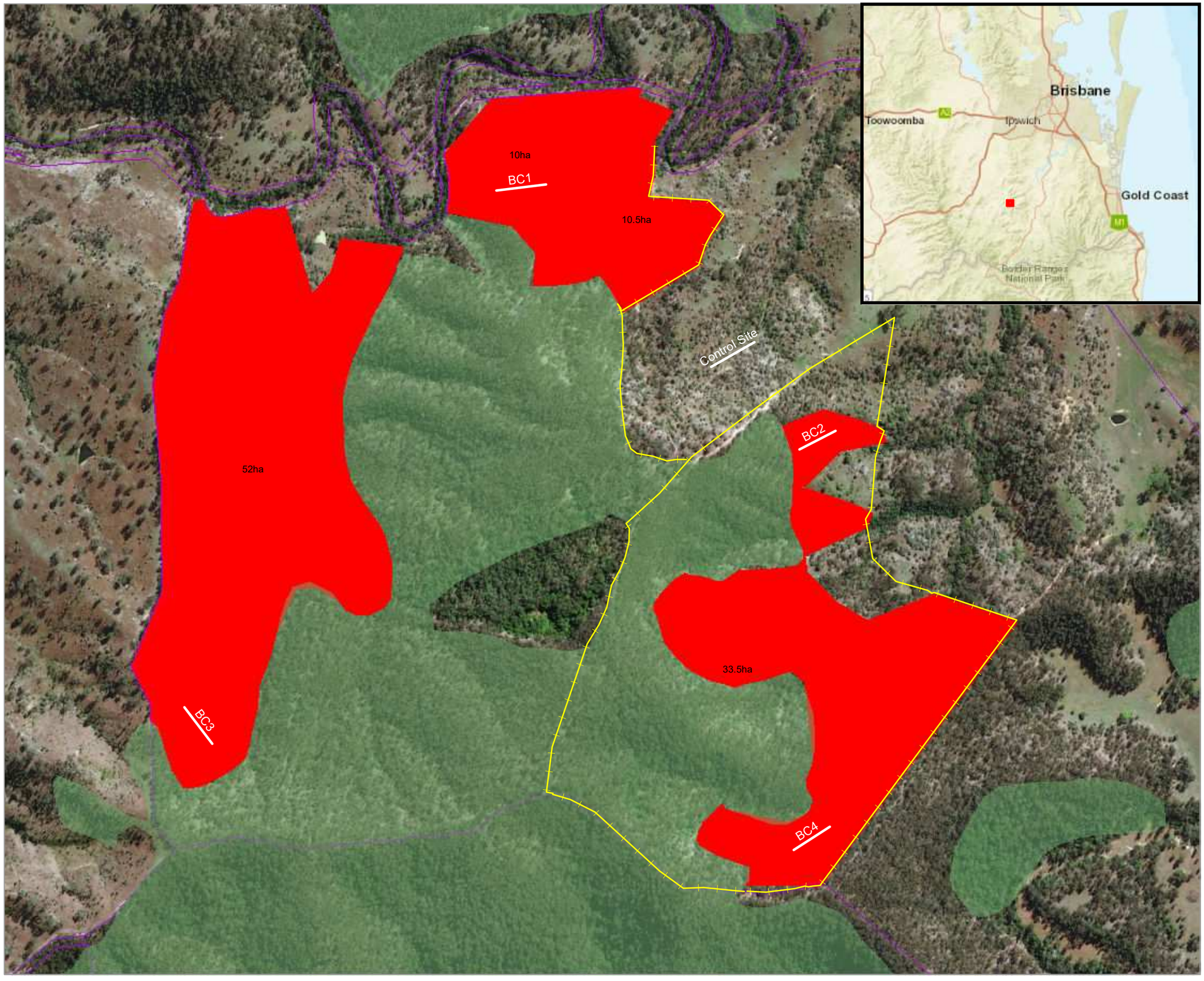


FIGURE 2: BIOCONDITION ASSESSMENT

Paradise Water External Offset Management Plan

Fence
BioCondition Transects
Cadastre
External_Offset

Mapped Regional Ecosystems

12.9-10.2

Notes:
-Data by Green Tape Solutions 2018
-Base map Copyright (c) Esri and its data suppliers.
-Regional Ecosystems and QTopo Base map Copyright (c) State of Queensland (DNRM)

0 190 380 Meters

Green Tape Solutions
Quality, Integrity, Experience

Ref: Paradise Water 2017
Author: KM
Date:04/12/2017

4. Offset Strategy

4.1. Management Objectives

The objectives of the OMP are:

1. To attain and maintain remnant status and allow Koala use of the site for the period of the approval; and
2. To attain and maintain completion of EPBC approval condition and criteria.

This will be achieved through the following management actions:

- Prevent the clearing of any native vegetation within the offset area;
- Prevent timber harvesting to ensure Koala trees reach 38cm or greater in DBH for improved Koala habitat;
- Monitor and based on monitoring results, implement a wild dog and feral animal control program;
- Manage onsite fuel loads and fire hazards to reduce fire frequency and severity;
- Implement a controlled burning regime which includes cool burns conducted in a mosaic pattern that is determined by rainfall patterns, moisture and fuel loads;
- Prevent hot fires and uncontrolled fire from entering the offset site by reducing fuel loads and maintaining fire breaks around the offset area;
- Manage / exclude grazing for the purposes of fuel load management and regeneration of the shrub layer and understory. This must only occur for the purpose of reducing fuel loads and ensuing there are no uncontrolled hot burns or canopy fires;
- Manage stock access within the offset site; and,
- Control weeds that are likely to impede Koala ground movements (i.e. lantana).

4.2. Management Outcomes

The area will be managed, restored and protected for the period of the approval so that:

- The vegetation within the Regional Ecosystem attains and maintains similar or better condition than the benchmark 12.9-10.2 ecosystem and reaches remnant status under the *Vegetation Management Act 1999*. The management of the vegetation will demonstrate an improvement on the baseline BioCondition Class for each of the four (4) BioCondition control sites from Class 5 (Dysfunctional) to Class 7 (Functional) which supports an increase in Koala habitat quality condition from 7 to 8.
- The offset site will be protected under the VM Act through the Category A and Category B designations;
- Declared and environmental weed, in particular *Lantana sp.* will be controlled on site in accordance with the *Biosecurity Act 2014*, with a target of an overall reduction in the total extent of declared weeds by 75% in 3 years, and ongoing reduction in extent after Year 5. While the objective will be the eradication of Lantana infestations within 5 years, this may not be achievable as a result of surrounding private properties, Local Government Land and State-owned land being infested themselves with Lantana. Wildlife will continue to introduce seeds

and weed material into the area on an ongoing basis. A reduction in weeds and the prevention of dense Lantana thickets as required under the *Biosecurity Act 2014* will facilitate Koala movement through the offset area.

- Wild dogs or unmanaged domestic dog, when detected, either via scats, tracks or visual observations, are eradicated by shooting or trapping and monitoring via cameras and sand pads conducted on a weekly basis to determine the presence of other dogs entering the area.
- Feral animals are monitored, located and destroyed where possible. Due to the extreme rough nature of the land and general inaccessibility total eradication is very unlikely however it would be realistic to expect a 50% reduction in feral animal numbers if trapping and shooting is conducted on a regular basis.

Outcomes are achieved in accordance with implementation of the management actions described in **Section 5**.

5. Offset Management Actions

This section details the actions that will be implemented to achieve the objectives and minimise the risks associated with threatening processes and to support the objectives and outcomes described in **Section 4**. Remedial actions that will be undertaken are described, and details of the entities responsible for undertaking the management actions along with skills and expertise are included.

The management action is separate into two phases:

- Phase 1: Intensive management. This phase will be implemented for **the first five years** of the funded management program. The management program includes intensive weed management, feral animal / wild dog control, fire management, fire breaks, fencing, managed / controlled grazing within the offset site and monitoring and evaluation to ensure the management actions are completed and the actions are strongly contributing to the ongoing improvement to the site as Koala habitat;
- Phase 2: General site management: This phase will be undertaken by the Landowner until the end of the project's approval in 2045. This phase involves the on-going management and monitoring of the land. General site management includes maintenance of fire breaks, maintenance of problematic weeds, controlled grazing and wild dog control within the offset site and the greater overall property. It should be noted that the same management actions that impact Koala populations also impacts domestic stock in exactly the same way. Dogs in particular, are responsible for more than 20% of calf losses each year. Dog control to reduce calf losses results in far less Koala losses.

Details of the management actions are provided in the following sections.

5.1. Phase 1: Intensive Management Actions

5.1.1. Weed Management

The objective of weed management is to minimise the extent and occurrence of weeds within the offset site, particularly Weeds of National Significance (WoNS) and species listed as restricted invasive plants under the *Biosecurity Act 2014*. Weeds, such as the WoNS lantana (*Lantana camera*), infest habitat areas to the extent that Koalas may be physically prevented from moving through the area on the ground. These weeds, and other terrestrial species, smother and compete with seedling Koala food and habitat canopy trees, causing them to die or grow at a slower rate. Invasive grass species infestations have the potential to increase the fuel load of the habitat, causing more intense fires that would impact Koalas negatively (Lunney *et al*, 2007).

The *Biosecurity Act 2014* imposes a 'general biosecurity obligation' (GBO), which imparts a responsibility on all individuals or organisations to manage biosecurity risks that are under their control and that they know about, or should reasonably be expected to know about. Under the GBO, individuals whose activities present a biosecurity risk must take all reasonable and practical steps to prevent or minimise their activities from causing a biosecurity event. This includes implementing appropriate land use practices to prevent or minimise the spread of invasive animals and plants.

- Minimise the introduction, establishment and spread of non-indigenous weed species through regular surveillance, maintenance of a 10m buffer zone outside the offset area and/or fence line, vehicle wash-downs, grazing and chemical control, including Declared Pest Plants listed under the *Biosecurity Act 2014*.

- Manage weeds in accordance with the management activities schedule (Table 11) with particular emphasis on the reduction of pasture weed species and the control of declared pest plants.
- Weed control must be undertaken using either low volume gas powered applicator, backpack sprayer or high-volume power spray for the selective control of weeds.
- Any clearing of native vegetation to allow access for the control of non-indigenous weeds will be limited to localised pruning by hand.
- Use combination of restricted grazing regimes and chemical weed control, utilizing only monocot specific herbicides in the case of introduced pasture and dicot selective herbicides for other weed species, for the purpose of reducing populations and encouraging regeneration of native species.
- Vehicles and machinery must be washed down prior to site entry to reduce the spread of weed seeds. Additionally, persons entering the site must ensure they are not carrying weed seeds in their clothing/boots etc. prior to entering the site. Paper evidence must be provided to any persons requesting to view a wash down certificate. Persons entering with machinery or equipment must hold current weed wash down certification prior to entry to minimise potential weed spread. Any introduced soil or vegetative material must also be certified weed and disease free.
- Management actions will also include establishing and maintaining a "10m management buffer zone" outside the offset boundary or fence line, whichever is the most practical. This zone, which is located outside of the offset area, will be managed to minimise the risk of weed and fire threats to the offset area. An example of the need for a buffer zone is where a weed is located within 10m of the offset area and will require treating to avoid spread into the offset management area.

Performance criteria (PC) and targets for weed control in the offset area are:

1. PC1 - To implement weed control activities throughout the offset area, during the period of project approval (i.e. to 2045);
2. PC2 - To reduce the extent of all weed infestations by 75% within the first 3 years of management;
3. PC3 - To reduce the extent of all weed infestations including *Lantana sp.* by 90%, and maintain this weed infestation target during the period of project approval (i.e. to 2045).

5.1.2. Fire Management

As the surrounding areas include private land and Governmental land that are heavily vegetated, a fire exclusion strategy will be implemented for the offset site. The strategy includes the following elements:

- Maintenance of existing firebreaks around the offset site.
- Minimising fuel hazard within the offset area using cool burns, controlled grazing, mosaic burns and aligning fire breaks with the offset area boundary wherever management area interfaces with pasture, specifically at the base of hills and ranges where fires may enter.
- Include a fuel reduction zone (FRZ) outside of management area boundary through fuel reduction burning conducted between July and September, when fuel loads exceed 10 tonnes per ha within the FRZ.

- Fire breaks will be inspected on a minimum annual basis and following significant rainfall events where fire breaks and/or existing roads become heavily rutted or expose large rocks. Inspections will include all existing tracks over whole of property and along fence-lines.
- As per the QLD Herbarium's recommendation for burning this ecosystem, the following approach will be implemented (seasonally dependent);
- Undertaken fire during Summer to Winter at interval, including spot ignition in cooler or moister periods to encourage mosaics. Burning should aim to produce fine scale mosaics of unburnt areas.
- Manage fire within the offset area for the duration of the project approval so as to allow regeneration of the shrub layer, increase native perennial and tussock grasses and encourage the retention of hollow logs and woody debris. Intensive management includes monitoring of fuel loads, ongoing review of existing fire regimes, review of climatic conditions, implementation of cool trickle burns in a mosaic pattern every 5-7 years (seasonally dependent).

The approach may change during the term of this OMP to reflect updated QLD Herbarium published recommendations.

Performance criteria and targets for fire management for the offset area are:

- PC 4: Maintenance of fire breaks is achieved for the duration of the project's approval;
- PC 5: Increase regeneration of shrub layer by 50% and increase of native perennial and tussock grasses by 30% to meet the remnant status within the first 5 years; and,
- PC 6: Reduce intensity and frequency of fire to improve remnant status of the vegetation for the duration of the approval.

5.1.3. Stock Exclusion and Control

Uncontrolled stock access can impact Koala habitat by reducing the number of regenerating shrubs and trees. Therefore, stock will be excluded from the offset area to facilitate regeneration of the shrub layer and understory; however, limited grazing may be implemented within the offset area to reduce fire risk and to aid weed control.

Grazing will be controlled by:

- Fencing the boundary of the offset area. Permanent boundary fences for stock control will be cattle proof and fauna-friendly, however where barbed wire is required for effective stock exclusion, fences will consist of 2 barbed wires in the middle with plain top and bottom wires. The bottom wire will be set a minimum of 500 mm from the ground to allow for unrestricted movement of wildlife. Line posts will be set 7-10 m apart with a box strainer assembly (or similar) at corners. Permanent fences will include wire mesh gates to allow for easy movement of weed control contractors and fire control equipment. Internal fencing, if used, will be a 2 strand electric fence with the bottom wire set 500 mm from the ground to allow easy access by Koala. Steel posts will be at 10 m spacing with a simple "cocky" gate installed to allow easy access. The electric fence will be solar powered and not require mechanical clearing of a fence-line.
- Grazing will be totally excluded during and immediately after substantial rainfall events to reduce impacts on regeneration, allow grass species to set/disperse seed and to prevent compaction. This will occur before stock are introduced to the site and only following discussions and provisions of photographs showing existing ground cover, fuel loads and

pasture height within the management area that supports stock management. Stocking rates and duration will also be determined by the results of the BioCondition assessment results performed each November by the ecologists and consultation with the property owners who have successfully managed this property for over 130 years.

Performance criteria and targets for stock grazing in the offset area are:

- PC 7: Stock are excluded from the offset site, except where authorised by an ecologist and/or discussed with the landowner for fuel/fire hazard management.
- PC 8: Boundary fencing is established and maintained to exclude/manage stock.
- PC 9: Maintain good condition of the fence. Damaged boundary fencing is repaired as soon as practicable following detection of unauthorised stock access and/or damaged fencing;
- PC 10: A fauna friendly fence is to surround the offset site;
- PC 11: To ensure groundcover remains greater than 70% on average across the offset area, tussock grass height remains above 750 mm, natural regeneration is occurring and the shrub layer averages 10% foliage projection cover for the duration of the approval.

In the event of unintended stock access, a contingency response will be implemented, which will be comprised of identifying where the stock accessed the offset area, repairing damage to fencing and removing the unauthorised stock. Stock will be removed as soon as reasonably possible.

5.1.4. Feral Animal and Wild Dog Control

Given the property is relatively remote, wild or uncontrolled domestic dogs are rarely an issue. The single most obvious indicator of wild dog presence is the mutilated remains of calves as even 2-3 dogs cannot consume the carcass of a calf and a fox, cat or pig cannot contend with a protective mother while bringing down a calf. No calves have been lost for a number of years and no half eaten carcasses found. Foxes, cats and pigs are often observed on the lower creek flats below the offset area where there is smaller wildlife but very rarely, if ever, on the hill slopes where Koala inhabit. A continuous monitoring and observational program to identify any dog's will be conducted as a standard component of property management, as has always been done in previous years to ensure there are minimal stock losses.

As the area is now being managed for Koalas and domestic stock are still on the property, a continuous surveillance for tracks in soft sands and scats is already conducted as a normal component of property management, as, with current cattle prices, any stock losses represents significant loss of income.

If an increase in stock losses occurs or increased pads and scats are observed, an annual program of camera surveillance, trapping and shooting will be conducted and financed by Stocklands through funding in the management plan by professional trappers and shooters until 2045. Pads in soft sands and scats is usually much more prevalent on creek flats where the dog waters. On the upper hill slopes where the Koala inhabits, the geology is hard rock with virtually nil sand pads. As a result, camera monitoring with an enclosed bait is generally the only way to determine the presence of dogs. In essence, monitoring for dogs using the sand pad and scat method is only used on the creek flats while baited cameras are utilised on the upper slopes.

The performance criteria will be:

- PC 12: Reduction in Koala predation as a result of reduced dog numbers. When dog trapping and shooting are conducted for a number of weeks, dogs will move out of an area they perceive

as unsafe and may not return for a number of months. The measurable result will be a significant reduction in dog and/or pig numbers observed or captured on camera.

5.1.5. Unauthorised Access or Use

Given the offset site is located on private property, the risk of unauthorised access or use and /or the risk of degradation from activities such as rubbish dumping, firewood collection, etc., will be limited. However, to further minimise the risk associated with these activities on site, at no time can a person access the management area without informing the landowner or relevant personnel (property manager) of the intent of entry. There will be a requirement to inform the landowner to access the property providing at least 24 hours' notice. When entering and leaving the property, the landowner or relevant personnel must be advised. Persons entering the management area must hold a current weed hygiene certificate for all vehicles and equipment.

Furthermore, persons operating equipment on the site must be licensed and proficient in its operation. Due to the rough terrain, all persons much have completed a certified 4x4-training program and be confident in traversing rough and steep terrain.

The performance criteria are to be:

- PC 13: Offset site access by persons other than the landowner is only for the purpose of implementing this plan; and
- PC 14: fence condition is monitored on a quarterly basis. Any damage is reported to the project manager with repair taking place when reasonably possible, whilst preventing stock access.

5.2. Phase 2: Ongoing Management

After Phase 1, the landowner will continue to manage the offset site in accordance with this OMP. As the offset area is subject to QLD's *Biosecurity Act 2014* and will be protected under the VMA, the offset site and indeed the whole area will be managed as Koala habitat during the period of project approval (i.e. until 5 January 2045). As such, the offset area will comply with the requirements of condition 4 of EPBC Approval (EPBC 2013/6864) via this OMP.

The landowner will manage the offset site and surrounding area to maintain their property in good condition and as favourable habitat for Koala. Landowner management outside the normal Biosecurity actions or general property management, will be funded by Stocklands, will include:

- Weed control (at the landholder's discretion and expense if part of normal everyday property management or a component of the Biosecurity Act. If monitoring indicates a higher level of weed management is required, this will be at Stocklands expense.
- Maintenance of fire breaks completed at landholder's discretion / expense as part of normal property management to protect their own infrastructure. These action implemented by the landholder, while protecting their own property assets, will automatically protect the offset area as well
- Implementation of cool fire management regimes and ongoing fuel load reduction; (at the landholder's discretion and expense if part of normal everyday property management or at Stocklands expense if a dedicated fire management action is identified as being required through monitoring);
- Repair of fence; (completed at landholder's discretion / expense as part of normal property management);

- Stock management for retention of at least 70% grass cover and 30% shrub layer. (completed at landholders discretion / expense as part of normal property management) ;
- Control feral animals (cats, foxes) and wild dogs / uncontrolled domestic dogs. (at the landholder's discretion and expense if stock losses are identified as being wild / uncontrolled domestic dogs or at Stocklands expense if a dedicated management / control / shooting / trapping or camera survey is identified as being required through monitoring Koala
- Ongoing road / track repair for ease of management. (completed at landholder's discretion / expense as part of normal property management);

Management will cease at 2045, but normal landholder property management to ensure the property is viable habitat for both domestic stock and native wildlife (inclusive of Koala) will be an ongoing component of property management. Most of the performance criteria outlined in the phase 1 are also applicable during phase 2. These PC are reiterated below:

- PC1 - To implement weed control activities throughout the offset area, during the period of project approval (i.e. to 2045);
- PC3 - To reduce the extent of all weed infestations including *Lantana sp.* by 90%, and maintain this weed infestation target during the period of project approval (i.e. to 2045);
- PC 4: To maintain fire breaks over the duration of the project's approval;
- PC 6: Reduce intensity and frequency of fire to improve remnant status of the vegetation for the duration of the approval;
- PC 7: Stock are excluded from the offset site, except where authorised by an ecologist and agreed with the landowner for fuel/fire hazard management;
- PC 8: Boundary fencing is maintained to exclude/manage stock;
- PC 9: Maintain good condition of the fence. Damaged boundary fencing is repaired as soon as practicable following detection of unauthorised stock access and/or damaged fencing;
- PC 10 Feral animals, wild dogs and uncontrolled domestic dog numbers are monitored and reduced to protect both domestic stock, prevent Koala mortality and conserve other native wildlife;
- PC 11 There are no losses of Koala due to feral animals, wild dogs and uncontrolled domestic dog
- PC12: To ensure groundcover remains greater than 70% on average across the offset area, tussock grass height remains above 750 mm, natural regeneration is occurring and the shrub layer averages 10% foliage projection cover for the duration of the approval; and
- PC 13: Offset site access by persons other than the landowner is only for the purpose of implementing this plan.

5.3. Summary of Management Objectives and Actions

Table 8 provides a summary of the management objectives and actions to implement within the offset site.

Table 8: Summary of Management Objectives and Actions

Management objectives	Management activities	How the activity will be carried out	Where the activity will be carried out	When the activity will be carried out	Who will be carrying out the activity	Relevant performance criteria	Monitoring Activities
To attain and maintain remnant status and allow Koala use	Retention of native vegetation	No clearing other than for weed or fire management will occur.	Within the defined offset site	For the duration of the approval.	Current and future landowners	PC 5: Increase regeneration of shrub layer by 50% and increase of native perennial and tussock grasses by 30% to meet the remnant status.	BioCondition assessment to be undertaken every November for the first 5 years and then every November in years 2027, 2032, 2037 and 2044.
	Feral Animal, wild dogs and uncontrolled domestic dogs	Monitoring, trapping, shooting, scat and pad observations	All of property and where possible on adjacent land	Intensely for the first 5 years during the dedicated management plan, then as required based on monitoring results	Landholders and professional animal control persons	Reduce and/or eliminate predation on Koala, stock and any other species of native wildlife	Observations, pads in soft sands, scats, camera surveillance and monitoring of stock / wildlife losses and/or injuries.
	Weed Control of declared weeds i.e. Lantana camara Lantana montevidensis Opuntia stricta	Spot Spraying with selective and systemic herbicide. Weed control to include a 10m buffer outside the offset area or fence to discourage re-entry of weeds back into the site. Use combination of restricted grazing regimes and chemical weed control, utilizing only monocot specific herbicides in the case of introduced pasture and dicot selective herbicides for other weed species, for the purpose of reducing populations and encouraging regeneration of native species.	Activity will be carried out across the entire management area and include a 10m buffer area outside the offset area and/or fence.	Weed control will be conducted annually for the first 5 years, then as required. Focus will be on weeds listed under the Biosecurity Act 2014, Queensland Weeds Strategy 2002 – 06, and local regulation for control of weed plant species (including environmental weeds).	Weed removal and reduction conducted by contractor with experienced weed control crew for the first 5 years. Reduced weed levels and new outbreaks will be managed through controlled grazing by the landowner for the duration of the approval.	PC 2: to achieve an overall reduction in the total extent of the weed infestation by 75% in first 3 years. This will open up the landscape to allow for Koalas to have easier mobility while on the ground. PC 3: to achieve a reduction in overall weed infestation extent by 90% in 5 years and demonstrate BC Score for weed of 16.	Assessment of the presence and spread of weeds to be undertaken through BioCondition assessment and visual observations. BioCondition assessment to be undertaken every November for the first 5 years and then every November in years 2027, 2032, 2037 and 2044.
	Weed Control: all vehicles entering and exiting the site are washed down	Vehicles and machinery must be washed down prior to site entry to reduce the spread of weed seeds	Within the defined offset site	At all times	Persons entering the management area must hold a current weed hygiene certificate for all vehicles and equipment.	PC 2: to achieve an overall reduction in the total extent of the weed infestation by 75% in first 3 years. This will open up the landscape to allow for Koalas to have easier mobility while on the ground. PC 3: to achieve a reduction in overall weed infestation extent by 90% in 5 years and demonstrate BC Score for weed of 16.	Assessment of the presence and spread of weeds to be undertaken through BioCondition assessment and visual observations. BioCondition assessment to be undertaken every November for the first 5 years and then every November in years 2027, 2032, 2037 and 2044.
	General property management (Grazing)	Fencing the boundary of the area, so as to allow the controlled grazing / management of domestic stock for the purposes of reducing fire fuel loads, whilst minimising impacts to native flora and fauna. Intensively managed grazing (crash grazing, cell grazing, short term intensive grazing) within the management area to ensure native vegetation is not impacted by grazing or trampling. Grazing will be permitted at particular times to achieve desired fuel loads in these areas. Grazing will be totally excluded during and immediately after substantial rainfall events to reduce impacts on regeneration, allow grass species to seed and to prevent compaction.	On an “as needs” basis where a threat to the management area is identified.	Stocking rates and grazing durations will be determined by the landowner and the monitoring ecologists as required.	Landowner with support and direction of monitoring ecologist.	PC 5: Demonstrate BC Score for Tree canopy and Koala tree canopy median height and canopy cover or respectively. PC 11: Ensure groundcover remains greater than 70% on average across the management area, tussock grass height remains above 750 mm, natural regeneration is occurring and the shrub layer averages 10% Foliage Projection Cover (FPC).	Assessment of the condition of the Koala habitat through BioCondition assessment. BioCondition assessment to be undertaken every November for the first 5 years and then every November in years 2027, 2032, 2037 and 2044.
	Fire Management: Maintenance, establishment of fire break	Will be carried out with a bulldozer to ensure a quality fire break and quality tracks for use by management teams and ecologists visiting to perform surveys.	Around the perimeter of the management area where access allows and soil stability is not	Generally, fire break management will be carried out in mid / late autumn or early spring. In the first	Conducted by the landowner as they have the required heavy equipment	PC 4: Maintenance of fire breaks is achieved for the duration of the project approval.	Check firebreak and fuel load during BioCondition assessment.

	Include a fuel reduction zone (FRZ) outside of management area boundary through fuel reduction burning conducted between July and September, when fuel loads exceed 10 tonnes per ha within the FRZ.	compromised and/or native vegetation is not damaged	six months, fire breaks will be installed as a priority. Internal roads and access tracks to be maintained in trafficable condition at all times. Implementation of cool trickle burns in a mosaic pattern every 5-7 years (seasonally dependent).	already on site and are experienced operators.	PC 5: Increase regeneration of shrub layer by 50% and increase of native perennial and tussock grasses by 30% to meet the remnant status. PC 6: Reduce intensity and frequency of fire to improve remnant status of the vegetation.	BioCondition assessment to be undertaken every November for the first 5 years and then every November in years 2027, 2032, 2037 and 2044.
Fire Management: Minimizing fuel hazard within the offset area	This will be done by undertaking cool burns and controlled grazing, mosaic burns and aligning fire breaks with the offset area boundary wherever management area interfaces with pasture, specifically at the base of hills and ranges where fires may enter.	Within the defined fire zone area and offset site	Cool burn to be undertaken during Summer to Winter. With interval of 4-25 years to aim for 40-6% mosaic burn			
Stock Management: Fencing construction for stock exclusion / management.	Permanent boundary fences for stock control will be cattle proof and fauna-friendly, however where barbed wire is required for effective stock exclusion, fences will consist of 2 barbed wires in the middle with plain top and bottom wires. The bottom wire will be set a minimum of 500 mm from the ground to allow for unrestricted movement of wildlife. Line posts will be set 7-10 m apart with a box strainer assembly (or similar) at corners. Permanent fences will include wire mesh gates to allow for easy movement of weed control contractors and fire control equipment. Internal fencing, if used, will be a 2 strand electric fence with the bottom wire set 500 mm from the ground to allow easy access by Koala. Steel post spacing's will be at 10 m spacing with a simple "cocky" gate installed to allow easy access. The electric fence will be solar powered and not require mechanical clearing of a fence-line.	At a location that allows stock control and management of the offset area.	At start of management period in the first six months. Grazing will be excluded during and immediately after substantial rainfall events to reduce impacts on regeneration, allow grass species to set/disperse seed and to prevent compaction.	All fencing to be conducted by the landowner to ensure quality and consistent fencing.	PC 7: Stock are excluded from the offset site, except where authorised by an ecologist and agreed with the landowner for fuel/fire hazard management. PC 8: Boundary fencing is established and maintained to exclude/manage stock. PC 10: a fauna friendly fence is to surround the offset site.	Fence condition is monitored on a quarterly basis (this can include opportunistic fence inspections by contractors, landowner and staff accessing the site throughout the year) during phase 1 offset area management.
Stock Management: Maintenance of fencing	Maintain the good condition of the fence	All fences around the offset site.	Fence condition is monitored on a quarterly basis (this can include opportunistic fence inspections by the landowner, contractors and staff accessing the site throughout the year) during the phase 1 management period. After year 5, the landowner will monitor fence condition as part of ongoing maintenance and operations.	By Landowner	PC 9: Maintain good condition of the fence. Damaged boundary fencing is repaired as soon as practicable following detection of unauthorised stock access and/or damaged fencing. PC 13: fence condition is monitored on a quarterly basis. Any damage is reported to the project manager with repair taking place when reasonably possible, whilst preventing stock access.	Fence condition is monitored on a quarterly basis (this can include opportunistic fence inspections by contractors and staff accessing the site throughout the year) during the phase 1 management period. In the event of unintended stock access, a contingency response will be implemented, which will be comprised of identifying where the stock accessed the offset area, repairing damage to fencing and removing the unauthorised stock.

2.To attain and maintain EPBC completion criteria	Monitoring and reporting	Ecological monitoring to include photo point monitoring, BioCondition assessment in the management area and reference site, unbounded floral survey, weed presence and abundance and fuel load monitoring. General monitoring to include inspection of site works and general site condition relative to the objectives of this management plan. Preparation and supply of compliance reporting.	The activity will be carried out across the entire management area with specific areas of quantitative sampling as described in this plan.	Annually for phase 1 of the management program nominally 5 years and then every November in years 2027, 2032, 2037 and 2044.	One of the ecologists who conducted the first site assessments (benchmarks) and one of the ecologists from the offset management team. (in the event an ecologist from the first site assessments is not available, an independent ecologist will be engaged) A report will be prepared by the ecologist who conducted the first site assessment or an independent ecologist. The report will not be prepared by any member of the offset management team.	Overall Performance criteria: Compliance with offset area management commitments and offset condition outcomes in this OMP.	Not applicable
	Unauthorised Access or Use	To further minimise the risk associated with these activities on site, at no time can a person access the management area without informing the landowner or relevant personnel (property manager) of the intent of entry	Within the whole offset site	There will be a requirement to inform the landowner to access the property providing at least 24 hours' notice. When entering and leaving the property, the landowner or relevant personnel must be advised	Landowner	PC 12: the offset site is accessed by persons other than the landowner, only for the purpose of implementing this plan.	Not applicable
	Legal Mechanism to secure the offset site	Protect the offset site by preventing the clearing of any native vegetation within the offset area.	Within the whole offset site	For the duration of the approval (until 5th January 2045)	By the landowner	Overall Performance criteria: Compliance with offset area management commitments in this OMP and the relevant conditions of approval.	Not applicable
		Certified Voluntary Declaration on title for parcel 1/RP12394. Long-term protection of offset by mapping of the offset site as Category A (Offset Area) followed by Category B (Remnant Vegetation) under the DNRME Regulated Vegetation Management Map.		Certified Voluntary Declaration – five years enacting the Category A (Offset Area) under the VMA. Category B (Remnant Vegetation) – for the duration of the approval (until 5th January 2045).			

6. Roles and Responsibilities

All employees and contractors, who will work within the site, have a general duty of care under the *Environmental Protection Act 1994.* Notwithstanding any specifications in this OMP, the contractors must report environmental incidents to their immediate supervisor and participate in the investigation and corrective action required to reduce environmental harm or the re-occurrence of the incident.

While general environmental compliance is the responsibility of all site personnel, specific roles and responsibilities for environmental performance and compliance will be allocated to specific positions. Table 8 provides an overview of environmental management roles and responsibilities for the OMP.

Table 9: Roles and Responsibilities

Position	Roles and Responsibilities
Development Manager/ Contract Administrator	The Development Manager will liaise directly with the Project Ecologist and the Landowner to ensure that success of the offset management plan.
Landowner	The Landowner will provide land access for the management and maintenance of the site for the first 5 years or until completion of the performance outcome outlined in this OMP. Landowner will then undertake general site management as outlined in this OMP to ensure that habitat condition and suitability of the site for Koala is maintained for the remaining of the period of project approval (2045) as a result of the area being mapped under State Legislation as Category A (Offset Area) and category B (Remnant Vegetation). The landowner will liaise with the Development manager during the period of the approval. The Landowner must be familiar with the management action outlined in this report.
Project Ecologist	• Meeting with the site supervisor/ Rehabilitation Contractor and audit site works to ensure compliance with the OMP as required; • Liaise with the Rehabilitation Contractor during the life of the OMP to provide advice on remedial action where required; and, • Undertake the yearly BioCondition Assessment to monitor the offset and determine whether the completion criteria have been achieved. • Prepare monitoring reports to be submitted to DotE. Minimum qualification required: the project ecologist must possess a Bachelor of Environmental Science (or equivalent), and/or a minimum of 10 years' experience in flora and fauna surveys, managing offset rehabilitation / restoration work, supervising on-ground work, negotiating with the relevant authority and undertaking ecological monitoring and reporting. The rehabilitation area is to undergo a review every year by a qualified independent ecologist and must be familiar with the offset requirement outlined in this offset

	management plan. The Project ecologist must be able to identify trends and opportunities for improvement to ensure continual improvement and best practice management.
Rehabilitation Contractor	The Rehabilitation Contractor will be responsible for ensuring that works on site are undertaken for the first 5 years or until the performance outcomes outlined in this OMP are met. Specific responsibilities include: • Ensuring all personnel responsible for implementing the Project's environmental management requirements including the OMP are competent on the basis of training, education, and experience; • Responsibility for the allocation of resources to ensure the OMP is implemented; • Ensuring the implementation of work practices that reduce the risk of environmental impact; • Advising the Project Ecologist whenever works are programmed, identification of the type of works and report any compliance actions, as required. • Undertaking the weed management works in accordance with the approved OMP. Minimum qualification required: The Rehabilitation Contractor must have a minimum of 5 years' experience in undertaking rehabilitation and restoration work including planting, watering, mulching, and undertaking weed management. The contractor must have appropriate licenses and permit to use weed herbicides.
Quality Control and Completion of Management Actions Auditor	The Quality Control and Completion of Management Actions Auditor will: • Liaise directly with Stocklands to ensure every management action is completed in full as per the details in clause 9.4 of the Tripartite Deed.
Feral Species, wild dog & uncontrolled domestic dog contractor. Note: Feral animals include wild dogs, uncontrolled domestic dogs, cats, foxes, pigs or any species with the capacity to impact negatively or	• Responsible for predatory feral species control. • Undertaking camera trapping surveys to track the number of feral species in the conservation area. • Reports to the Project Ecologist to discuss trapping success and contingency. Minimum qualification required: Must have at least 5 years' experience in the field of feral species control with appropriate permits to traps and dispose of feral species.

predate on native wildlife.	

7. Monitoring, Reporting and Adaptive Implementation

7.1. Monitoring Objectives

The key objective of the offset and associated rehabilitation is to achieve the completion criteria for Koala habitat values (from 7 to 8 by 2045). Therefore, the monitoring program must provide an:

- 'early-control' function, that is to have confidence management actions are effective for achieving the offset completion criteria; and,
- 'early warning' function, so as inform timely decisions on corrective actions to ensure completion criteria are achieved.

This monitoring program will inform the effectiveness of management actions, with monitoring parameters to be 'SMART':

- Specific - Clear and concise to avoid any misinterpretation of the data;
- Measurable - Can be quantified and results can be compared to other data and able to show trends if measured over time. These measures should also give a consistent result, regardless of who is doing the calculation;
- Achievable - Practical, reasonable and credible given available resources and expected conditions;
- Relevant - Informative and useful to stakeholders, having regard to OMP objectives and completion criteria (i.e. need to measure what is important to the success of the plan); and,
- Timed - Specifies a timeframe for achievement and measurement.

Monitoring will be conducted during November of each year the management program operates. The five BioCondition transects conducted in November 2015 will be repeated in the same location each year until the end of year 5 with the web-based benchmark used to determine the current vegetation condition within the offset area.

For consistency and transparency, monitoring will be conducted by at least one, of the suitably qualified persons the persons who conducted the original five transects (if not possible, then an independent ecologist) and one of the on-ground management team to ensure the same methodology is utilized to collect site data. The site will not be solely monitored by the organisation or persons performing the offset management actions.

Monitoring will also include an observational assessment for feral animals, Koala, scats, any increase in wildlife and impacts by feral predatory animals.

7.2. Photo Point Monitoring

Ten photo monitoring locations will be installed within the offset area. Two photo monitoring points will be placed within each of the five transects. These points will include a landscape photo along the transect from the "Start Point" and another five photographs at the 50 m metre point of the transect taken in a standardised N, S, E, W & Ground direction to exactly match the original photos taken in November 2015. Photo monitoring will take place in November of each year for the duration of the first five years and then every November in years 2027, 2032, 2037 and 2044.

7.3. Fixed Location BioCondition Assessment

This assessment will be completed every November for the first 5 years and then every November in years 2027, 2032, 2037 and 2044. The five BioCondition assessments will be repeated in the same locations and results of the field data will be compared to both the current BioCondition data collected in November 2015 and the QLD Governments benchmark data for 12.9-10-2. Comparison with the field data will determine the success of the management practices and improvement needed (if any) to achieve the performance outcomes outlined in this plan.

Table 9 and Figure 1 shows the location of each of the five transects. **Blue** Coordinates identify the landscape photograph at the Start while **Red** Coordinates identify the location of 5 photographs taken at the 50 m meter point.

Table 10: Coordinates in GDA94 UTM Showing Location of Transects and Photo Points.

Transect ID Number	Start Transect (0 m)	Mid Transect (50 m)	End Transect (100 m)
Transect 1	56 J 479337 6902006	56 J 479290 6901999	56 J 479244 6901993
Transect 2	56 J 478489 6900824	56 J 478522 6900790	56 J 478537 6900744
Transect 3	56 J 479978 6900456	56 J 480018 6900474	56 J 480065 6900500
Transect 4	56 J 479982 6901433	56J 479960 6901385	56J 479933 6901344
Transect 5: Control site will be located outside the offset sites within the same property	Exact location TBD during the next monitoring survey	Exact location TBD during the next monitoring survey	Exact location TBD during the next monitoring survey

7.4. Unbounded Flora Survey

An unbounded floral survey will be conducted at each monitoring event. The survey will be targeted at producing an overall management area floral list and will include estimates as to relative abundance based on the ACFOR subjective scale. This assessment will include estimates of weed cover and abundance.

The ACFOR scale is as follows:

A - The species observed is "Abundant" within the given area.

C - The species observed is "Common" within the given area.

F - The species observed is "Frequent" within the given area.

O - The species observed is "Occasional" within the given area

R - The species observed is "Rare" within the given area.

7.5. Fire Fuel and Grazing Monitoring

Fire fuel and grazing monitoring will be conducted by the landowner prior to and during grazing events and by the monitoring ecologist during BioCondition monitoring events.

Ground cover and pasture biomass will be assessed by the landowner prior to and during grazing events. The offset area will be visually assessed for cover and pasture height, with grazing to cease when tussock grass height falls below 750 mm and/or ground cover in pasture areas, including leaf litter, is found to be less than or equal to 70%.

Fire fuel load will be measured during BioCondition monitoring events and recorded within the monitoring report. Measurements will be undertaken at five locations within the management area measuring depth of fire fuel and the measurements averaged to provide an estimate as to fire fuel load within the community. Where fire fuel loads are found to exceed 10 tonnes per ha, consideration should be given to increasing grazing events and/or back burning at the boundary to protect the management area against wildfire.

7.6. Statistical Analysis of Results

Field observations and vegetation assessment will be undertaken in accordance with the Guide to determining terrestrial habitat quality – a toolkit for assessing land based offsets under the Queensland Environmental Offsets Policy (version 1.1 December 2014) (DEHP, April 2017).

Data for each of the BioCondition attributes monitored will be collected at each site and reported on and presented in a sequential manner (including previous data collected) to quantify change from the benchmark collected in 2015. This will record the change in each attribute measured and hence the condition of the ecological community and habitat, thus enabling a statistical comparison to previous years' data and the progression of the offset site condition and EPBC Offset Assessment Guide Calculator inputs.

The BioCondition assessment is considered to be an effective way to detect change in environmental condition due to management interventions (Queensland Herbarium, 2016). The BioCondition framework is a typical Australian multimetric condition approach and has been tested for attribute suitability, observer variability and appropriate reference site identification (Queensland Herbarium, 2016).

Tucker (2016) found that the strategic location of reference sites for benchmarking was fundamental to mitigating the effects of climate, environmental gradients and disturbance processes. His results suggest that multimetric design may be altered through the removal of vegetation species richness estimates, improving usability for non-specialists without compromising surrogacy potential. Site location should be representative of the vegetation community, and at least 50 m from any major disturbance, such as a road. Also, sites must be located at least 500m apart to ensure independence of the data between sites assessed (Eyre *et al.*, 2015).

Keith (2000) outlined the number of vegetation sampling is one of the critical factors in determining the proportion of the flora captured. It is important to ensure that the plot remains within the regional ecosystem to be sampled. Two to five randomly selected sampling provide sufficient spatial replication to enable statistically valid conclusions as established under the monitoring program (Keith, 2000). Our BioCondition assessment program will provide 4 BioCondition transect and one control site which met the statistical requirement to effectively demonstrate attainment of performance targets and completion criteria as well as to detect change in environmental condition due to management interventions.

7.7. Monitoring of Field Works

Management area monitoring will include visual assessment of the fences, access tracks, weed control and regrowth by an ecologist. Monitoring will include an assessment of all works conducted in the period since the previous monitoring report, with notes to be provided to the approval holder. Notes will include an assessment of the efficacy of the field work, estimate of success rates, notes on the condition of fire breaks / access and fences and the overall offset area condition.

Table 11 outlines the monitoring schedule for the offset site

Table 11: Monitoring Schedule

Management Activities	Monitoring activity	Parameter/s measured	Related guidelines	Where	When	Reliability
1. Weed management	• Undertake BioCondition assessment	• Percentage of weeds present on site • Habitat structure and quality specifically relating to Koalas as per Table 7	A Condition Assessment Framework for Terrestrial Biodiversity in Queensland (Eyre et al., 2015)	Whole offset site	BioCondition assessment to take place annually for the first 5 years and then every November in years 2027, 2032, 2037 and 2044.	High – weed management will target WONS and declared weeds species. Performance outcomes are to be met to ensure success of the weed program. High – BioCondition assessment is a reliable method and the most practical method of objectively measuring the condition of the habitat for Koala.
2. Exclusion / management of stock	• Inspection of fences and for presence of stock • Stock are excluded/managed from the offset site, except where authorised by an ecologist for fuel/fire hazard management.	• Fence condition (hole, damage, etc) • Presence of cattle in the offset site when not controlled.	• Not applicable	Whole offset site	Fence condition is monitored on a quarterly basis during phase 1 offset area management. Presence of stock to be monitored regularly.	High – Direct monitoring (visual) will ensure that the fence is maintained and cattle are excluded/managed from the offset site.
3. Feral Animal monitoring and control	• Check for scats, pads in soft sand, carcasses • Establishment of baited cameras • Trapping	• Scats, pads, carcasses, visual sightings • Koala numbers • Increase in ground dwelling wildlife	• NA	Whole of Property with focus on the offset area	Ongoing as general property Management with dedicated monitoring and control to occur annually during the first 5 years and on	High because it is of as much interest to the landholder re stock losses as it is to Koala losses. It is in the landholders best interests to monitor all the time for predatory animals.

Management Activities	Monitoring activity	Parameter/s measured	Related guidelines	Where	When	Reliability
	• Shooting	(Bandicoots, Bettongs, Wallabies, Antechinus etc)			an as required basis until 2045.	
4. Fire Management	• Check presence and condition of fire breaks • Check fuel loads	• Quality and maintenance of fire breaks (i.e. presence of fuel load, access of fire track, vegetation regrowth, etc)	• Not applicable	Whole offset site	Opportunistic monitoring by Project Ecologist, Rehabilitation Contractor and Landowner throughout the duration of the rehabilitation.	High – monitoring of fire breaks and fuel load is the most reliable way to management fire on site
5. Unauthorised access or use	• Fencing and gates will be in place around the offset site.	• Checking for damage to fences and presence of stock inside the conservation area	• Not applicable	Offset site boundaries	Fence condition is initially monitored on a quarterly basis and monitored as part of general maintenance and operations after year 5.	High - Direct monitoring (visual) will ensure that the fence is maintained and cattle are excluded/managed from the offset site

7.8. Reporting

The report will be provided to the approval holder (Stockland) who will then publish the report on their website. It can be accessed there for review by interested persons.

Monitoring and compliance audits will be conducted in November of years 2018 to 2022, 2027, 2032, 2037 and 2044 with reports provided to the approval holder within 20 working days of the field monitoring being completed. The report will contain:

- Name and contact details of landowner / relevant authority. If someone other than the landowner is undertaking management activities (i.e. a contractor) their details must also be provided, including skills and expertise of the responsible entity(ies).
- DNRM/EPBC approval number;
- Lot on Plan property description and postal address;
- Photo monitoring;
- BioCondition assessment and associated GPS locations of central transect;
- An overview of plan implementation, including threats and risks controlled, lessons learned and proposed modifications to management actions for the subsequent year;
- the progress of the management area in achieving the management outcomes and how any risks or threats have impacted on the area
- An indication of any risks or potential threats that have become apparent to the offset area since the development of the offset plan, and activities to be undertaken to manage these threats and/or risks
- Evidence of progress towards the management outcomes and where all management outcomes have been achieved in full, evidence of completion.

A proposed table of contents for the monitoring report is provided below.

1. Introduction
2. General Management Area Condition
3. Works Program Report
    - Fencing and ongoing maintenance;
    - Fire break maintenance and maintenance of current access tracks;
    - Erosion control and / or soil disturbance (if required);
    - Fire management and maintenance;
    - Grazing management, results and details of AE equivalent grazing days;
    - Weed control;
    - Equipment, vehicles to be washed and blown down for weed spread measures between all management activities;
    - Feral animal, wild dogs, uncontrolled domestic dog control, macropod control;
    - Monitoring and evaluation;

4. Statement of Attainment Against Management Targets
5. Statement of Risk Management Against Threatening Processes
6. Results – BioCondition Assessment
7. Results – Photo Point Monitoring
8. Results – Unbounded Floral Survey
9. Results – Fire Fuel Monitoring
10. Results – Grazing
11. Weed Population Report

Appendix 1: BioCondition Data

Appendix 2: Photo Point Monitoring Data (full set of photographs)

Appendix 3: Unbounded Floral Survey Data

Appendix 4: Mapped Extent of Erosion

7.9. Duration of Management Agreement and Achieving Remnant Status

The offset area will be intensively managed for the first five years and then its condition maintained through general management until 5th January 2045. Beyond 2045, management for balanced environmental and production values will be conducted at the landholder's discretion. The offset area also needs to demonstrate the essential habitat factors for Koalas:

Vegetation that:

a) Contains Eucalyptus, Corymbia, Angophora, Lophostemon or Melaleuca species; and,

b) Has one or more of the following species present: *Eucalyptus tereticornis* (forest blue gum), *E. fibrosa* (broad-leaved red ironbark), *E. propinqua* (small fruited grey gum), *E. latisinensis* (white mahogany), *E. carnea* (white mahogany), *E. psammitica*, *E.grandis* (flooded gum), *E. microcorys* (tallowwood), *E. tindaliae* (Tindale's stringybark), *E. resinifera* (red mahogany), *E. populnea* (poplar box); *E. robusta* (swamp mahogany), *E. racemosa* (scribbly gum), *E. crebra* (narrow-leaved ironbark), *E. exserta* (Queensland peppermint), *E. seeana* (narrow-leaved gum), *Lophostemon confertus* (brush-box), *Lophostemon suaveolens* (swamp box) and *Melaleuca quinquenervia* (broad-leaved paperbark).

Height cover and composition within the management area will reflect the conditions for remnant vegetation as described in the *Vegetation Management Act 1999* and the BioCondition benchmarks for these communities. Weeds within the management area will be no greater than the weed cover recorded in the reference sites, consistent with those for undisturbed remnant areas for the same Regional Ecosystem and have no significant impact on recruitment and forest function.

The whole of the management area will transition to a mapped Category B (remnant vegetation) area on a Regulated Vegetation Management Map, certified by the Chief Executive of DNRME. This will be achieved through the submission of a "Request to re-assess a Regional Ecosystem map" form to the Queensland Herbarium in the accepted format; and through the submission of a BioCondition assessment and monitoring report that demonstrates that the BioCondition within the management area is consistent with or better than the BioCondition benchmarks for the particular RE achieving BioCondition Class 1.

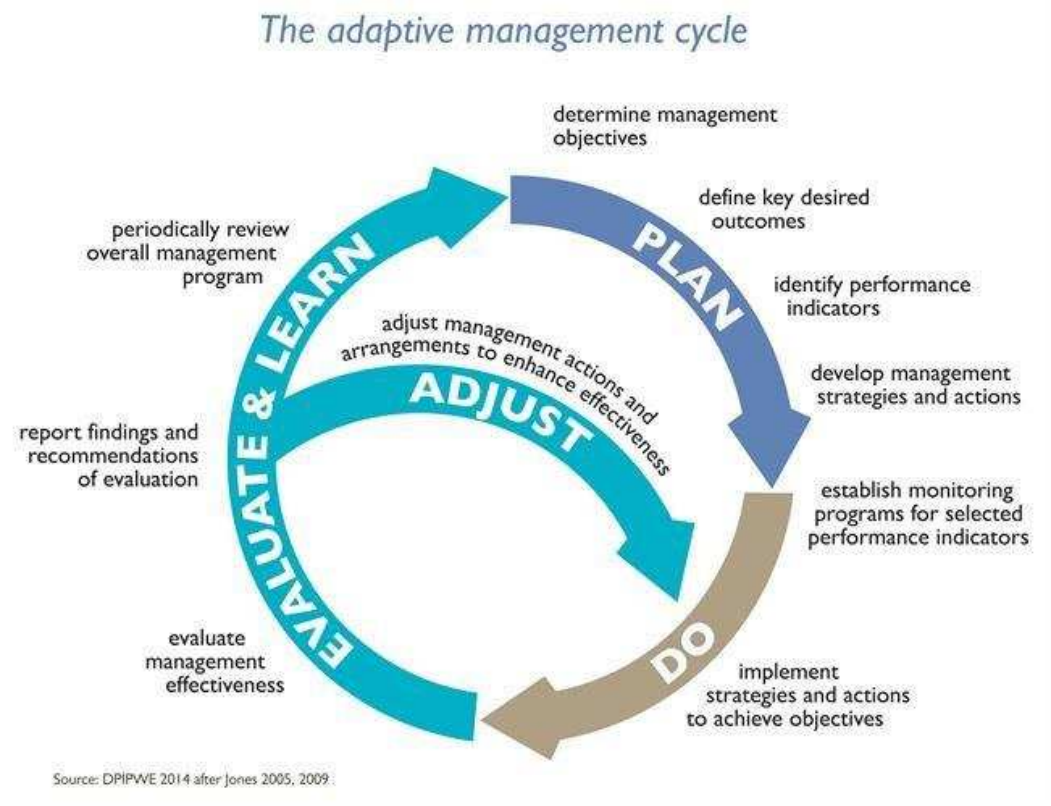
7.10. Adaptive Implementation

Rehabilitation work is by its very nature, dependent on a range of variables including rainfall and other climatic conditions, changes in soil chemistry, bushfire, pests and vegetative diseases. Adaptive management will be implemented to evaluate which management actions are most effective at achieving specified objectives. Rigorous combination of management, research, and monitoring will ensure that information is gained and management activities can be modified to achieve the best possible environmental outcomes/achieving the PC outlined in this OMP.

If the parties cannot agree on a revised OMP, the existing OMP will continue to apply.

Adaptive management will be performed as shown in the **Figure 2**.

Figure 3: Adaptive Management Principle



The first step is the preparation of this OMP which defines the management objectives, environmental outcomes, performance criteria and management actions (Sections 4 and 5). Following approval by DoEE, the OMP will be implemented and monitoring of the management actions will start through BioCondition assessments for vegetation condition and structure, visual observations for any feral animal or introduced predator that may adversely impact on the Koala populations, fire regimes and stock management.

This OMP will be reviewed on an on-going basis to ensure it remains current and applicable to the activities being undertaken at the offset areas. As monitoring methodologies could evolve over time, the OMP review will also include an assessment of the monitoring techniques to ensure the techniques are current and that the OMP is adapted to include any more appropriate technologies or methodologies which may become available.

It is proposed that the first review of the OMP be undertaken following the 5 years' intensive management actions, when the completion criteria have been attained or following major environmental events such as bushfire, drought, etc. then subsequently at 5 year intervals until 2045.

The review stage requires the input of the ecologist, rehabilitation contractor, landowner and development managers together, because it includes both the statistical analysis of the results (produced by the monitoring program) and the assessment of the implications of the findings for management. It will lead directly on to the next cycle of adaptive management, starting with the adjustment of the management practices under questions. The review of the OMP will be informed by:

- Results of BioCondition assessment and monitoring activities;
- Assessment and evaluation of risk management, including in response to the risk level, changing circumstances or the results from implementing contingency responses;
- Results of audits and reporting activities;
- Evaluation of the effectiveness of management measures;
- Consequences of significant environmental incidents (pre-determined and unanticipated); and
- Audits of the implementation and effectiveness of the plan.

8. Risks to Offset Management Objectives

A risk analysis detailing the potential risks to achieving the offset delivery plan's objectives was assessed based on likelihood risk table provided below (**Table 10**). A list of the potential risks, likelihood rating and remedial action specific to the delivery of the offset management plan are provided in **Table 11**.

Offsets for clearing permits require long-term security of the outcome (whether land acquisition or on-ground management). Rehabilitating the land and transferring the land into the conservation estate both reduces the risk to the offset site and increases the long-term protection of the site.

8.1. Risk Assessment

A risk assessment of potential impacts for the Project and associated offset delivery has been undertaken. A standard risk assessment matrix has been used for the purpose of assessing risks associated with management of the offset site.

Table 12: Risk Assessment Matrix

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

Likelihood and consequence

Qualitative measure of likelihood (how likely is it that this event/circumstances will occur after management actions have been put in place/are being implemented)	
Highly likely	Is expected to occur in most circumstances
Likely	Will probably occur during the life of the project
Possible	Might occur during the life of the project
Unlikely	Could occur but considered unlikely or doubtful
Rare	May occur in exceptional circumstances
Qualitative measure of consequences (what will be the consequence/result if the issue does occur)	
Minor	Minor risk of failure to achieve the plan's objectives. Results in short term delays to achieving plan objectives, implementing low cost, well characterised corrective actions.
Moderate	Moderate risk of failure to achieve the plan's objectives. Results in short term delays to achieving plan objectives, implementing well characterised, high cost/effort corrective actions.

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

Table 13: Risk Assessment for Offset Management Activities

Management objective/desired outcome	Event or circumstance	Likelihood consequence and risk level			Management actions/measures	Residual risk			Detection/monitoring activity/ies	Feasible/effective corrective actions
		L	C	RL		L	C	RL		
To achieve EPBC condition class 8/10 by 2023.	Unanticipated species establishment and invasion	2	1	LOW	• Vehicle wash-down protocols will be implemented during construction; • Implement Rehabilitation Management Plan for the project.	2	1	LOW	• Monitoring as per BioCondition Assessment. • Informal landowner monitoring.	Increase weed control where necessary.
	Noise, dust and vibration disruption to fauna during offset management activities	3	2	MED	• Development and implementation of Wildlife Management Plan to minimise direct impact on fauna during offset management activities. • Development and implementation of Wildlife Management Plan to minimise human/fauna interaction. • Undertake on-ground work activities as per Local or State Government regulations.	2	2	LOW		
	Grazing as a result of fences being damaged …	3	3	MED	Maintenance of the offset areas should be provided on regular basis to ensure that fences are maintained and no grazing occur on site (unless permitted to reduce weed in section).	2	1	LOW	Quarterly monitoring of all fences.	Stock to be removed within 5 business days and fences to be repaired.

Management objective/desired outcome	Event or circumstance	Likelihood	consequence	and risk level	Management actions/measures	Residual	risk		Detection/monitoring activity/ies	Feasible/effective corrective actions
	Lack of serviceable tracks for easy vehicular access	3	2	MED	Maintain roads / tracks to level where they can be easily traversed by 4x4 vehicles with trailers, Rural Fire Service vehicles and monitoring. Ensure no roads are dead ends and that all roads connect with other roads on the property for multiple access points and escape routes in the event of an uncontrolled burn.	2	2	LOW	Degraded or inaccessible tracks to be reported once found by on ground staff.	Tracks are to be repaired as soon as reasonably possible.
	Revegetation / On ground management issues	3	2	MED	• Receive approval for all operational work including the Rehabilitation Management Plan. • Rehabilitation Management Plan and performance criteria are to prepared, in consultation with relevant stakeholders	2	2	LOW	Ongoing communication between staff and management.	
	Excessive grazing that reduces or restricts the regeneration of native species.				Open areas support exotic pasture grasses and are in use for grazing purposes. Stock currently have unrestricted and unmanaged access to the proposed site.				Remove / manage grazing pressure to allow regeneration of shrubby understory and Herbs / Forbes. Fence site with wildlife friendly fences to ensure stock are managed / excluded from the offset areas based on noted impacts, fuel loads and impacts to wildlife breeding cycles Grazing must be intensively managed (ie. crash grazing or time controlled grazing) using low impact fence with minimal clearing of large trees along the fence-line. Yearly monitoring will identify issues and implement alternative	??

Management objective/desired outcome	Event or circumstance	Likelihood	consequence	and risk level	Management actions/measures	Residual	risk		Detection/monitoring activity/ies	Feasible/effective corrective actions
									actions.	
	Timber harvesting				Past timber harvesting has retained very few Koala habitat trees of sufficient size as to provide effective resting sites for Koala				Exclude timber harvesting practices from the offset site until such a time as the Koala habitat trees attain a DBH of 38cm. If harvesting does resume, 40 trees =/> than 38cm DBH must be retained per ha.	
	Lack of serviceable tracks for easy vehicular access.				Current roads in poor conditions with ruts, washouts, large rocks and minimal connectivity between roads.				Maintain roads / tracks to level where they can be easily traversed by 4x4 vehicles with trailers, Rural Fire Service vehicles and monitoring. Ensure no roads are dead ends and that all roads connect with other roads on the property for multiple access points and escape routes in the event of an uncontrolled burn.	
	Catastrophic event that destroys fences or infrastructure implemented to improve Koala habitat.	2	2	LOW	Wildlife, flood, cyclone, storm event that destroys fences, roads or impedes the sites ability to regenerate in the allocated 5-year timeframe.				Additional money allocation in the management plan provide a measure of surplus money to repair damaged infrastructure. Additionally, allocated funds within the management plan can be manipulated as required to achieve the management plan. The landowner has heavy equipment on site and readily available in minimise impacts or repair infrastructure as required. Implement cool burns in a mosaic pattern, maintain fire breaks and work in association with neighbors to, as far as practical, control wild fires.	

Management objective/desired outcome	Event or circumstance	Likelihood	consequence	and risk level	Management actions/measures	Residual risk			Detection/monitoring activity/ies	Feasible/effective corrective actions
Manage uncertainties	Key data / information used to formulate the plan inadequate	2	2	LOW	BioCondition assessment is a recognized methodology that is approved in Qld and is used to assess the ecological function of an ecosystem. Data will be collected in a standard and repeatable manner to minimise any errors.	1	1	LOW		
	Limitations and/or uncertainty, associated with the use of that data/information.	2	2	LOW	• A minimum of four transect will be monitored during the 5 years of the rehabilitation work. Additional random ecological assessment will be provided to reduce any uncertainties in the use of data. • Additional data will be collected if the assessment of the results is not considered sufficient to assess the success of the offset.	1	1	LOW		
	Limitations and/or uncertainty, associated with the implementation of the offset plan	2	2	LOW	Assessment of the offset success will be undertaken by independent, qualified ecologists (Relevant qualifications are outlined in Section 6.2).	2	1	LOW		

8.2. Contingency Response and Corrective Actions

If structured monitoring or opportunistic observations indicate that a risk has been realised, a basic action plan is to be prepared identifying appropriate corrective actions to rectify the event or circumstance. An example of some common risks and the suggested contingency response are provided below in Table 14.

Table 14: An example of common risks and contingency responses

Risks	Initial Response	Corrective Actions
New Weed infestations	• Identify how the new infestation arose • Ensure all staff are retrained in the use of hygiene procedures (e.g. weed and seed of vehicles)	• Correct hygiene protocols if this was considered an issue. • Increase weed treatments with the advice of the rehabilitation contractor. • Upon being notified or becoming aware of new weed infestation being present in greater than 10% of the offset area, the Rehabilitation Contractor (first 5 years of management) or Landowner is to implement pest control measures within one month. These measures may include, and are not limited to foliar spraying, basal bark spraying, stem injection, cut stump, cut and swab, stem scraper; and wick applicators. • The monitoring report will document the weed presence, weed control measures and extent of grass cover during the reporting period and the correlating responsive actions.
Damage in fence	• Identify where fence is broken and potential cause of damage. • Identify if stock has accessed the offset site.	• Upon being notified or becoming aware of an unsecure offset area, the Rehabilitation Contractor or Landowner is to undertake fence maintenance and repairs to re-secure the offset area as soon as possible and within 30 days. • The monitoring report will document the installation, maintenance and repair of fences during the reporting period.
Increase in/detection of feral animals, dogs or	• Monitor and confirm presence, and likely access points/direction for control planning	• Trap • Shoot • Monitor

Risks	Initial Response	Corrective Actions
introduced predators		
Unintended and prolonged stock access	• Identify where stock accessed the offset site.	• Any entry points due to fencing breaks etc. to be repaired to a stock proof condition as soon as possible and within 30 days. • Remove stock as soon as reasonably possible. • Identify if stock have damaged vegetation and replant where necessary. • The monitoring report will document the grazing periods that occurred in the offset areas during the reporting period and the repair of fences and the correlating responsive actions that occurred as part of grazing management.
Uncontrolled bushfire	• Contact the fire authorities on 000 if a fire is seen in the offset site. • Inspect the site for injured Koalas and transport to a wildlife vet if a competent staff member is present. Alternatively contact the Australia Zoo Wildlife Hospital on 07 5436 2097.	• Upon being notified or becoming aware of prohibited fire in the offset area, the Rehabilitation Contractor or Landowner is to reassess access protocols for any lessees etc., signage and general access within one fortnight. • After any occurrence of fire in the offset area, the landowner or rehabilitation contractor will: ○ inspect and repair, and widen if necessary, all firebreaks; and ○ reassess fuel load reduction practices (i.e. Increase controlled stock access if appropriate to lower fuel loads or increase invasive grass control with the removal of large sections of dead grass off site). and ○ exclude grazing until the grass cover present at the end of the dry season is a minimum • The monitoring report will document any known incidences of fire that have occurred during the reporting period and the correlating responsive actions.

9. Management Actions Schedule

9.1. Tripartite Agreement

The process by which management will be administered includes use of a Bank Guarantee as security, following development of a Tripartite Agreement **(Appendix 3)** between the proponent (Stockland), on-ground management contractor (Australian Environmental Landscapes -AEL) and the Landowner (Brian Michael Dunn and Dunkerry Investment Pty Ltd ATF Dunn Investment Trust), who may also conduct components of the management actions. The Bank Guarantee will total a value equal to the estimate of costs and expenses required by Section 9 of this OMP and invoices issued by the contractor to the applicant upon completion of each management action. Management actions will not be paid until an independent ecologist visits the offset site and certifies that the management action has been completed as per this Offset Management Plan.

9.2. Management Actions

The management actions detailed in Section 5 will be undertaken on the management area at the frequencies noted and at the amount detailed in this Offset Management Plan and the amount agreed on by AEL and the Landowner. The duration of the intensive management program is 5 years, then the offset site will be managed and vegetation condition maintained by the landowner. Changes to the management actions and/or approach may be required over time if the BioCondition assessments and field observations by the independent monitoring ecologists indicate the management actions within this document, climatic conditions and stock management by the landowner are not contributing to the sites ongoing development as Koala habitat.

9.3. Changes to Management Actions

Where, as a result of observations during field operations and or via the monitoring and compliance arrangements, it is observed that alternative management measures or techniques are desirable, alternate management actions must be discussed with the landowner and a revised management plan submitted by the proponent to the Department for approval, in accordance with Condition 11 of approval for EPBC 2013/6864. Implementation of revised management actions must be funded by existing management dollar allocations.

9.4. Invoicing for the Completion of Management Actions

Completed management actions must be invoiced to the proponent for review by the Trust administration for payment. Each invoice is to include details of the management action and the date the action was completed. Management actions will not be paid until an independent ecologist visits the offset site and certifies that the management action has been completed as per this Offset Management Plan. Payment is to be made to the party who performed the management actions and management certification within 30 days of the invoice being received.

9.5. Unsatisfactory Completion of Management Actions

Where management actions are not being performed at the nominated frequency or at a sub-standard level, the responsible party will be asked to remediate those management actions before payment is processed. If the sub-standard or infrequent management actions are not remediated following three requests, an alternate on-ground contractor may be engaged.

9.6. Responsibility for BioCondition Monitoring and Reporting

For consistency and transparency, monitoring will be conducted by at least one, of the suitably qualified persons the persons who conducted the original five transects (if not possible, then an independent ecologist) and one of the on-ground management team to ensure the same methodology are utilized to collect site data. The site will not be solely monitored by the organisation or persons performing the offset management actions.

10. Consent/Agreement

by the (enter name of the delegate of the Chief Executive Officer, Department of Environment and Resource Management and the relevant delegation) to indicate approval of the vegetation management plan.

Name: ……..

Position: ……...

Signature: ……

Date: …….....

by Brian Michael Dunn and Dunkerry Investment Pty Ltd ATF Dunn Investment Trust being the current owner/s of the abovementioned property to indicate that the terms of this vegetation management plan including responsibilities under the management plan, have been read, understood and accepted.
The landowner agrees that any non-compliance with the requirements of this vegetation management plan shall constitute a breach of the terms and conditions of the legally binding mechanism entered into.

(Tick whichever is applicable)

☑ We have obtained independent legal advice on my obligations under this plan.

OR

☐ I have not obtained independent legal advice, though I have been advised by DERM that I should do so, and I accept the risks of not seeking such independent legal advice and sign this vegetation management plan on that basis.

Name: …….

Signature: …….

Name: …….

Signature: …….

Date……

11. Emergency Contacts and Procedures

The following list of contacts and procedures will be used where issues have been identified with the implementation of this management plan. Issues may relate to:

- Management actions not being adhered to or poorly implemented;
- A risk observed that may affect the property or landowner's livelihood;
- Management actions not achieving the management outcomes or objectives;
- Fire risk unacceptably high;
- Grazing levels too high / too low;
- An identified risk that affects the short term / long term viability of the site;
- Observation that impacts the landowner's property management (i.e. gates left open, unapproved persons on site, vehicle traversing site that do not have weed/seed certification);
- An injured fauna species found on site; and,
- An action affecting the offset sites current or future condition.

Table 15: Emergency procedures

Contact Person	Procedure
Landowner	Phone for any property related issue. Please ensure Anthony Dunn is 1st point of contact.
Compliance Enforcement Branch – Dept. of the Environment & Energy	Any breach or non-compliance with this management plan, call DoE for advice.
Crossroads Rural & Environment)	Any issue with site management, illegal entry or poor site management.
Green Tape Solutions)	Any fauna related issue inclusive of injuries, death. Particularly relevant in relation to bats and birds.
Australian Environmental Landscapes	Any issue with site management, call Craig as 1st point of contact.
Stockland Development Pty Ltd	For any issue with the site in relation to current / future site management or non-payment for completion of management actions
Wildlife Care (Toowoomba)	Any wildlife related issue.

Fauna Foster Care of Australia's Unique Native Animals	Any wildlife related issue.
RSPCA QLD	Any wildlife related issue.
Ipswich Koala Protection Society	Any wildlife related issue.
QLD Parks & Wildlife	Any wildlife related issue.

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APPENDIX 1

Approval Condition and Assessment of Compliance

Table 16: Condition of Approval and Assessment of Compliance

Conditions Number	Condition of Approval	Section and/or Page Number which address the approval condition	Key Commitments for meeting each condition
4	At least three months prior to commencement of the action, the approval holder must submit an Offset Management Plan (OMP) which has been reviewed by a suitably qualified person to the Minister for approval. The approval holder must not commence the action unless the Minister has approved the OMP in writing. The approved OMP must be implemented. The OMP must include, but not be limited to:	The external offset management have been prepared and reviewed by independent qualified person, Kelly Matthews (Director from Green Tape Solutions) and Steve Cupitt (Principal ecologist from Crossroads Rural and Environment). Their resumes are provided in Appendix 4.	Not applicable
4.a	a detailed description of the offset areas required by Condition 3, consistent with the EPBC Act Environmental Offsets Policy	Description of the offset area is provided in Section 2.0 of this plan.	Not applicable
4.b	measures to protect, manage and rehabilitate Koala habitat in the offset areas, including, but not limited to: i. a map/maps showing areas to be managed; ii. timing of management activity for each area; iii. performance criteria for each area; iv. a monitoring plan to assess the success of the management activities measured against the baseline condition. This must include, but not be limited to, control sites and periodic ecological surveys to be undertaken by a suitably qualified person; v. a risk assessment and a description of the measures that would be implemented to mitigate the identified risks; vi. the use of local provenance plants for rehabilitation, where planting is undertaken; vii. installing and maintaining fencing as necessary to prevent domestic livestock from entering offset areas while allowing Koala movement; viii. excluding grazing from offset areas, except where necessary for bushfire prevention and control, for example	i. The map of the area is provided in Figure 1. ii. Management activities and performance criteria are provided in Section 5 and Section 10.6. iii. Monitoring plan is provided in Section 7. iv. A risk assessment has been added in Section 8. v. Management of grazing for fuel load purposes from offset areas is outlined in Sections 5.2, 5.3 and 7.4. vi. Vegetation / weed management strategy is provided in Section 5.1.	Keys commitment include: • Weed management will be undertaken for a period of 5 years. • The external offset area will be managed by a cattle proof fence to only allow grazing for fuel reduction purposes.

Conditions Number	Condition of Approval	Section and/or Page Number which address the approval condition	Key Commitments for meeting each condition
	by using crash grazing; ix. vegetation management including increasing abundance of Koala food trees and controlling weeds, including as shown in Annexure 2; and x. undertaking regular Koala predator control.		
4.c	Details of the offset attributes (including maps in electronic Geographic Information System (GIS) format with accompanying shapefiles), site descriptions, environmental values, connectivity with other Koala habitat and biodiversity corridors	Section 2 of this plan outlines the description of the site. GIS shapefiles are also attached with the post-approval application.	Not applicable
4.d	detailed surveys and descriptions of the offset areas to clearly identify baseline conditions and establish performance indicators. This must include: i. a baseline description (prior to any management activities) of the current condition of the extant vegetation of each offset area, including the location of survey points (GPS reference); ii. the quantity of Koala habitat provided by the offset area; iii. the quality of Koala habitat found within the offset area (prior to any management activities); iv. vegetation condition mapping; and v. photo reference points.	Details of the surveys and description of the offset areas to clearly identify baseline conditions and establish performance indicators are provided in Section 3.	Baseline condition and performance criteria include BioCondition assessment of relevant transects, provision of mapping and photos reference points.
4.e	Details of the parties responsible for managing, monitoring and implementing the OMP for the duration of this approval, including the minimum relevant experience and qualifications required for the relevant responsibilities	Details of the parties responsible for managing, monitoring and implementing the OMP for the duration of this approval are provided in Section 10. Resume of suitable qualified person undertaken the monitoring is provided in **Appendix 5.**	Resume of suitable qualified person undertaken the monitoring is provided in **Appendix 5.**

APPENDIX 2

Voluntary Declaration

APPENDIX 3

Tripartite Agreement