

Appendix J

Offset Management Plan

Caloundra Transport Corridor Upgrade

EPBC 2024/09956

Offset Management Plan

Sunshine Coast Regional Council

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Executive summary

Project background

The Sunshine Coast Regional Council (SCRC), in partnership with the Department of Transport and Main Roads (TMR), proposes to construct and operate a new integrated transport corridor in Caloundra, Queensland (Qld) referred to as the Caloundra Transport Corridor Upgrade Project (the 'Project' or proposed action).

On 1 August 2024, the Project was referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and was declared a 'controlled action' (EPBC 2024/09956) on 30 October 2024.

Subsequently, on 14 November 2024, a request for additional information required for assessment by preliminary documentation was issued by DCCEEW under Section 95A(2) of the EPBC Act. Specifically, Section 6 (proposed offsets) of the request for additional information required the preparation of an Offset Proposal (OP) and Offset Management Plan (OMP) to inform DCCEEW's assessment of potential Project impacts to matters of national environmental significance (MNES). Further Attachment B of the request for additional information provided specific requirements for both the OP and the OMP. This document (i.e. OMP) has been prepared in response to Section 6 and Attachment B of the request for additional information.

Significant residual impacts on matters of national environmental significance overview

The Project EPBC Act preliminary documentation (Aurecon, 2026a) identified two protected matters that are likely to be subject to significant residual impacts, including:

- Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland Threatened Ecological Community (Coastal Swamp Sclerophyll Forest TEC)
- Koala habitat.

Proposed offset site

In accordance with the Environmental Offsets Policy (Department of Sustainability, Environment, Water, Population and Communities [DSEWPC], 2012) under the EPBC Act, offsets must be provided for any MNES that are expected to experience a significant residual impact due to the proposed action.

Based on the significant residual impacts, the provision of 29.35 hectares (ha) of direct offsets has been proposed to compensate for the Project impact to the Coastal Swamp Sclerophyll Forest TEC and Koala habitat. The proposed quantum of offsets exceed that required to achieve no-net loss (i.e. legislative compliance). Therefore the proposed offset will ultimately result in a net gain in relation to the two protected matters associated with this OMP. The total significant residual impacts associated with the Project and the proposed quantum of offsets are outlined in Table E.1.

Table E.1 Significant residual impacts quantum and the quantum of proposed offsets

MNES	Status	Habitat type impacted	Significant residual impact associated with proposed action (ha)	Proposed offset site area (ha)
Coastal Swamp Sclerophyll Forest TEC	Endangered	-	2.09	29.35
Koala habitat	Endangered	Foraging and breeding, shelter and dispersal	6.17	29.35

The proposed offset property is Lot 10 on P231637 in Meridian Plains, Queensland. The property is approximately 62.34 ha. Within the property, 29.35 ha have been selected as the proposed offset site (refer Figure 2-2).

The property is currently located on land owned by the SCRC in the form of freehold land. It has been cleared in the past as a result of previous cattle grazing activities and is directly adjacent to Meridian Plains Conservation Park.

An assessment to determine the suitability of the proposed offset site was conducted by Aurecon in March 2026. It was found that vegetation within the proposed offset site consisted of Regional Ecosystem (RE) 12.3.5 regrowth considered to be analogous to the Coastal Swamp Sclerophyll Forest TEC, and degraded exotic pasture with isolated melaleucas and *Eucalyptus tereticornis*.

The presence of the Coastal Swamp Sclerophyll Forest TEC within the significant residual impact area forms the first requirement for proposed offset. This protected matter is listed as Endangered under the EPBC Act and is identified within the Commonwealth conservation advice for the community as being analogous to RE 12.3.5 as mapped by the Queensland Government. The patches of regrowth RE 12.3.5 within the proposed offset site were found to pass the key diagnostic criteria and condition thresholds of the Coastal Swamp Sclerophyll Forest TEC and fulfil the first requirement of the offset.

The second requirement of the offset is provision of Koala habitat, due to significant residual impacts on the matter. The Coastal Swamp Sclerophyll Forest TEC is known to provide foraging, breeding and shelter habitat for the Koala. In addition, there is potential for supplementary planting of Koala foraging trees such as *Eucalyptus tereticornis* and *Eucalyptus robusta*. This fulfils the second requirement of the offset. The assessment of the suitability of the proposed offset site identified that the necessary conditions (i.e. habitat types and area) occur to meet the Project offset obligations.

Offset management

The primary goal for managing the proposed offset site is to enhance habitat quality for the target offset MNES. The intended conservation result focuses on protecting and restoring habitat, expanding habitat size and resources, improving patch connectivity, and mitigating threats to support sustainable populations of the two MNES values. This will be achieved by meeting completion criteria within 20 years, alongside interim performance milestones set every five years. Successfully reaching these completion criteria are anticipated to improve ecosystem functionality and bolster resilience. After the offset period (defined as either 20 years or the time required to meet the completion criteria, whichever is longer) ongoing general land management practices will suffice to uphold the conservation gains.

This document outlines the proposed offset site parameters and management actions to be implemented on the proposed offset site. It includes details on planned management activities, monitoring protocols, corrective and adaptive management measures, as well as reporting obligations, all aimed at ensuring compliance with the EPBC Act.

Offset monitoring

To assess and ensure the success of management measures, ongoing monitoring of the proposed offset site is proposed, enabling adjustments to management actions when needed. This process also involves documenting progress against performance milestones and completion criteria. Through monitoring, it will be confirmed that the offset activities enhance ecosystem resilience, thereby delivering persisting conservation outcomes for the target offset MNES.

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Acronyms, abbreviations and definitions

Terminology	Definition
ALA	Atlas of Living Australia
ASL	above sea level
Biosecurity Act	<i>Biosecurity Act 2014</i> (Qld)
CEEV	Critically Endangered, Endangered, and Vulnerable
cm	centimetres
Coastal Swamp Sclerophyll Forest TEC	Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland Threatened Ecological Community
Cth	Commonwealth
DAWE	Department of Agriculture, Water and the Environment (former)
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DotE	Department of the Environment (former)
DSEWPC	Department of Sustainability, Environment, Water, Population and Communities (former)
EDL	ecologically dominant layer
EP Act	<i>Environmental Protection Act 1994</i> (Qld)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth)
ha	hectares
IBRA	Interim Biogeographic Regionalisation for Australia
kg	kilograms
km	kilometres
km ²	square kilometres
m	metres
mm	millimetres
MNES	matter of national environmental significance
NC Act	<i>Nature Conservation Act 1992</i> (Qld)
NSW	New South Wales
OMP	Offset Management Plan
PMST	Protected Matters Search Tool
Project	Caloundra Transport Corridor Upgrade Project
proposed action	Caloundra Transport Corridor Upgrade Project
Qld	Queensland
RE	Regional Ecosystem
SCRC	Sunshine Coast Regional Council
SQP	suitably qualified person/s
TEC	threatened ecological community
TMR	Department of Transport and Main Roads
VDec	Voluntary Declaration under the <i>Vegetation Management Act 1999</i> (Qld)
WoNS	Weeds of National Significance

Key definitions

Term	Definition
approval holder	The person to whom the EPBC Act project approval is granted and is responsible for compliance with conditions (if any) applied to a project.
benchmark	Benchmarks are quantitative values for regional ecosystems derived from data collected from field-based reference sites for each site condition attribute assessed in BioCondition methodology.
commencement of the action	Means the first instance of any specified activity associated with the proposed action including clearing and construction. Excludes minor physical disturbances defined within the EPBC Act controlled action approval.
commencement of the OMP	Means the first instance of any specified management actions associated with this OMP. This should occur within 12 months of the commencement of the action.
completion criteria	Final habitat quality scores and criteria required to meet the required conservation gains for each target offset MNES over the duration of the offset.
disturbance footprint	The disturbance footprint is defined as the proposed action footprint (permanent and temporary disturbance areas) that will be directly impacted by the proposed action.
duration of the offset	The duration of the offset is defined as 20 years or until the completion criteria are achieved, whichever is longer.
EPBC Act	The <i>Environment Protection and Biodiversity Conservation Act 1999</i> is Australia's national environmental law. It provides a legal framework to protect the environment, especially those aspects that are matters of national environmental significance.
EPBC Act assessment	The significant impact assessment for MNES undertaken as part the Project preliminary documentation.
habitat quality score/habitat quality	A method of evaluating habitat quality within a particular community based on key indicators including site condition, site context and species habitat index (if necessary). The method produces a score out of 10, where the maximum score of 10 represents a fully intact system. Scores of 4, 5 and 6 may indicate good quality regrowth or medium value habitat.
impact area	The area to be disturbed as part of the proposed action.
matters of national environmental significance (MNES)	Environmental values protected under the Commonwealth EPBC Act. Significant residual impacts to these values may require offsets under the legislation.
Modified Habitat Quality Assessment (MHQA)	The Modified Habitat Quality Assessment (MHQA) method is a best-practice approach to derive habitat quality scores (HQS) for input to the EPBC Act Offset Assessment Guide (offset calculator). These methods are intended to generate a HQS that represents key habitat values provided by a site (<i>site condition</i>) and values of its surrounding landscape (<i>site context</i>). When applied to threatened species, HQS also quantifies the value of both the site and the species population (<i>species stocking rate</i>).
Offset Management Plan (this document)	A document that outlines how an area of land, set aside as a biodiversity offset, will be managed to compensate for significant residual impacts caused by a proposed action on a protected matter (e.g. MNES).
performance criteria	Specific measures identified to determine the effectiveness of management actions and, when required, implement corrective actions to maintain progress towards interim performance targets and the completion criteria.
pest/s	Means any pest species identified under the <i>Biosecurity Act 2014</i> (Qld) known to provide threats to the Koala and/or degrade the quality of the Coastal Swamp Sclerophyll Forest threatened ecological community, Koala habitat or its ability to regenerate.
Project disturbance footprint	The extent of disturbance associated with the proposed action.
Regional Ecosystem (RE)	A vegetation community in a bioregion that is consistently associated with a combination of geology, landform, and soil. Regional Ecosystems are described in the Regional Ecosystem Description Database, produced by the Queensland Herbarium.

Term	Definition
regrowth vegetation	Vegetation which forms the predominant canopy of the community but does not meet either: a) 50% of the undisturbed predominant canopy; or b) more than 70% of the vegetation's undisturbed height; and c) is composed of species characteristic of the vegetation's predominant canopy and is greater than 15 years.
remnant vegetation	Vegetation which forms the predominant canopy of the community that: a) covers more than 50% of the undisturbed predominant canopy; and b) averages more than 70% of the vegetation's undisturbed height; and c) is composed of species characteristic of the vegetation's undisturbed predominant canopy.
suitable habitat	A species preferred environment required to sustain a viable population. Suitable habitat may include breeding, foraging and shelter resources for fauna or preferred environmental conditions for flora.
suitably qualified ecologist	Means a person who has relevant professional qualifications and at least three years' work experience designing and implementing flora and fauna surveys and management plans for the Koala using relevant protocols, standards, methods and/or literature.
target offset MNES	The following MNES where significant residual impacts by the proposed action are likely: ■ Coastal Swamp Sclerophyll Forest threatened ecological community ■ Koala
Pest animal	Pest animal as listed in Schedule 2 of the <i>Biosecurity Act 2014</i> (Qld)
proposed offset property	Includes the entirety of the Rainforest Drive Reserve (Lot 10 on P231637) which has an area of approximately 62.34 ha.
proposed offset site	Part of Lot 10 on P231637, located on Rainforest Drive, Meridian Plains, Queensland. Totalling 29.35 ha which will be legally secured and managed in accordance with this Offset Management Plan.
threatened ecological community (TEC)	An ecological community that is a naturally occurring group of native plants, animals and other organisms that are interacting in a unique habitat and listed under the provisions of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) (EPBC Act)
threatened species	Means Extinct (EX), Extinct in the Wild (XW), Critically Endangered (CE), Endangered (E), Vulnerable (V) or Conservation Dependent (CD) under the EPBC Act.
vegetation community	An identified vegetation community (i.e. structure, composition, condition and/or underlying geology) verified from a field survey. Communities may include Regional Ecosystems, remnant vegetation and/or disturbed/novel ecosystems (e.g. parkland, disturbed roadsides, etc.).
weed/s	Means any weed species identified within the Weeds of National Significance (WoNS) and weed species listed under the <i>Biosecurity Act 2014</i> (Qld), species listed in the Coastal Swamp Sclerophyll TEC conservation advice (Appendix B of the conservation advice), or other tall non-native grass species, including <i>Setaria sphacelata</i> (South African Pigeon Grass) and <i>Megathyrsus maximus</i> (green panic) known to restrict the movement of Koala and/or degrade the quality of the Coastal Swamp Sclerophyll Forest TEC, Koala habitat foraging/breeding habitat, or its ability to regenerate.

Department of Climate Change, Energy, the Environment and Water request for additional information cross reference table

The below table details each of the Caloundra Transport Corridor Upgrade Project (EPBC 2024/09956) Offset Management Plan (OMP) request for additional information items and the section addressed within the OMP.

Cross reference table for the OMP request for additional information items and section addressed within OMP

Item	Request for additional information description	OMP section reference
2.1	A description of the Proposed offset site(s) including location, size, condition, existing and future tenure, and relevant ecological/species values present and surrounding land uses.	Section 2.1 and 3
2.2	Maps and shapefiles to clearly define the location and boundaries of the Proposed offset site/s, accompanied by the offset attributes (e.g., physical address of the Proposed offset site/s, coordinates of the boundary points in decimal degrees, the relevant MNES that the environmental offset/s compensates for, and the size of the environmental offset/s in hectares).	Section 2.1
2.3	Baseline survey information (matter habitat quality, baseline pest and weeds survey) showing MNES presence and the extent and quality of the respective habitat(s) at the Proposed offset site(s) in accordance with the relevant survey guidelines or using a scientifically robust and repeatable methodology.	Section 3.5 and 3.5
2.4	Summarised details of the nature of the conservation gain to be achieved for relevant MNES, including the creation, restoration and revegetation of habitat in the Proposed offset site/s.	Section 3.6.1
2.5	Information about how the Proposed offset site/s will provide connectivity with other habitats and biodiversity corridors and/or will contribute to a larger strategic offset for the relevant MNES. This should include information about how the proposed offset/s area contributes to any state and/or regional plan/s for the conservation of the protected matter.	Section 3.4
2.6	Baseline survey information showing pest and weed presence at the Proposed offset site(s) in accordance with the relevant survey guidelines or using a scientifically robust and repeatable methodology.	Sections 3.6.2 and 3.6.3.
2.7	Mechanisms for protection, for at least the full duration of the impact, under a conservation covenant or otherwise accepted method, noting that protection mechanisms for permanent impacts should continue in perpetuity.	Section 2.3
2.8	Completion criteria and, if necessary, performance targets that evidence protection or improvement of EPBC Act listed communities, species and their habitat. For the purpose of the plan: a) completion criteria are longer term time-bound values, specified for measurable parameters, that if attained and maintained ensure the plan's environmental objectives are achieved; and For example: 'By Year 20, the approval holder must reduce non-native plant cover to within 5% of the benchmark value associated with each Regional Ecosystem.' b) performance targets are time-bound short- and medium-term targets, for management interventions and environmental condition, that are used to monitor, evaluate, review and improve the effectiveness of the plan to offset impacts. For example: 'By Year 10, the approval holder must reduce non-native plant cover to within 10% of the benchmark value associated with each Regional Ecosystem.'	Sections 4 and 9

Item	Request for additional information description	OMP section reference
2.9	The plan includes management measures that will protect or improve EPBC Act listed threatened ecological communities and/or species and their habitat. Each management measure: a) is specifically linked to the attribute of the protected matter for which the management measure applies; b) has timeframes for implementation; c) is described sufficiently to avoid ambiguity and to inform plan implementation; d) is related to attaining/maintaining completion criteria and/or performance targets; and e) is derived from recognised principles, practice, or guidelines, and is justified - technically, scientifically and legally (e.g. by recommendation in a national recovery plan) – as an effective and appropriate measure to attain and/or maintain the plan's completion criteria and/or performance targets. Management activities must be targeted towards the needs of the protected matter that is offset, and must align with the recovery objectives for the species as identified in relevant National Recovery Plans or Conservation Advice.	Sections 5 and 10
2.10	The plan identifies and manages uncertainty. To this end the plan specifies: a) key data/information used to formulate the plan; b) the limitations and/or uncertainty associated with the use of that data/information; c) the risks that limitation and/or uncertainty represents for plan failure; and d) how limitations and/or uncertainty, and associated risks, are mitigated during plan implementation. For example, where a margin of safety is applied to management measures until uncertainty is reduced to an acceptable level or performance targets/completion criteria are attained/maintained.	Sections 3, 8 and 9
2.11	The plan assesses the risk of failure to achieve the plan's performance targets and/or completion criteria. To this end the plan: a) states the plan's performance targets and/or completion criteria; b) identifies events or circumstances that prejudice attainment/maintenance of performance targets and/or completion criteria. The events or circumstances must address scientific/ecological uncertainty, stochastic events and legal/land use planning factors that may represent risks; c) includes a qualitative assessment of the likelihood and consequence of those events or circumstances, and the residual risk of failure to achieve those criteria due to identified events or circumstances (assuming management measures will be implemented); d) characterises risk as low, medium, high or severe, and derived from likelihood (highly likely, likely, possible, unlikely, rare) and consequence (minor, moderate, high, major and critical); and e) outlines how consequence, likelihood and risk level for each risk have been determined.	Sections 4.1, 4.1.6 and 8

Item	Request for additional information description	OMP section reference
2.12	The plan manages the risk of failure to achieve performance targets and/or completion criteria by: a) specifying management measures that will be implemented to attain/maintain the completion criteria and/or performance targets; b) enhancing monitoring and management measures for high-risk events or circumstances, thereby providing a 'margin of safety' to detect, avoid or mitigate the likelihood and/or impacts of the event or circumstance; c) specifying measurable events or circumstances (management triggers) that detect actual or potential issues in a timely manner to avoid, minimise or mitigate adverse impacts; d) ensuring the monitoring program includes activities to detect management triggers, and explains how monitoring activities may inform the selection and implementation of corrective actions; e) specifying methods to be used to determine whether the management trigger is project attributable; f) specifying effective and appropriate corrective actions that may be implemented if a management trigger is realised; and g) monitoring the effectiveness of corrective actions and implementing appropriate responses in the event corrective actions are not effective.	Sections 4.3, 5.6 and 10
2.13	The plan describes the monitoring methods that will be implemented, and: a) demonstrates the relevance of the monitoring methods to the protection of the relevant aspect of the protected matter(s) for which the offset is implemented; b) includes quantitative (e.g. on-ground survey results) and qualitative baseline data (e.g. photo-point monitoring sites) that establish the start quality/condition of the environment, and which can be used to measure performance against; c) describes the sampling strategy (including monitoring area, site selection and sampling intensity over space and time) and statistical analyses to be employed; d) justifies the sampling strategy/monitoring methods, including through: e) an assessment of effectiveness and constraints to use; f) capacity to detect change in environmental condition due to management interventions; g) capacity to demonstrate attainment of performance targets and/or completion criteria; and h) the statistical power of the strategy/method. i) commits to engage appropriately qualified experts to design and conduct monitoring and survey activities, and analyse monitoring results; j) accounts for seasonal/climatic variability; and k) details the location, nature and number of monitoring sites, including benchmark/reference sites to evaluate management performance.	Sections 5.6 and 10
2.14	The plan includes commitments to report on plan implementation and success as well as opportunities for improvement. This is achieved by: a) if the project is approved, identifying relevant reporting obligations under the EPBC Act approval, or otherwise proposing appropriate regular reporting intervals, objectives and methods; b) specifying how plan/strategy implementation will be reported in accordance with those obligations; c) including a reporting template specifying key risk management, management measures, monitoring and adaptive implementation outcomes for the reporting period; and d) including a schedule and triggers for reporting types (e.g. annual compliance, incident, non-compliance, contingency).	Section 7 and Appendix F

1 Introduction

1.1 Project background

The Sunshine Coast Regional Council (SCRC), in partnership with the Department of Transport and Main Roads (TMR), proposes to construct and operate a new integrated transport corridor in Caloundra, Queensland (Qld) referred to as the Caloundra Transport Corridor Upgrade Project (the 'Project' or proposed action).

On 1 August 2024, the Project was referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and was declared a 'controlled action' (EPBC 2024/09956) on 30 October 2024.

Subsequently, on 14 November 2024, a request for additional information required for assessment by preliminary documentation was issued by DCCEEW under Section 95A(2) of the EPBC Act. Specifically, Section 6 (proposed offsets) of the request for additional information required the preparation of an Offset Proposal (OP) and Offset Management Plan (OMP) to inform DCCEEW's assessment of potential Project impacts to matters of national environmental significance (MNES). Further, Attachment B of the request for additional information provided specific requirements for both the OP and the OMP. This document (i.e. OMP) has been prepared in response to Section 6 and Attachment B of the request for additional information.

1.2 Findings of significant residual impacts on MNES

The Project EPBC Act preliminary documentation (Aurecon, 2026a) identified two protected matters that are likely to be subject to significant residual impacts to which offsets are required, consisting of:

- Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland Threatened Ecological Community (Coastal Swamp Sclerophyll Forest TEC)
- Koala habitat.

The target MNES for this OMP are the Coastal Swamp Sclerophyll Forest TEC and Koala habitat.

Table 1-1 summarises the significant residual impacts associated with the proposed action and the proposed offset provided.

Table 1-1 Significant residual impacts associated with proposed action and the quantum of proposed offsets

MNES	Status	Habitat type impacted	Significant residual Impact associated with proposed action (hectares (ha))	Proposed offset site area (ha)
Coastal Swamp Sclerophyll Forest TEC	Endangered	-	2.09	29.35
Koala habitat	Endangered	Foraging and breeding, shelter and dispersal	6.17	29.35

SCRC is committed to providing direct offsets to compensate for the significant residual impacts associated with the proposed clearing of Coastal Swamp Sclerophyll Forest TEC and Koala habitat for the Project.

Offsets are required to achieve a conservation outcome that counterbalances any significant residual impact on a MNES from proposed Project works. Offsets must replicate the environmental values which are subject to loss, minimise the time between the impact and the delivery of the offset, and offer additional protection or management actions to improve the environmental values at risk (Department of Sustainability, Environment, Water, Population and Communities [DSEWPC], 2012).

1.3 Purpose of this document

The purpose of this document is to provide information to address the requirements and implementation of the Project OMP in accordance with the EPBC Act Environmental Offsets Policy (DSEWPC, 2012a).

The primary mechanisms to achieve delivery of the proposed offset include:

- The dedication of a proposed offset site of 29.35 ha of vegetation that is considered analogous (or has the potential to be analogous) to the Coastal Swamp Sclerophyll Forest TEC, which also provides habitat for the Koala
- Rehabilitation and revegetation management activities to improve the condition of low and medium quality patches within the proposed offset site to achieve high quality condition, size and increased carrying capacity (net gain) for the target offset MNES
- Reestablishing the extent of Coastal Swamp Sclerophyll Forest TEC in areas where the vegetation does not currently meet the minimum condition threshold for the TEC
- Implementation of a management plan for the following categories to ensure the integrity of existing remnant vegetation is improved or maintained:
 - Increasing habitat values (including species richness and foraging/breeding habitat)
 - Pest management
 - Weed management
 - Fire management
- Consistent monitoring and reporting to ensure that the proposed offset site is achieving and maintaining the completion criteria, including meeting the nominated interim milestone targets.

The implementation of these offset mechanisms will create a continuous conservation area of high-quality habitat for the Koala and the ecological community.

2 Offset overview

This section provides an overview of the proposed offset details, including:

- Location, area, tenure and ownership of the proposed offset (refer Section 2.1)
- Roles and responsibilities for offset delivery (refer Section 2.2)
- Timing and offset protection mechanism (refer Section 2.3)
- Intent of environmental offset (refer Section 2.4).

2.1 Location, area, tenure and ownership of proposed offset

An assessment to determine suitable Project offset areas within the region was completed by SCRC in 2026. The assessment identified the proposed offset property (i.e. Lot 10 on P231637) which is located directly adjacent to the Meridan Plains Conservation Park, within the locality of Meridan Plains, Queensland (refer Figure 2-1 and Figure 2-2). The proposed offset property is located approximately 5 km north-west of Caloundra (and the impact site) and has been historically cleared as a result of previous cattle grazing activities.

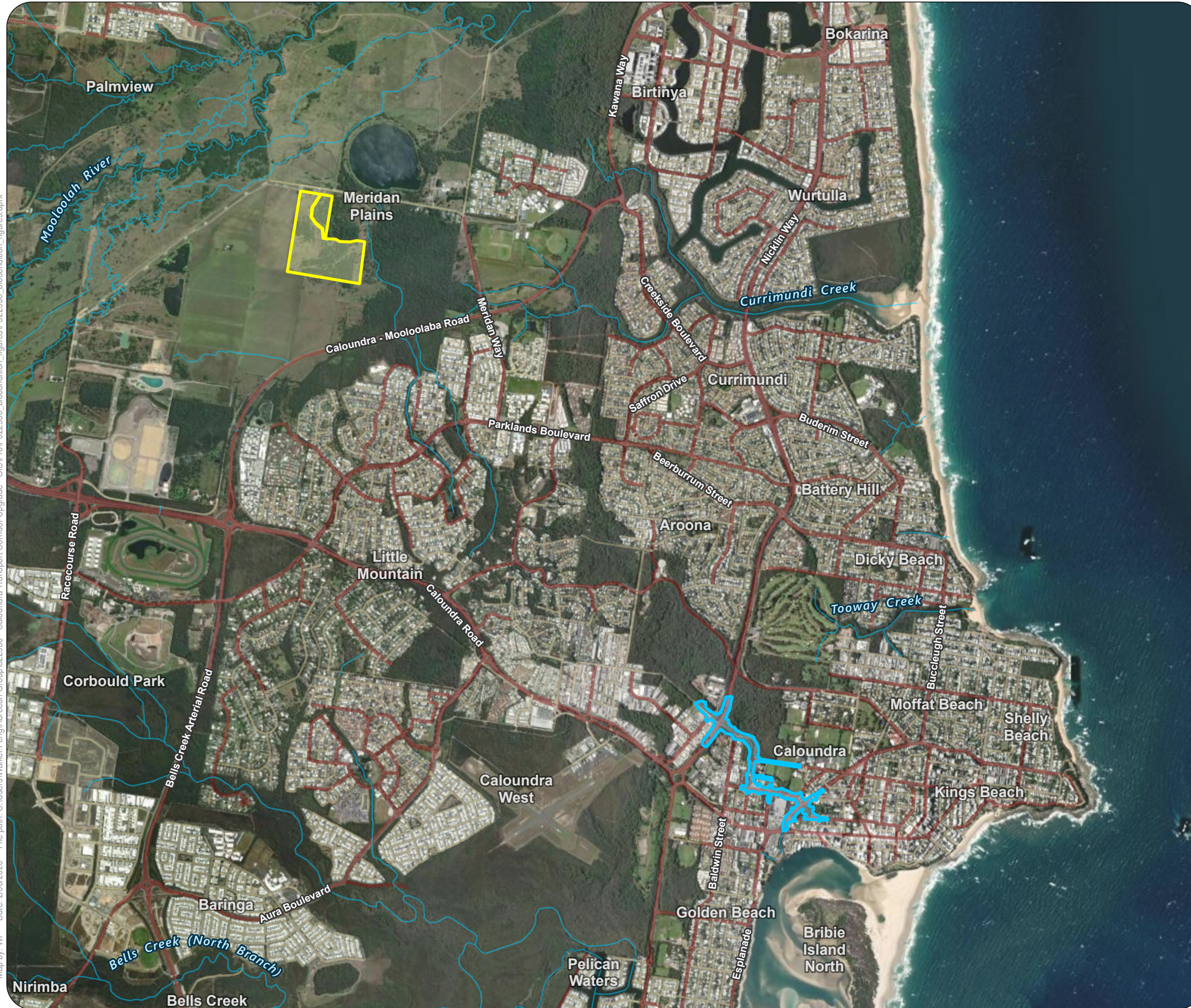
The proposed offset property has an area of approximately 62.34 ha. The proposed offset site is located within the proposed offset property and has an area of 29.35 ha. Shapefiles to clearly define the location and boundaries of the proposed offset site, accompanied by the offset attributes (e.g. physical address of the proposed offset site, coordinates of the boundary points in decimal degrees, the relevant MNES that the environmental offset/s compensates for, and the size of the environmental offset/s in hectares) have been provided as a separate attachment to this document.

The proposed offset site is located on land that is owned by SCRC in the form of freehold land. No current exploration permits, mining or petroleum leases occur over the proposed offset site or proposed offset property.

An assessment to determine the suitability of the proposed offset site was conducted by Aurecon in March 2026. It was found that vegetation within the proposed offset site consisted of Regional Ecosystem (RE) 12.3.5 regrowth considered to be analogous to the Coastal Swamp Sclerophyll Forest TEC, and degraded exotic pasture with isolated melaleucas and *Eucalyptus tereticornis*.

The presence of the Coastal Swamp Sclerophyll Forest TEC within the significant residual impact area forms the first requirement for proposed offset. This protected matter is listed as Endangered under the EPBC Act and is identified within the Commonwealth conservation advice for the community as being analogous to RE 12.3.5 as mapped by the Queensland Government. The patches of regrowth RE 12.3.5 within the proposed offset were found to pass the key diagnostic criteria and condition thresholds of the Coastal Swamp Sclerophyll Forest TEC and fulfil the first requirement of the offset. The remaining degraded patches are to be restored to the extent that they meet the key diagnostic criteria and minimum condition threshold for the protected status of the TEC.

The second requirement of the offset is provision of Koala habitat, due to significant residual impacts on the matter. The Coastal Swamp Sclerophyll Forest TEC is known to provide foraging, breeding and shelter habitat for the Koala. In addition, there is potential for supplementary planting of Koala foraging trees such as *Eucalyptus tereticornis* and *Eucalyptus robusta*. This fulfils the second requirement of the offset. The assessment of the suitability of the proposed offset site identified that the necessary conditions (i.e. habitat types and area) occur to meet the Project offset obligations (refer Offset Proposal within the Preliminary Documentation).



Legend

- Major roads
- Minor roads
- Watercourse
- Project disturbance footprint
- Proposed offset site

Revision: A

Date: 2/06/2026

A3 scale: 1:35,000

0 500 1,000 1,500 Metres



Coordinate system: GDA2020 MGA Zone 56

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Caloundra Transport Corridor Upgrade

Figure 2-1 Proposed offset site locality map

Map by: WF Date: 2/06/2026 File path: C:\Users\Walker.Feng\Aurecon Group\622936 - Caloundra Transport Corridor Upgrade - GIS\Prop\622936_biocondition_figures\622936_biocondition_figures.aprx



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, © State of Queensland (Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development) 2025



Legend

- Major roads
- Minor roads
- Watercourse
- Proposed offset site
- Conservation Park

Revision: A

Date: 2/06/2026

A3 scale: 1:10,000

0 100 200 300 400 Metres



Coordinate system: GDA2020 MGA Zone 56

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Figure 2-2 Proposed offset site

2.2 Roles and responsibilities for offset delivery

It will be the responsibility of the Approval Holder to engage Suitably qualified person/s (SQP) to undertake the habitat quality assessments, ecological studies, Koala surveys/habitat assessments, prepare reports and undertake inspections, as required.

SCRC will be the Approval Holder and will therefore have the overarching responsibility for satisfying the requirements of this OMP. SCRC will engage the following specialist as required in accordance with this OMP:

- SQP to undertake baseline and monitoring surveys
- Suitably qualified and experienced bush regeneration contractors or restoration ecologists to undertake replanting and rehabilitation programs
- Licensed weed control – commercial operators to undertake weed management programs
- Licensed and suitably qualified pest management technicians to undertake pest control programs.

It will be the responsibility of these contractors to undertake their operations in accordance with this OMP.

The following OMP stakeholders are identified by their roles below.

- **SCRC – Approval Holder**
 - Natural Areas Offset Officer – offset delivery and overseeing on-ground works (e.g. site monitoring, management and reporting).
 - Senior Field Botanist/Ecologist – vegetation/habitat quality assessment and Modified Habitat Quality Assessment (MHQA).
- **SCRC offsets team/Contractor – Operational works**
 - Weed management activities, weed treatment, revegetation, assisted regeneration, fire management activities, pest management, monitoring and ecological surveys as directed by the Approval Holder.

2.3 Timing and offset protection mechanism

Prior to the commencement of the action, a voluntary declaration (VDec) will be prepared and registered under Section 19F of the *Vegetation Management Act 1999* (Qld) over the proposed offset site. A VDec is a legally binding protection mechanism that is registered in title and is binding on all current and future owners of the land. Once declared, a property map of assessable vegetation displaying the area as a Category A area will be made.

Within 20 business days of securing the VDec, SCRC as owner of the land will advise DCCEE in writing and provide legal security documentation. The VDec protections upon the proposed offset site will be enforced for the life of the Project. A declaration can only be ended under Section 19L of the *Vegetation Management Act 1999* by the chief executive if:

- The management outcomes of the management plan have been achieved
- It is not in the interests of the State, having regard to public interest
- Another environmental offset is provided in accordance with the *Environmental Offsets Act 2014* (Qld) for an activity impacting the original offset area covered by the VDec.

Within 12 months of securing the VDec, SCRC will establish a legally binding Environmental Statutory Covenant, securing the site for the life of the Project EPBC Act controlled action approval under the *Land Title Act 1994* (Qld).

Legal protection via the VDec and the Covenant will cover the extent of proposed offset site within Lot 10 on P231637.

2.4 Intent of environmental offset

The overarching environmental outcome for the proposed offset site is to create habitat and improve quality of the Coastal Swamp Sclerophyll Forest TEC and Koala habitat. In accordance with the EPBC Act, the environmental outcomes to be achieved for the proposed offset site through the implementation of this OMP are:

- Increase extent of Coastal Swamp Sclerophyll Forest TEC and Koala habitat
- Improve habitat quality of the ecological community Coastal Swamp Sclerophyll Forest TEC across the proposed offset site
- Improve Koala habitat quality and potential carrying capacity across the proposed offset site
- Improve connectivity with adjacent habitat in the greater landscape
- Allow the area to be appropriately managed to reduce threatening processes
- Reduce the extent and cover of weeds, and actively manage the occurrence of pests.

To have successfully restored the habitat in the proposed offset site, the interim milestones and management plan must result in a habitat quality uplift of 3 points for each matter after 20 years. Therefore, for each matter this will result in an uplift in the habitat quality scores:

- Coastal Swamp Sclerophyll Forest TEC from 4 to 7
- Koala habitat from 3 to 6.

Active management will be undertaken within the proposed offset site targeted to the Coastal Swamp Sclerophyll Forest TEC and Koala habitat. Management actions are designed to achieve offset outcomes that benefit the matters, beyond what would have been achieved without the offset. The proposed offset site provides offset opportunities to improve habitat through increased funding from the Project and targeted species-specific management, beyond that which could be provided by SCRC conservation funding alone.

3 Proposed offset site description

This section provides a description of the proposed offset site, in relation to the following:

- General description (refer Section 3.1)
- Vegetation communities and flora species (refer Section 3.2)
- Habitat/vegetation suitability (refer Section 3.3)
- Connectivity (refer Section 3.4)
- Baseline survey methodology (refer Section 3.5)
- Baseline condition (refer Section 3.6)
- Flooding (refer Section 3.7)
- Condition of proposed offset site without offset management action (refer Section 3.8)
- Additionality (refer Section 3.9).

3.1 General description

Current environmental values present within the proposed offset site include a mix of degraded and regrowth swamp sclerophyll alluvial systems. Extensive areas of regrowth and non-remnant vegetation containing areas infested by weeds are present. Weed infestations occur throughout the proposed offset site and pose a significant fire risk and impede the recruitment of native flora species. The protection and management of the proposed offset site will increase and improve the quality of habitat, and carrying capacity for the target offset MNES.

3.2 Vegetation communities and flora species

The vegetation within the proposed offset site has been historically cleared and currently consists of regrowth vegetation and non-remnant areas (refer Figure 3-1) analogous to RE 12.3.5 in terms of species diversity and abundance, along with areas of exotic grasslands.

Extant onsite vegetation is analogous (in relation to species diversity and abundance) to the Coastal Swamp Sclerophyll Forest TEC (refer Section 3.3.1) and is dominated by Eucalypt/Melaleuca open forest and woodland and occurs on Quaternary alluvial systems. Typical canopy species include *Melaleuca quinquenervia* and *Eucalyptus tereticornis*. Non-native flora species (e.g. *Setaria sphacelata* (South African Pidgeon Grass)) are well represented throughout much of the proposed offset site (refer Photograph 1). Areas not dominated by *Setaria* comprise of a fern dominated groundcover, most notably *Hypolepis muelleri*. Representative Assessment Units (AUs) have been assigned for Broad Condition Classes, and the methodology for these are presented in Section 3.5.4.

Map by: WF Date: 2/06/2026 File path: C:\Users\Walker.Feng\Aurecon Group\622936 - Caloundra Transport Corridor Upgrade - GIS\Pro\622936_biocondition_figures\622936_biocondition_figures.aprx

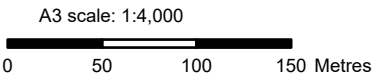


Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, © State of Queensland (Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development) 2025



- Legend**
- Minor roads
 - Watercourse
 - Monitoring sites
 - Proposed offset site
- Assessment unit**
- AU11
 - AU12

Revision: A Date: 2/06/2026



Caloundra Transport Corridor Upgrade

Figure 3-1 Ground-truthed vegetation and assessment units



Photograph 1 Representation of vegetation located at the proposed offset site

3.3 Habitat/vegetation suitability

The proposed offset site provides habitat for Coastal Swamp Sclerophyll Forest TEC as well as Koala. Habitat requirements for TEC and fauna species, derived from the Commonwealth conservation advice, is provided within Appendix A. The sections below indicate how the proposed offset site provides suitable habitat or is analogous to the Coastal Swamp Sclerophyll Forest TEC and suitable habitat for the Koala.

3.3.1 Coastal Swamp Sclerophyll Forest TEC

The key diagnostic characteristics and condition thresholds criteria outlined in the Coastal Swamp Sclerophyll Forest TEC (Department of Agriculture, Water and the Environment [DAWE], 2021) were used to confirm presence of the TEC within the proposed offset site.

AU11 (RE 12.3.5 regrowth analogous to Coastal Swamp Sclerophyll Forest TEC) consists of three patches within the offset area for a total of 15.64 ha (Patches 1-3). AU12 (RE 12.3.5 Category X) consists of two patches for a total of 13.71 ha (Patches 4 and 5). Figure 3-2 provides the location of the TEC patches and condition classes.

The key diagnostic characteristics of the TEC patches within the proposed offset site were assessed and addressed in Table 3-1 (Patches 1-3) and Table 3-3 (Patches 4-5). Patches 1-3 were assessed together as the vegetation was largely similar and passed all key diagnostic characteristics. Patches 4 and 5 were assessed together as they were both cleared Category X patches with similar conditions. The condition classes for all patches are summarised in Table 3-3.

Table 3-1 Assessment of TEC Patches 1-3 characteristics against the key diagnostic characteristics and condition thresholds for the Coastal Swamp Sclerophyll Forest TEC

Key diagnostic characteristic	Assessment criteria description	Assessment of criteria characteristics within the proposed offset site
Geographic location	Restricted to coastal catchments. Occurs on the mainland and islands near to the coast (within 20 km) from South East Queensland to south-eastern New South Wales (NSW) within Interim Biogeographic Regionalisation for Australia Bioregions South East Queensland (SEQ), NSW North Coast, Sydney Basin, South East Corner (Bateman subregion).	Yes – Occurs in SEQ within 10 km of the coast.

Key diagnostic characteristic	Assessment criteria description	Assessment of criteria characteristics within the proposed offset site
Elevation	Typically below 20 m above sea level (ASL), occasionally up to 220 m ASL on hill slopes with perched swamps or high-water table.	Yes – Area of interest is between 43 to 51 m ASL.
Soil type	Hydric soils that are waterlogged or intermittently inundated for 1 to 3 months per year (seasonally). Formed by unconsolidated alluvial, marine or aeolian sediments, stained black/dark grey by humus. Soil type aids but biological composition is primary for identification.	Yes – Area of interest reflective of RE 12.3.5, which is landzone 3 (alluvium) and intermittently inundated.
Hydrology	Inundation patterns ranging from intermittent to episodic; natural hydrological regime intact or managed to maintain ecology.	Yes – Natural hydrological regime appeared intact. Area is often inundated.
Vegetation structure	Varies from tall closed to open forest or woodland to dense shrubland; minimum crown cover at least 10%, typically 50-70%.	Yes – Tall open forest. Cover ~38%.
Canopy dominance	From SEQ to Sydney Basin Bioregion: canopy dominated or co-dominated by <i>Melaleuca quinquenervia</i> and/or <i>Eucalyptus robusta</i>. Other <i>Melaleucas</i> may dominate locally (<i>M. dealbata</i>, <i>M. biconvexa</i>, <i>M. ericifolia</i>).	Yes – Canopy dominated by <i>M. quinquenervia</i> .
Other canopy/ sub-canopy Species	May include species like <i>Casuarina glauca</i>, <i>Banksia</i> spp., <i>Callistemon salignus</i>, <i>Corymbia intermedia</i>, <i>E. tereticornis</i>, <i>E. longifolia</i>, <i>E. botryoides</i>, <i>Livistona australis</i> and/or <i>Lophostemon</i> spp.	Yes – Some of these species are present but not dominant across a patch.
Understorey composition	The understorey typically includes a variable ground layer, depending on the canopy cover and inundation rate/period. Tall sedges (typically <i>Gahnia</i> spp.) and/or ferns often dominate the ground layer, mixed with graminoids and other herbs, especially <i>Imperata cylindrica</i> (Blady Grass).	Yes – Ground layer composition varies but contains ferns, graminoids and herbs, typically dominated by ferns.
Presence of halophytic species	Ecological community is not present if halophytic species dominate the ground layer such as <i>Apium prostratum</i>, <i>Atriplex cinerea</i>, <i>Chenopodium glaucum</i>, <i>Rhagodia candolleana</i>, <i>Samolus repens</i>. Halophytic dominance typically indicates estuarine or saltmarsh vegetation, not this forest type.	Yes – no halophytic species observed
Final result: Passes the key diagnostic criteria for Coastal Swamp Sclerophyll Forest TEC.		

Table 3-2 Assessment of TEC Patches 4 and 5 characteristics against the key diagnostic characteristics and condition thresholds for the Coastal Swamp Sclerophyll Forest TEC

Key diagnostic characteristic	Assessment criteria description	Assessment of criteria characteristics within the proposed offset site
Geographic location	Restricted to coastal catchments. Occurs on the mainland and islands near to the coast (within 20 km) from South East Queensland to south-eastern New South Wales (NSW) within Interim Biogeographic Regionalisation for Australia Bioregions South East Queensland (SEQ), NSW North Coast, Sydney Basin, South East Corner (Bateman subregion).	Yes – Occurs in SEQ within 10 km of the coast.
Elevation	Typically below 20 m above sea level (ASL), occasionally up to 220 m ASL on hill slopes with perched swamps or high-water table.	Yes – Area of interest is between 43 to 51 m ASL.
Soil type	Hydric soils that are waterlogged or intermittently inundated for 1 to 3 months per year (seasonally). Formed by unconsolidated alluvial, marine or aeolian sediments, stained black/dark grey by humus. Soil type aids but biological composition is primary for identification.	Yes – Area of interest reflective of RE 12.3.5, which is landzone 3 (alluvium) and intermittently inundated.

Key diagnostic characteristic	Assessment criteria description	Assessment of criteria characteristics within the proposed offset site
Hydrology	Inundation patterns ranging from intermittent to episodic; natural hydrological regime intact or managed to maintain ecology.	Yes – Natural hydrological regime appeared intact. Area is often inundated.
Vegetation structure	Varies from tall closed to open forest or woodland to dense shrubland; minimum crown cover at least 10%, typically 50-70%.	No – The patch is primarily cleared land dominated by <i>Setaria sphacelata</i> and other weed species.
Canopy dominance	From SEQ to Sydney Basin Bioregion: canopy dominated or co-dominated by <i>Melaleuca quinquenervia</i> and/or <i>Eucalyptus robusta</i>. Other <i>Melaleucas</i> may dominate locally (<i>M. dealbata</i>, <i>M. biconvexa</i>, <i>M. ericifolia</i>).	No – The patch is primarily cleared land dominated by <i>Setaria sphacelata</i> and other weed species. There is no canopy.
Other canopy/ sub-canopy Species	May include species like <i>Casuarina glauca</i>, <i>Banksia</i> spp., <i>Callistemon salignus</i>, <i>Corymbia intermedia</i>, <i>E. tereticornis</i>, <i>E. longifolia</i>, <i>E. botryoides</i>, <i>Livistona australis</i>, <i>Lophostemon</i> spp.	No – The patch is primarily cleared land dominated by <i>Setaria sphacelata</i> and other weed species. There is no canopy.
Understorey composition	The understorey typically includes a variable ground layer, depending on the canopy cover and inundation rate/period. Tall sedges (typically <i>Gahnia</i> spp.) and/or ferns often dominate the ground layer, mixed with graminoids and other herbs, especially <i>Imperata cylindrica</i> (Blady Grass).	No – ground layer dominated by <i>Setaria sphacelata</i> .
Presence of halophytic species	Ecological community is not present if halophytic species dominate the ground layer such as <i>Apium prostratum</i>, <i>Atriplex cinerea</i>, <i>Chenopodium glaucum</i>, <i>Rhagodia candolleana</i>, <i>Samolus repens</i>. Halophytic dominance typically indicates estuarine or saltmarsh vegetation, not this forest type.	Yes – no halophytic species observed
Final result: Not Coastal Swamp Sclerophyll Forest TEC.		

The assessment criteria (DAWE 2021) used to inform the TEC condition class thresholds in Table 3-3 is described below.

Patch size:

The smallest patch size identifiable is 0.25 ha; breaks up to 30 m between vegetated areas can be included as one patch. Breaks greater than 30 m indicate separate patches.

Patch size in the decision-matrix is divided into:

- Large: ≥ 5 ha
- Medium: ≥ 2 ha and < 5 ha
- Small–contiguous: ≥ 0.25 ha and < 2 ha and contiguous (within 30 m) to another ≥ 5 ha remnant.

Biotic threshold:

Small–isolated: ≥ 0.5 ha and < 2 ha, but not contiguous to a ≥ 5 ha remnant.

Ground-layer non-native cover in the decision-matrix is divided into:

- High condition: < 20 % non-native
- Good condition: 20 to 50 % non-native
- Moderate condition: 50 to 80 % non-native
- Low condition: > 80 % non-native.

Table 3-3 TEC condition class thresholds

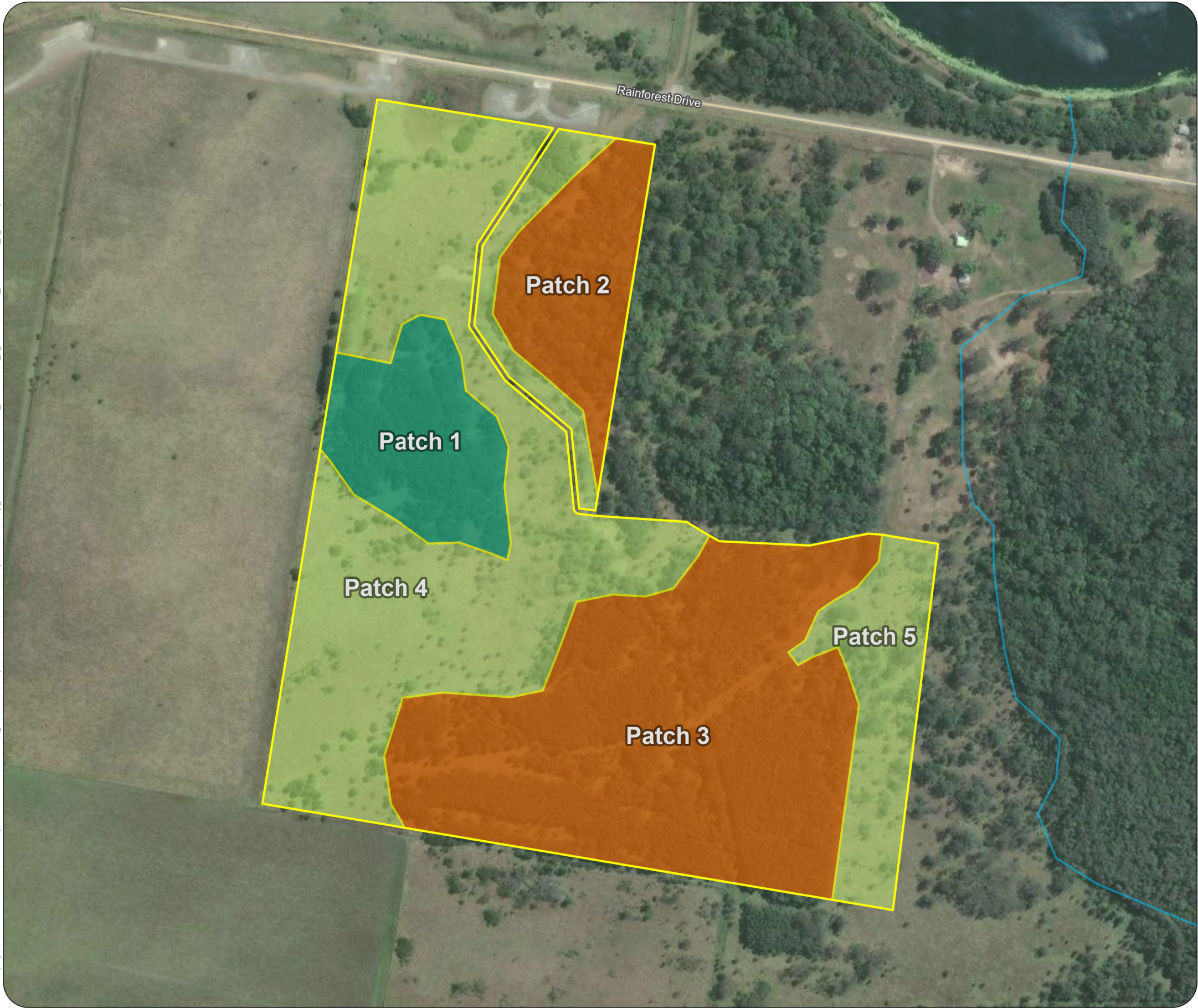
	Patch 1	Patch 2	Patch 3	Patch 4*	Patch 5*
Patch size	Medium (2.75 ha)	Medium (2.58 ha)	Large (10.31 ha)	11.30 ha [#]	2.41 ha [#]
Biotic threshold	Moderate condition (55% non-native perennial ground cover)	Good condition (40% non-native perennial ground cover)	Moderate condition (55% non-native perennial ground cover)	Low condition (>95% non-native perennial ground cover)	Low condition (>95% non-native perennial ground cover)
TEC condition class	C2	C1	C1	Not currently TEC	Not currently TEC

Table note:

* Patches do not currently meet the Key Diagnostic Characteristics

Patch sizes have been provided to inform potential areas for future TEC patch boundaries within the proposed offset area. TEC extent could potentially extend further outside the proposed offset area boundary over the 20 years, but for the purposes of this document, potential extents have been restricted to current proposed boundary.

Map by: WF Date: 24/06/2026 File path: C:\Users\Walker.Feng\Aurecon Group\522936 - Caloundra Transport Corridor Upgrade - GIS\Pro\522936_biocondition_figures.aprx

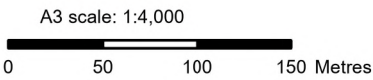


Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, © State of Queensland (Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development) 2025



- Legend**
- Minor roads
 - Watercourse
 - Proposed offset site
 - TEC condition**
 - Class C1
 - Class C2
 - Proposed TEC re-establishment extent
- *Patches 4 and 5 indicate areas for proposed TEC re-establishment*

Revision: A Date: 9/07/2026



Caloundra Transport Corridor Upgrade

Figure 3-2 Location of the TEC patch and condition

3.3.2 Koala habitat

Koalas naturally inhabit a range of temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by Eucalyptus species and their habitat can be broadly defined as any forest or woodland containing species that are known Koala food trees, or shrubland with emergent food trees. In addition, in coastal lowland areas of Queensland, Koalas are found in vegetation communities dominated by Melaleuca or Casuarina species (Youngentob et al. 2021).

As identified in Section 3.1 and shown in Figure 3-1, the majority of the proposed offset site contains vegetation dominated by Melaleuca (i.e. Myrtaceous) species. Extant vegetation is considered analogous to the RE 12.3.5 as defined by the Queensland Regional Ecosystem Description Database (REDD), and the Coastal Swamp Sclerophyll Forest TEC in relation to species diversity and abundance (refer Section 3.1). The Coastal Swamp Sclerophyll Forest TEC provides suitable habitat for Koalas through a canopy of *Melaleuca quinquenervia*. and associated *Eucalyptus robusta*

It is noted that currently few eucalypts occur within the proposed offset site, however supplementary planting of eucalypts and restoration is planned and will provide more Koala habitat. It is therefore concluded that the proposed offset site provides suitable habitat for the Koala as it is consistent with the DCCEE approved conservation advice for the species.

3.4 Connectivity

The placement of the proposed offset site is important in maintaining connectivity between habitats of non-remnant and remnant vegetation for areas considered analogous to the Coastal Swamp Sclerophyll Forest TEC (i.e. RE 12.3.5).

The proposed offset site provides medium ecological connectivity with remnant vegetation communities bounding the north-east edge of the area and partial connectivity to the north-west (refer Figure 2-2 and Figure 3-1).

The proposed offset site is contained within a State wide biodiversity corridor as defined under the Biodiversity Planning Assessment for SEQ. The proposed offset site is a key connection point linking extant vegetation corridors that occur to the northeast of the proposed offset site (i.e. Meridian Plains Conservation Park and Mooloolah River National Park (north)) and those that are located to the south-west (i.e. Caloundra National Park and Mooloolah River National Park (south)).

The proposed offset site is connected to remnant vegetation in Meridian Plains Conservation Park and upon restoration would connect various patches of Coastal Swamp Sclerophyll Forest TEC to be contiguous with the wider area of remnant vegetation.

In the wider landscape Kawana Link Road and Caloundra Road present partial barriers for connectivity (i.e. pavement and hard surfaces that are raised above natural surface levels to reduce flooding). Kawana Link Road is not bound by fauna or human exclusion fencing (e.g. cyclone fencing or barbed wire fencing). Therefore this road is not considered to constitute a major barrier to the movement of species that are known to cross cleared areas (i.e. Koala, macropods, birds and other mobile species).

The proposed offset site provides strategic connectivity with State mapped Koala priority areas and Core Koala Habitat areas, further connecting Meridian Plains Conservation Park with the lower Mooloolah River National Park and other mapped Koala habitat.

3.5 Baseline survey methodology

This section outlines the methodology used for conducting baseline surveys within the proposed offset site.

3.5.1 Baseline pest monitoring survey

Baseline monitoring for pest species was conducted through the strategic deployment of remote cameras at three locations within the proposed offset site. At all three locations, a bait (i.e. dog food protected from ants and flying insects) was used to draw in potential pests. Cameras were placed along existing tracks and in accordance with the NSW National Parks and Wildlife Service Monitoring standard for large feral animals (NSW DCCEEW 2026) (refer Table 3-4). The cameras were active continuously from 3 March 2026 to 19 March 2026, capturing evidence to establish the presence and activity patterns of the following target pests:

- European Fox (*Vulpes vulpes*)
- Feral Cat (*Felis catus*)
- Wild Dog (*Canis familiaris* – with the exception of *Canis familiaris dingo*)
- Domestic Cattle (*Bos taurus*)
- Feral/Domestic Goat (*Capra hircus*)
- Horse (*Equus caballus*)
- Pig (*Sus scrofa*).
- Rabbit (*Oryctolagus cuniculus*).

The purpose of this surveillance was to establish a baseline for pest populations, which will inform subsequent pest management strategies and allow for the quantitative assessment of control program efficacy. The location and orientation of the cameras are described in Table 3-4.

Table 3-4 Camera trap location and orientation

Camera number	Location (latitude and longitude)	Orientation	Camera height from ground	Camera angle relative to the ground	Notes
101RECNX (AUR02)	-26.758676, 153.085210	West	1 m	Parallel	Bait station clearly visible in field of view
100RECNX (AUR03)	-26.756590, 153.086469	South	1 m	Parallel	Bait station clearly visible in field of view
100RECNX (AUR07)	-26.756252, 153.087555	West	1 m	Parallel	Bait station clearly visible in field of view

The presence of pests within the offset area is assessed using Activity Index (AI) informed by methods in Jenks et al. (2011). AI is defined as the total number of detections divided by total trap hours or as this equation:

$$AI = \frac{\text{Number of captures}}{\text{Number of trap hours}} \times 100$$

A detection is the positive identification of one of the target species within a 20-minute interval, with a maximum of three independent detections possible per hour. Total trap hours are calculated as the total number of trap days multiplied by 24. For example, if the maximum number of detections were made (3 per hour), on a single trap day (24 hours), the AI is 3.0 (72 detections ÷ 24 hours). This represents the maximum possible AI. Where multiple cameras are used, the AI of each camera is summed and divided by the total number of cameras. If the AI is less than 0.24 a score of 15 is assigned, for any AI above 0.24 but less than 1 a score of 7 is assigned. For AI more than 1 a score of 1 is assigned.

An AI of 0.24 corresponds to roughly 2 captures over a standard 36-night survey (864 trap hours). Detecting a pest species only 1-2 times across a full survey period indicates sporadic, incidental presence rather than a resident or actively foraging population, supporting a low risk score (15 – low threat). Once captures exceed this rate (≥2-8 over 36 nights, AI 0.24-1.0), presence becomes regular enough to indicate moderate use of

the offset area (score 7 – moderate threat), and AI >1 (~9+ captures) reflects frequent, resident-level activity (score 1 – high threat).

3.5.2 Baseline weed assessment

A baseline weed assessment was carried out to identify and map weed species capable of resulting in competition or alterations to the habitat within the proposed offset site. This assessment involved systematically traversing the site to delineate and map infestations, establishing weed survey points within representative areas, and assigning a weed severity score which utilised the defined classification system at each point:

- Major (>80%)
- High (50 to 80%)
- Moderate (20 to 80%)
- Low (5 to 20%)
- Very Low (<5%).

This severity scoring quantified the extent and impact of existing weed infestations, thus providing a foundation for future weed management prioritisation and the monitoring of control success.

3.5.3 Koala surveys

A targeted spotlighting survey was conducted on the 4 March 2026 specifically to detect the presence of Koalas (*Phascolarctos cinereus*) within the proposed offset site. This involved two 200 m surveys undertaken with a spotlight, searching for 10 metres per minute for a total time of 20 minutes per transect. During the survey, systematic searches of the canopy were conducted to inform species presence and approximate density. The weather conditions experienced during spotlighting were clear with a maximum of 28.4 °C.

The spot assessment technique (SAT) was used to assess the level of Koala activity/presence at the proposed offset site in accordance with the methodology listed in *A Review of Koala Habitat Assessment Criteria and Methods* (Youngentob et al. 2021). This involved undertaking three separate SAT surveys, in different locations on the proposed offset site, (refer Figure 3-3) conducting a 1 m radial search around the base of one tree for two person minutes and repeating surveys for the nearest 29 trees.

3.5.4 Habitat quality

The DCCEEW (unpublished) MHQA methodology (DCCEEW 2025) was chosen as the preferred and most thorough method of assessing habitat quality within the impact area and proposed offset site. MHQA adapts the methodology outlined in the Queensland *BioCondition Assessment Manual* (Version 2.2) (Eyre et al. 2015) and the *Guide to determining terrestrial habitat quality* (Version 1.2) (DEHP 2017). MHQA introduces an additional habitat factor, species stocking rate, in order to satisfy the requirements of EPBC Act Offset Policy Principles.

The method utilises benchmark scores to ensure assessments are measured to a known standard, repeatable and consistent in determining habitat quality. One round of habitat quality assessments were conducted within the proposed offset site by two suitably qualified ecologists in March 2026. Transect survey numbers were conducted in accordance with the guide to number of sampling sites relative to assessment unit size.

Habitat quality assessments were undertaken within the proposed offset site using the MHQA methodology. Appendix B provides the detailed methodology associated with the MHQA for the proposed offsite site, and Appendix C provides the results of the MHQA survey for the proposed offsite site.

3.6 Baseline condition

3.6.1 Habitat quality

Habitat quality assessments were undertaken within the proposed offset site using the MHQA methodology. The methodology adopted for assessing habitat quality is detailed in Appendix B, and Appendix C provides the results of the MHQA survey for the proposed offsite site.

The Coastal Swamp Sclerophyll Forest TEC received a weighted habitat quality score of 4 (rounded) and Koala habitat received a score of 3 (rounded) at the proposed offset site. A summary of the target offset MNES habitat quality scores (total scores and rounded scores) are provided in Table 3-5. Where fauna habitat quality inputs differed from default methodology of the *Guide to determining terrestrial habitat quality* (Version 1.2) and MHQA, the scoring justifications are provided in Appendix C.

Table 3-5 Weighted habitat quality scores for the target offset MNES within the proposed offset site

Habitat quality	Total score	Rounded score
Coastal Swamp Sclerophyll Forest TEC	3.67	4
Koala	3.12	3

3.6.2 Weeds

A baseline weed assessment was conducted by Aurecon in March 2026. A baseline weed assessment identified the following weeds that may result in competition or alterations to habitat present within the proposed offset site:

- *Ageratum houstonianum* (Purple top)
- *Baccharis halimifolia* (Groundsel Bush)
- *Bidens pilosa* (Cobbler's Pegs)
- *Desmodium uncinatum* (Silver-leaf Desmodium)
- *Emilia sonchifolia* (Emilia)
- *Hymenachne amplexicaulis* (Hymenachne)
- *Ludwigia longifolia* (Long-leaf Willow Primrose)
- *Lantana camara* (Lantana)
- *Paspalum conjugatum* (Sour Grass)
- *Paspalum urvillei* (Vasey Grass)
- *Pinus elliotii* (Slash Pine)
- *Schinus terebinthifolius* (Broad-leaved pepper)
- *Setaria sphacelata* (South African Pigeon Grass)
- *Sida cordifolia* (Flannel Weed)
- *Solanum torvum* (Devil's Fig)
- *Urena lobata* (Urena Burr).

Weeds of National Significance, restricted plants under the *Biosecurity Act 2014* (Qld) or locally significant invasive plants species identified by the *Sunshine Coast Biosecurity Plan 2024* were identified within the proposed offset site, including:

- *Baccharis halimifolia* (Groundsel Bush) – restricted under the *Biosecurity Act 2014* (Qld)
- *Hymenachne amplexicaulis* (Hymenachne) – restricted under the *Biosecurity Act 2014* (Qld) – Weed of National Significance
- *Lantana camara* (Lantana) – restricted under the *Biosecurity Act 2014* (Qld) – Weed of National Significance
- *Schinus terebinthifolius* (Broad-leaved pepper) – restricted under the *Biosecurity Act 2014* (Qld).

Other *tall non-native grass species* that were identified within the proposed offset site:

- *Paspalum conjugatum* (Sour Grass)
- *Paspalum urvillei* (Vasey Grass)
- *Setaria sphacelata* (South African Pigeon Grass).

For the purposes of this OMP and any associated performance targets, weeds can be defined as any weed species identified within the Weeds of National Significance (WoNS), weed species listed under the

Biosecurity Act 2014 (Qld), species listed in the Coastal Swamp Sclerophyll TEC conservation advice (Appendix B of the conservation advice), or other tall non-native grass species, including *Setaria sphacelata* (South African Pigeon Grass) and *Megathyrsus maximus* (green panic) known to restrict the movement of Koala and/or degrade the quality of the Coastal Swamp Sclerophyll Forest TEC, Koala habitat foraging/breeding habitat, or its ability to regenerate.

The results of the extent and severity of the baseline weed survey is displayed in Figure 3-3. The following risks level areas were represented in the proposed offset area as follows:

- Major (≥80%) – 11.52 ha
- High (50 to <80%) – 11.68 ha
- Moderate (20 to <50%) – 6.47 ha
- Low (5 to <20%) – 0 ha
- Very Low (<5%) – 0 ha.

3.6.3 Pests

Dedicated targeted pest surveys were completed in March 2026 during the assessment phase for the proposed offset site. Baseline pest monitoring was carried out through remote camera deployment at three sites within the proposed offset site from 3 March 2026 to 19 March 2026. Camera traps recorded three fox sightings. Camera trap locations are displayed in Figure 3-3.

Combined with incidental observations, with the following species observed or derived from specimen-backed publicly available databases:

- Wild Dog (*Canis familiaris* – with the exception of *Canis familiaris dingo*) – likely present as either a wild dog or unrestrained domestic dog given the proposed offset site proximity to urban areas. Wild dogs are listed as a Biosecurity Invasive animal as identified by Schedule 2 of the Biosecurity Act.
- Cat (*Felis catus*) – likely present as a wild cat or unrestrained domestic cat. Wild cats are listed as a Biosecurity Invasive animal as identified by Schedule 2 of the Biosecurity Act.
- European red fox (*Vulpes vulpes*) – observed directly within the proposed offset site (camera trap). Foxes are listed as a Biosecurity Invasive animal as identified by Schedule 2 of the Biosecurity Act.

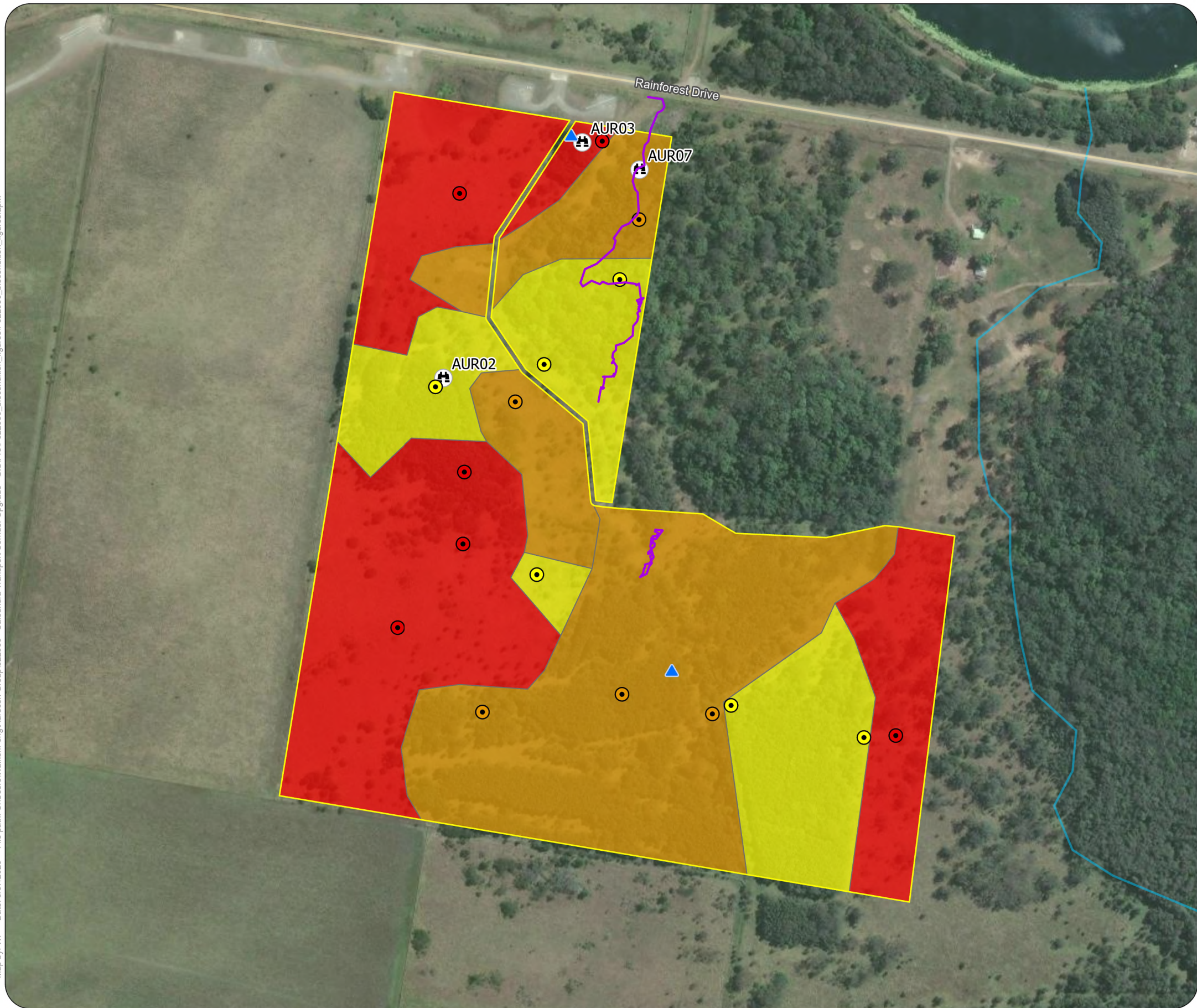
Terrestrial fauna inventory surveys conducted by Future-Plus Environmental (FPE) for Sunshine Coast Council in spring 2022 and autumn 2023 found that the proposed offset site was regularly utilised by three introduced ungulates – the domestic goat (*Capra hircus*), cattle (*Bos taurus*) and the domestic horse (*Equus ferus caballus*) (Forman & Ball, 2023). The European red fox was also detected across both surveys. Pig (*Sus scrofa*) was not observed or had data records nearby but has been added as a target species due to its potential for damage to the offset area.

During the initial 12-day baseline survey window, three independent capture events of European foxes (*Vulpes vulpes*) were recorded across the monitoring stations, resulting in a baseline Activity Index (AI) of:

$$AI = \frac{3 \text{ captures}}{36 \text{ nights} \times 24} \times 100 = 0.35$$

No other pest species were captured on camera traps from baseline surveys. For the impact site no pest species were captured.

Map by: WF Date: 9/07/2026 File path: C:\Users\Walker.Feng\Aurecon Group\522936 - Caloundra Transport Corridor Upgrade - GIS\Proj\522936_biocondition_figures\522936_biocondition_figures.aprx



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, © State of Queensland (Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development) 2025



Legend

- Minor roads
- Watercourse
- Proposed offset site
- Camera points
- SAT locations
- Spotlighting

Weed severity

- High
- Major
- Moderate
- High
- Major
- Moderate

Revision: A

Date: 9/07/2026

A3 scale: 1:4,000

0 50 100 150 Metres



Caloundra Transport Corridor Upgrade

Figure 3-3 Survey locations and the extent and severity of weed cover

Coordinate system: GDA2020 MGA Zone 56

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3.6.4 Koala presence

Following two SAT surveys and spotlighting surveys (refer Section 3.5.3) conducted in March 2026, no Koalas or Koala scats were observed within the proposed offset site which is consistent to the impact site findings (Aurecon, 2026). Suitable Koala habitat was observed within the offset site as dispersal habitat, and whilst abundance of Locally Important Koala Foraging Trees was low (<5% cover), the proposed offset site will have the potential to meet suitable foraging and breeding habitat for the Koala in the future with the revegetation of eucalypt species (e.g. *Eucalyptus robusta* and *Eucalyptus tereticornis*).

Atlas of Living Australia (ALA) shows eight records for the Koala within a 5 km radius of the proposed offset site (records with a verified date <30 years ago) (ALA, 2026).

3.7 Flooding

The offset site is situated extensively within a formally mapped SCRC flood zone, associated with Meridian Plains floodplain. The majority of the offset site is designated as a High Risk flood zone, which is subject to inundation during major regional riverine flood events. The site experiences regular intermittent, low-velocity flooding events, on a bi-yearly/yearly basis, depending on regional weather events. Flooding waters have the potential to retain on site after large rainfall events. These recurring flood pulses are important for maintaining the specific hydrological regimes required by dominant canopy species, such as *Melaleuca quinquenervia*, and supporting the recruitment of native alluvial understorey species.

3.8 Condition of proposed offset site without offset management actions

The current Offset Calculator (refer Appendix D of the Offset Proposal) predicts that without the offset management actions, the future quality of the impacted ecological communities will neither increase nor decrease. Some attributes may increase over time, particularly within the regrowth areas where a native canopy has been established. In the case of South African pigeon grass (*Setaria sphacelata*), there is an anticipated arrested development in habitat quality as a result in this invasive species' presence at the proposed offset site. There is also the risk of an uncontrolled burn that goes through the proposed offset site, due to the current height and fuel profiles of the canopy. In that event there is a high risk that damage could occur to the canopy height and cover values and set back recovery of the vegetation. As the management actions of the OMP provide mitigating actions against risk of bushfire and weed incursion, prevention/mitigation of this scenario has been taken into account in the future scenario without offset management actions. Attributes likely to be impacted have been displayed in the MHQA summary scores in Appendix B of the Offset Proposal within the Preliminary Documentation.

3.9 Additionality

The proposed offset site at Rainforest Drive had been historically used for agricultural purposes as grazing land, then subsequently purchased by SCRC for a potential solar farm that did not pass feasibility assessment. The land was then allocated an environmental purpose given the potential future ecological value after ecological restoration. The presence of cleared areas on the proposed offset site allows for a transition from non-habitat to habitat critical to the survival of the species/community for both the Koala and the Coastal Swamp Sclerophyll Forest TEC through large-scale supplementary and canopy establishment. Through this supplementary planting, primary Koala food trees (*E. robusta* and *E. tereticornis*) would be selected to significantly increase the quality for the Koala. The proposed offset site requires more intensive management, meaning the 20-year with-offset gains will be more pronounced and require less reliance on passive regeneration. This active management would be in the form of weed control of dominating thickets of weeds, planting and establishing access tracks for long term land management.

4 Performance targets and completion criteria

Performance targets define the measurable environmental outcomes that must be achieved to demonstrate the successful delivery of the OMP for the target offset MNES. Performance targets describe what must be achieved, not the specific management actions or monitoring methods used to achieve them, which are detailed separately in Sections 4.3 and 6, respectively.

Assessment against the performance targets will be undertaken using baseline condition data established at OMP commencement, with progress evaluated through monitoring at defined intervals. Interim milestones (refer Section 4.2) provide checkpoints that demonstrate progress toward the performance targets, while completion criteria (refer Section 4.3) confirm final achievement of the required outcomes.

The performance targets apply for the full duration of the offset period unless otherwise stated.

4.1 Performance targets

Six specific performance targets are proposed. These consist of the following:

- Habitat quality success indicators (refer Section 4.1.1)
- Rehabilitation and regeneration management (refer Section 4.1.2) – used to assess management actions identified in Section 5.1
- Pest management (refer Section 4.1.3) – used to assess management actions identified in Section 5.2
- Weed management (refer Section 4.1.4) – used to assess management actions identified in Section 5.3
- Fire management (refer Section 4.1.5) – used to assess management actions identified in Section 5.4
- Access tracks and exclusion fencing (refer Section 4.1.6) – used to assess management actions identified in Section 5.6 and facilitate on ground delivery of the above performance targets and associated management actions.

Further information related to performance targets associated with each of the indicators and management actions is provided in the sections below.

4.1.1 Habitat quality success indicators

The OMP aims to achieve a measurable and sustained improvement in habitat quality for the target offset MNES over a 20-year timeframe.

The following habitat quality performance targets apply across the proposed offset site:

- Habitat quality scores for the Coastal Swamp Sclerophyll Forest TEC will increase by a minimum of 3 points from the baseline condition by Year 20.
- Habitat quality scores for Koala habitat will increase by a minimum of 3 points from the baseline condition by Year 20.
- Habitat quality scores for the target offset MNES will not decline below baseline levels at any monitoring event.
- Where monitoring indicates that habitat quality is not improving in line with the expected trajectory, adaptive management and corrective actions will be implemented in accordance with Sections 8 and 9.
- All designated areas for the Coastal Swamp Sclerophyll Forest TEC (except for proposed access tracks) must, at a minimum, meet requirements for the Key diagnostic characteristics and condition thresholds¹ as per the approved conservation advice.
- Uplift to be provided as per the Koala and Coastal Swamp Sclerophyll Forest TEC detailed future scores per average score for the AUs (refer Appendix C).

¹ Section 2.1 and 2.3 of the approved conservation advice for the Coastal Swamp Sclerophyll Forest TEC (DAWE 2021)

Habitat quality improvement will be assessed using the MHQA methodology at the monitoring intervals specified in Section 6.

4.1.2 Rehabilitation and regeneration performance targets

Rehabilitation and regeneration at the proposed offset site are the key components that will result in an improvement in the baseline condition of the proposed offset site. To ensure success of the quality of habitat, the following performance targets must be achieved within the specified timeframes:

- Regrowth and degraded areas within the proposed offset site demonstrate progressive increases in native species diversity, canopy structure and recruitment consistent with the reference condition for analogous REs.
- By the end of Year 2, areas subject to rehabilitation or assisted regeneration (as detailed in Management action 1 and illustrated in Figure 5-1) demonstrate progressive increases in native species recruitment, vegetation cover and structural diversity relative to baseline.
- By the end of Year 5, areas subject to rehabilitation or assisted regeneration show evidence of successful establishment and ongoing survival of native vegetation.
- By the end of Year 10, rehabilitated and regenerating areas exhibit increasing canopy and mid storey development consistent with RE 12.3.5 benchmarks, and declining dominance of non native species relative to baseline.
- Canopy and mid-storey composition remains consistent with the key diagnostic characteristics and condition thresholds of the Coastal Swamp Sclerophyll Forest TEC.
- Koala habitat suitability improves through increased availability and quality of foraging, breeding, shelter and dispersal habitat.
- Rehabilitation outcomes contribute to an overall improvement in habitat quality scores in accordance with Section 4.1.1.
- By Year 15, areas of the proposed offset site (except for proposed access tracks) that do not initially meet the condition threshold for the Coastal Swamp Sclerophyll Forest TEC demonstrate vegetation structure and species composition consistent with the key diagnostic characteristics and minimum condition thresholds of the TEC.
- Introducing Koala foraging species to enhance the quality of Koala habitat, with a focus on increasing the density of *Eucalyptus robusta* and, to a lesser extent, *Eucalyptus tereticornis*, while ensuring eucalypt densities do not become dominant to the extent that key diagnostic characteristics or potential key diagnostic characteristics of the Coastal Swamp Sclerophyll Forest TEC are compromised. Revegetation efforts will be prioritised within AU12, while AU11 will be managed through targeted in-fill planting and weed control to support habitat improvement objectives.

Where monitoring indicates rehabilitation or regeneration outcomes are not tracking toward these performance targets, adaptive management and corrective actions will be implemented in accordance with Sections 8 and 9.

4.1.3 Pest management performance targets

Pests degrade the habitat quality and are a threatening process to threatened species such as Koala. To ensure success of the OMP and to ensure that the habitat quality of the proposed offset site increases for species such as the Koala, the pest management performance targets below must be achieved within the specified timeframes:

- From Year 1 onward, relative activity levels of identified pests within the proposed offset site are maintained at or below baseline levels, as assessed through monitoring. The following identified pest target species will be monitored and managed in accordance with Section 5 of this management plan:
 - European Fox (*Vulpes vulpes*)
 - Feral Cat (*Felis catus*)

- Pigs (*Sus scrofa*)
- Rabbits (*Oryctolagus cuniculus*)
- Wild Dog (*Canis familiaris* – with the exception of *Canis familiaris dingo*)
- Domestic Cattle (*Bos taurus*)
- Feral/Domestic Goat (*Capra hircus*)
- Horse (*Equus caballus*)
- By end of year 5, monitoring demonstrates that pest activity is not materially affecting habitat quality, vegetation condition or rehabilitation outcomes
- Pest activity does not result in a measurable decline in:
 - Habitat quality scores
 - Vegetation recruitment or survival within revegetation and targeted infill planting areas, or
 - Suitability of Koala habitat for foraging, breeding, shelter or movement.
- Where monitoring identifies pest activity that poses a risk to achieving habitat quality or rehabilitation performance targets, responsive management actions are implemented in accordance with the adaptive management framework described in Section 8.

4.1.4 Weed management performance targets

To ensure success of the OMP and habitat quality of the proposed offset site is increased for Koala and Coastal Swamp Sclerophyll Forest TEC, the following weed management performance targets must be achieved:

- Permanent monitoring photo points for future analysis of weeds identified as WoNS, weed species listed under the *Biosecurity Act 2014* (Qld), species listed in the Coastal Swamp Sclerophyll TEC conservation advice (Appendix B of the conservation advice), or other tall non-native grass species identified in Section 3.6.2 are to be established within six months of commencement of this OMP.
- Initial treatment of weed species identified as Weeds of National Significance (WoNS), weed species listed under the *Biosecurity Act 2014* (Qld), species listed in the Coastal Swamp Sclerophyll TEC conservation advice (Appendix B of the conservation advice), or other tall non-native grass species identified in Section 3.6.2 to commence within 12 months of commencement. Baseline mapping is to be completed within 6 months of commencement of this OMP.
- From Year 1 onward, overall non-native plant cover within the proposed offset site does not increase above baseline levels at any monitoring event.
- By Year 15, weed species as defined in Section 3.6.2 are reduced by at least 70 per cent cover from baseline conditions across the proposed offset site.
- Annual inspections and management to detect and treat weed species identified as WoNS, weed species listed under the *Biosecurity Act 2014* (Qld), species listed in the Coastal Swamp Sclerophyll TEC conservation advice (Appendix B of the conservation advice), or other tall non-native grass species identified in Section 3.6.2.
- Where mapped below good condition for the Coastal Swamp Sclerophyll Forest TEC, weeds will be targeted to ensure improvement of the condition class of the TEC. All current regrowth TEC areas (AU12) will be in High Condition after 20 years.

4.1.5 Fire management performance targets

To ensure success of the OMP and to ensure that the carrying capacity of the proposed offset site increases for species such as the Koala, the following fire management performance targets must be achieved within the specified timeframes:

- Establish Fire Management Units/Zones to integrate with the SCRC Digital Bushfire Management Plan and Bushfire Management Plan within 12 months of commencement of the OMP.
- Develop a prescribed burn plan prior to any prescribed burn.
- Burn interval regimes are to consider ecological requirements in accordance with RE 12.3.5 fire management guidelines as defined in the Queensland REDD for the duration of the offset period.
- Fire management is administered through Council's Planned Burn Program, in collaboration with other agencies when additional resources are required. The planned burn program is managed through the establishment of Fire Management Units (FMUs) to determine the frequency, resourcing, social and ecological considerations, and operational requirements to achieve burn objectives.

A Bushfire Management Plan, written by a suitably qualified person as per the Queensland Bushfire Resilient Communities Guidelines (QFES, 2018), should detail the following minimum information:

- Baseline Bushfire Risk and Fuel Load Assessment, including:
 - Potential risk areas where fire may originate from outside the site and enter
 - Potential sources where fire may originate from inside the site
 - Addressing that fire management will prioritise the offset as asset protection and prevention or similar
 - Overall fuel hazard assessment
- Ecological Fire Regimes
- Mitigation and Asset Protection Strategies, including:
 - indicative map with site access points
 - fire breaks located around boundaries
 - fire management lines (can double as existing internal tracks)
 - approximate locations of fire management resources (dams, potential siting of water tanks, equipment storage of required)
 - Annual fuel load monitoring program
- Post-Fire Monitoring, Recovery, and Adaptive Management

Firebreaks are proposed to be sited in conjunction with the access tracks within the offset area. The location and siting of the firebreaks are shown in Figure 5-2. The firebreaks will be no wider than 5 m wide and 1.22 ha in total area for the offset. The firebreaks will be located outside the existing extents of the TEC areas that currently meet the condition thresholds (i.e. Patches 1-3) (refer Section 3.3.1).

4.1.6 Access tracks and exclusion fencing

Access track establishment and exclusion fencing are enabling management measures that support the effective delivery of the OMP by facilitating safe access for authorised personnel while preventing degradation of habitat values through unauthorised access, trampling and livestock grazing. The performance targets below are intended to ensure that access infrastructure is fit-for-purpose, minimises ecological disturbance, and contributes to the achievement of habitat quality, rehabilitation and regeneration outcomes for the target offset MNES.

The following performance targets must be achieved within the specified timeframes:

- All access tracks shown on Figure 5-2 are established, where required, within 24 months of commencement of the OMP, using minimal-width designs that avoid drainage lines, prolonged inundation areas and TEC patches to the greatest extent practicable.
- Access tracks are confined to mapped locations and do not expand in width, length or alignment over time, unless approved through adaptive management in consultation with a suitably qualified ecologist.
- Access tracks remain free of erosion, scouring, ponding or altered hydrological flow paths, as verified through annual inspections and post-significant rainfall event inspections (>100 mm in 24 hours).

- No new informal or unauthorised access tracks are created within the proposed offset site. Any evidence of informal track formation or off-track vehicle or pedestrian access is identified through monitoring and remediated within three months of detection.
- Existing boundary fencing is assessed within six months of OMP commencement, and exclusion fencing is repaired, reinstated or installed where required to fully exclude livestock (including cattle, horses and goats) from the proposed offset site.
- Exclusion fencing is in place and fully functional prior to the commencement of any assisted regeneration or supplementary planting works, to ensure planted and naturally regenerating vegetation is protected from grazing and trampling impacts.
- Exclusion fencing is designed and installed to be wildlife-friendly and does not present injury risks to fauna. Barbed wire fencing is not used.
- Following installation, exclusion fencing remains stock-proof for the duration of the offset period, with annual inspections confirming fence integrity, gate functionality (where applicable) and absence of livestock access.
- Evidence of livestock presence (e.g. tracks, scats, grazing damage or trampling) is not observed within the proposed offset site following fence installation. Any livestock incursions detected are rectified within one month through fence repair, reinforcement or adaptive management actions.
- Access tracks and fencing infrastructure do not result in a measurable decline in habitat quality scores, vegetation condition, recruitment success or connectivity values for the target offset MNES, as demonstrated through habitat quality and rehabilitation monitoring.

Achievement of these performance targets will be verified through routine inspections, rehabilitation and regeneration monitoring, pest and weed surveys, and reported in the Project Annual Compliance Reports. Where performance targets are not met, corrective actions and adaptive management will be implemented in accordance with Sections 8 and 9 of this OMP.

4.2 Interim milestones

Interim milestones have been set to assist in the progress of the management actions and are provided to guide the anticipated timing and trajectory of progress toward achieving the performance targets over the life of the offset.

The binding environmental outcomes to be achieved through implementation of the OMP are defined in Section 4.1 (performance targets). Interim milestones should be interpreted in conjunction with Section 4.1 and are supported by the management actions (refer Section 5), monitoring program (refer Section 6) and adaptive management framework (refer Section 8). The interim milestones are included in Table 4-1.

Table 4-1 Interim milestones

Offset year	Performance theme	Performance target (SMART, outcome-based)
Year 1	Pest management	Pest management plan to be drafted within 1 year from the commencement of the action
	Fire and access management	Fire regimes and site access do not cause a measurable decline in habitat quality scores, vegetation condition or connectivity relative to baseline.
Year 5	Habitat quality	Revegetation plantings (excluding groundcovers) will be completed by Years 1 and 2. From Year 2 onward, areas subject to rehabilitation or assisted regeneration are expected to demonstrate progressive increases in native species recruitment, vegetation cover, and structural diversity relative to baseline. Habitat quality monitoring will demonstrate an overall habitat-weighted quality improvement of 1 point from baseline (from 4 to 5 for the TEC, and 3 to 4 for the Koala) per AU. Consequently, all AU12 areas will reach a moderate condition (50–80%) against the TEC conservation advice.
	Rehabilitation and regeneration	Rehabilitated and regenerating areas demonstrate ≥70 per cent survival of planted native species (where planting has occurred) and ongoing natural regeneration of native species across multiple growth strata.

Offset year	Performance theme	Performance target (SMART, outcome-based)
	Pest management	Pest activity remains at or below baseline levels, and monitoring demonstrates pest activity is not materially affecting habitat quality or rehabilitation outcomes.
	Weed management	Monitoring demonstrates a clear and sustained reduction in weed extent and/or severity relative to baseline, with no increase in total non-native plant cover. Less than 25% weed cover for RU1 - RU5 and AR1 - AR3).
Year 10	Habitat quality	Habitat quality scores for Coastal Swamp Sclerophyll Forest TEC and Koala habitat demonstrate continued improvement relative to Year 5 results, consistent with achieving the required uplift by Year 20.
	Rehabilitation and regeneration	Vegetation structure, composition and canopy development in rehabilitated areas increasingly align with analogous RE reference conditions, with declining dominance of non-native species relative to baseline.
	Pest management	Pest activity remains at or below baseline levels, or is not associated with measurable declines in vegetation condition, recruitment success or habitat quality.
	Weed management	Monitoring demonstrates ongoing progress toward the weed (as defined per Section 3.6.2) reduction targets, with overall non-native cover remaining below baseline levels. Less than 25% weed cover for RU1 - RU5 and AR1 -AR3.
Year 15	Habitat quality	Habitat quality monitoring confirms progress remains on track to achieve a minimum three-point uplift by Year 20, with no decline below baseline scores.
	Rehabilitation and regeneration	Areas that did not initially meet the Coastal Swamp Sclerophyll Forest TEC condition threshold demonstrate vegetation structure and species composition consistent with the key diagnostic characteristics and minimum condition thresholds of the TEC. All AU12 areas reach a good condition (20-50%) or better against the TEC conservation advice condition thresholds.
	Pest management	Pest activity continues to be effectively controlled, with no measurable impact on habitat quality, vegetation condition or rehabilitation success.
	Weed management	Weeds (as defined per Section 3.6.2) are reduced to 15 per cent cover across the proposed offset site.
Year 20	Habitat quality	Habitat quality scores for Coastal Swamp Sclerophyll Forest TEC and Koala habitat have increased by a minimum of three (3) points relative to baseline condition across the proposed offset site.
	Rehabilitation and regeneration	Rehabilitation and regeneration outcomes demonstrably contribute to the achieved habitat quality uplift and ecological function of the proposed offset site.
	Pest management	Pest activity is maintained at low threat AI levels as per the scoring guidance of the MHQA (refer Appendix C) such that it does not undermine achievement or persistence of offset outcomes.
	Weed management	Weeds (as defined in Section 3.6.2) are reduced to at least 10 per cent cover, and WoNS collectively occupy no more than 1 per cent of the proposed offset site.
Throughout offset period	All themes	Habitat quality does not decline below baseline levels; fire, access and land use do not compromise habitat quality, hydrology or connectivity; and adaptive management is implemented where performance targets are at risk.

4.3 Completion criteria

The proposed offset will be deemed successfully delivered when all of the completion criteria provided in this section have been achieved and demonstrated through monitoring, and are capable of being maintained, unless otherwise agreed in writing by DCCEEW.

4.3.1 Habitat quality uplift

By Year 20 from the commencement of the OMP, habitat quality scores within the proposed offset site will have increased by a minimum of three (3) points above baseline for both:

- Coastal Swamp Sclerophyll Forest TEC; and
- Koala habitat.

This uplift must be demonstrated across the proposed offset site using the MHQA methodology and be consistent with:

- The Year 20 performance targets in Table 4-1
- Habitat condition representative of high-quality Coastal Swamp Sclerophyll Forest TEC, as defined by the key diagnostic characteristics, condition thresholds and final habitat quality scores outlined in Table 4-1.

4.3.2 Rehabilitation and regeneration outcomes

By Year 15, all areas within the proposed offset site that did not initially meet the minimum condition threshold for the Coastal Swamp Sclerophyll Forest TEC demonstrate vegetation structure, canopy development and species composition consistent with the key diagnostic characteristics and minimum condition thresholds of the TEC.

By Year 20, rehabilitation and regeneration outcomes demonstrably contribute to:

- The required habitat quality uplift for both target offset MNES
- Improved ecological function, connectivity and resilience of the proposed offset site.

4.3.3 Weed management outcomes

Weed management outcomes must be achieved progressively and in accordance with the interim milestones in Table 4-1, with completion defined as follows:

- By Year 15, weeds (as defined per Section 3.6.2) within the proposed offset site are reduced by at least 70 per cent ($\geq 70\%$) relative to baseline conditions;
- By Year 20, weeds (as defined per Section 3.6.2) are reduced by at least 90 per cent ($\geq 90\%$) relative to baseline conditions, and this reduction is maintained thereafter.

Collectively, WoNS must occupy no more than one per cent ($\leq 1\%$) of the total proposed offset site area by Year 20, and be maintained at or below this level thereafter.

4.3.4 Pest management outcomes

By Year 20, pests listed under Schedule 2 of the *Biosecurity Act 2014* (Qld) are maintained at low threat AI levels as per the scoring guidance of the MHQA (refer Appendix C) (except for Koala dog threat scores, refer Section 4.1.3) than baseline assessments across the proposed offset site, such that pest activity:

- Does not result in a measurable decline in habitat quality scores
- Does not compromise vegetation condition, recruitment or regeneration outcomes
- Does not undermine the achievement or persistence of offset outcomes for the target offset MNES.

This condition must be demonstrated through monitoring consistent with Table 4-1 and maintained beyond the completion of the offset period.

5 Management actions

This section outlines the management actions required to meet the identified environmental outcomes of the proposed offset site. The management actions contained within this section have been developed to achieve the performance targets identified in Section 4.1, primarily to improve the overall habitat quality and condition for the Coastal Swamp Sclerophyll Forest TEC and habitat for the Koala. Additionally, the management actions are expected to also enhance the condition and quality of a wide range of biodiversity, including other EPBC Act listed threatened species.

The management actions described below, are regarded as appropriate for the proposed offset site and the two target offset MNES. The actions are designed to be measurable and monitorable, and they prioritise efficiency effectiveness, timeliness, and transparency. Additionally, management actions align with guidance outlined in the priority conservation and research actions from the conservation advice for the Coastal Swamp Sclerophyll Forest TEC (DAWE 2021), which will also result in habitat quality uplifts as well as the protection and restoration of habitat for the Koala.

The conservation advice for the Coastal Swamp Sclerophyll Forest TEC (DAWE 2021) identifies priority conservation and research actions under the following approaches:

- Identify and map remnant and other occurrences of the ecological community that meet the description and the condition thresholds. Where regeneration occurs, provide measures that will support the regeneration to maturity (e.g. provide fencing to minimise grazing/trampling damage risk). Implement programs to manage Pests, including domestic species.
- Maintain and reinstate appropriate hydrological regimes for the ecological community and the landscapes surrounding the ecological community – avoid disturbances to hydrology that will impact on ecological community
- Undertake surveys to locate and map remnant and other occurrences of the ecological community, as well as threatened species that occur in the ecological community
- Design and implement a monitoring program or, if appropriate, support and enhance existing programs for the ecological community and associated threatened species
- Further develop sustainable management guidelines and technical material to assist landowners, including measures to address inappropriate fertiliser application, stock management, ecological fire management and spray drift
- Develop effective control methods for the most damaging weed species that infest the ecological community, for example madeira vine (*Anredera cordifolia*), cats claw creeper (*Dolichandra unguis-cati*), morning glory (*Ipomoea* spp.), wandering jew (*Tradescantia fluminensis*), climbing asparagus (*Asparagus plumosus*), ochra (*Ochna serrulata*) and small-leaved privet (*Ligustrum sinense*)
- Investigate the importance of landscape scale gene flow and its implications for management of remnants, associated fauna, plant and animal interactions and longer-term ecological function. This includes research into optimal distances between remnants and remnant sizes that are crucial for a range of flora and fauna movements
- Undertake research, monitoring and evaluation to determine the relative biodiversity, conservation benefits of remnants, areas of regeneration and supplementary planting
- Assess the vulnerability of the ecological community to climate change
- Investigate the likely impacts of nearby eucalypt plantations on groundwater and fire potential of the ecological community
- Undertake analysis of cost effectiveness of landscape connectivity and the importance of small isolates.

Sections 5.1 to 5.4 provide specific management actions and Section 10 provides a summary table of implementation and monitoring activities and schedule.

The conservation advice and recovery plan for the Koala (DAWE 2022b) identifies priority conservation and research actions under the following approaches:

- The area of occupancy and estimated size of populations that are declining, suspected to be declining, or predicted to decline are instead stabilised then increased
- The area of occupancy and estimated size of populations that are suspected and predicted to be stable are maintained or increased
- Metapopulation processes are maintained or improved
- Partners, communities and individuals have a greater role and capability in listed Koala monitoring, conservation and management
- Identify nationally important populations and habitat for recovery across the listed Koala range under current and future conditions.
- Identify spatially and temporally strategic areas of high priority for: (i) restoration and revegetation based on Koala and eucalypt population viability; (ii) climate and fire refugia; and (iii) corridors facilitating movement and metapopulation processes of Koalas
- Develop prioritisation at regional or other appropriate scales for the long-term implementation of actions.
- Increase the overall area of protected Koala habitat by dedication of Crown land, and purchasing of private land identified as priority Koala habitat and considered to be at risk of loss, for incorporation into state protected areas.
- Establish or expand existing targeted private or leasehold land incentive mechanisms and programs to increase the area for long-term protection and conservation of areas identified as Koala habitats.

5.1 Management Action 1: Rehabilitation and regeneration management

Rehabilitation and regeneration at the proposed offset site are the key contributing actions that will improve the existing vegetation of Coastal Swamp Sclerophyll Forest TEC as well as Koala habitat. The rehabilitation and regeneration process involves the reinstatement of relevant ecological value to degraded areas and/or exposed areas as a result of any additional management action, for instance, weed removal.

MHQA survey of the proposed offset site has identified three regrowth patches of Coastal Swamp Sclerophyll Forest TEC. These patches, together with degraded and weed-affected areas (AU12 Category X patches), represent prime opportunities for rehabilitation through natural regeneration and targeted supplementary planting aimed at enhancing habitat quality and connectivity for Koalas and the Coastal Swamp Sclerophyll Forest TEC. This mapping identifies two separate zones for restoration priority and focus for conservation benefit/uplift, including:

- Assisted Regeneration of existing regrowth patches – assisted regeneration, weed maintenance and supplementary planting (refer Section 5.3)
- Revegetation of degraded Category X patches – revegetation planting to restore canopy and increase native species diversity, focusing on the species list in Table 5-2 to enhance in particular attributes for the Koala quality and availability of foraging, breeding and shelter habitat and Coastal Swamp Sclerophyll Forest TEC quality.

Creation of habitat for Koala within the proposed offset site will focus on either revegetation or assisted regeneration, which will facilitate the successful promotion of native regrowth and recruitment of eucalypts. The two approaches below are identified as a priority to act against habitat loss, disturbance and modification for the Koala, as specified in the approved conservation advice for Koala (DAWE, 2022a).

- Regeneration of existing regrowth vegetation through weed management and limited planting
- Creation of habitat via infill plantings to assist with canopy closure (note: increased canopy cover is an indicator of the development of an intact eucalypt forest, providing improved habitat conditions for the Koala).

The proposed offset site has been historically cleared for agricultural purposes predominantly grazing and currently supports a mosaic of exotic pasture dominated by South African pigeon grass (*Setaria sphacelata*) with nodes of swamp paperbark (*Melaleuca quinquenervia*) regrowth. Broad scale habitat quality

improvement will occur through revegetation of pasture as the preclearance vegetation community of RE 12.3.5 - *Melaleuca quinquenervia* open forest on coastal alluvium, equivalent to the Coastal Swamp Sclerophyll Forest TEC and Koala habitat. Regrowth nodes will be improved through assisted regeneration and supplementary planting to improve connectivity, resilience and functionality of the Coastal Swamp Sclerophyll Forest TEC and Koala habitat. The use of weed and pest control will be considered prior to reconstruction (refer Section 5.3). Maintaining and eradicating legacy infestations and preventing new weed incursions is a key driver of habitat quality uplifts.

Replanting will be implemented to facilitate recovery of canopy gaps. Table 5-2 contains a list of potential tree species to be used for in-fill planting, selection priority should be given to Koala foraging, breeding and shelter trees. Tree species selection has been derived from those species that are known to occur within the Coastal Swamp Sclerophyll Forest TEC and its analogues (i.e. RE 12.3.5) which are known to occur within proximity of the proposed offset site.

Reducing weed cover will enable unrestricted movements for species like Koala, this will be facilitated by controlling species like South African pigeon grass and increase native grasses and litter cover.

Infill species list and stem numbers/density will be informed by the Ecological Restoration Plan which will be formulated within six months of the implementation of the OMP. The proposed offset site covers 29.35 ha of land and is divided into two broad management types: Revegetation and Assisted Regeneration (refer Figure 5-1).

Map by: WF Date: 29/05/2026 File path: C:\Users\Walker.Feng\Aurecon Group\622936 - Caloundra Transport Corridor Upgrade - GIS\Pro\622936_biocondition_figures\622936_biocondition_figures.aprx



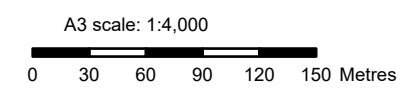
- Legend**
- Minor roads
 - Watercourse
 - Proposed offset site
- Restoration units**
- ARU1
 - ARU2
 - ARU3
 - RU1
 - RU2
 - RU3
 - RU4
 - RU5

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, © State of Queensland (Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development) 2025

Caloundra Transport Corridor Upgrade

Figure 5-1 Restoration units within the offset area

Revision: A Date: 1/06/2026



Revegetation units (RU) focus primarily on re-establishing the pre-clearance vegetation community through broad-scale tree planting. These units account for 13.71 ha of the total proposed offset site.

Assisted Regeneration units (ARU) focus on supporting the land's natural capacity to recover, with supplementary planting and weed management to enhance vegetation structure and improve ecosystem resilience. These units account for 15.64 ha of the total proposed offset site.

Restoration actions will be based on the best available knowledge and scientific research to maximise positive biodiversity outcomes, and will be undertaken by a suitably qualified revegetation contractor and will include measures to ensure the maintenance and survival of plantings in the proposed offset site. The *National Standards for the Practice of Ecological Restoration in Australia* (Standards Reference Group Society for Ecological Restoration Australasia, 2021) and *South East Queensland Ecological Restoration Framework* (Chenoweth EPLA and BRS 2012) will be used to guide restoration activities in a logical, ethical and systematic way to guide successful ecological restoration.

The revegetation area encompasses 13.71 ha of ex-pasture. To account for existing natural regrowth across 10% of the total area, planting will occur across 12.33 ha. The revegetation component is divided into five stages/units (refer Table 5-1) which will be delivered over two years followed by ongoing maintenance.

Table 5-1 Revegetation unit specifications

Revegetation unit	Year	Area	Area (ha) inc reduced 10% regrowth	Plant number
RU1	1	2.93	2.63	5,260
RU2	1	5.30	4.78	9,560
RU3	2	2.41	2.16	4,320
RU4	2	2.10	1.89	3,780
RU5	2	0.97	0.87	1,740
Total		13.71 ha	12.33 ha	24,660

A total of 24,660 tube stock will be installed over 2-years at 2.5 m spaces with 1.5 m between each planting row to allow access for maintenance slashing. The species list is indicative of RE 12.3.5 *Melaleuca quinquenervia*, *Eucalyptus robusta* woodland on coastal alluvium with a sclerophyll understory. Additional species of local provenance may be included which occur naturally within RE 12.3.5 where available from local nurseries; however, species substitution will require approval from Council. Species and densities have been determined by the Coastal Swamp Sclerophyll Forest TEC conservation advice key diagnostic characteristics and the Queensland Regional Ecosystem Technical Descriptions (Queensland Herbarium 2018). A breakdown of species composition and quantity per unit and year is provided in Table 5-2.

Table 5-2 Potential species for revegetation and supplementary planting

Scientific name	Common name	Percentage per RU
Dominant Canopy		
<i>Melaleuca quinquenervia</i> [#]	Broad-leaved Paperbark	20%
<i>Eucalyptus robusta</i> [*]	Swamp Mahogany	20%
Sub-dominant Canopy		
<i>Eucalyptus tereticornis</i> [*]	QLD Blue Gum	5%
<i>Casuarina glauca</i>	Swamp She-oak	5%
<i>Corymbia intermedia</i> [#]	Pink Bloodwood	5%
<i>Glochidion sumatranum</i>	Umbrella Cheese Tree	5%
<i>Livistona australis</i>	Cabbage Palm	5%
Subcanopy		
<i>Melaleuca salicina</i>	Willow Bottlebrush	2.5%
<i>Acacia disparima</i>	Southern salwood	2.5%

Scientific name	Common name	Percentage per RU
<i>Acacia leiocalyx</i>	Black wattle	2.5%
<i>Melaleuca sieberi</i>	Small leaved paperbark	2.5%
<i>Alphitonia excelsa</i>	Soap Tree / Red Ash	2.5%
<i>Lophostemon suavolens</i>	Swamp box	2.5%
<i>Melicope elleryana</i>	Pink Doughwood	2.5%
<i>Stephania japonica</i>	Snake Vine	2.5%
Shrub species		
<i>Aggregiflorum speciosum</i>	Wild-may	2.5%
<i>Banksia robur</i>	Swamp banksia	2.5%
<i>Hakea actites</i>	Wallum hakea	2.5%
<i>Leptospermum polygalifolium</i>	Tea-tree	2.5%
<i>Melaleuca nodosa</i>	Pricklyleaf paperbark	2.5%
<i>Melaleuca pachyphylla</i>	Wallum bottlebrush	2.5%
<i>Melastoma malabathricum</i>	Blue tongue	2.5%
Groundcover		
<i>Baloskion pallens</i>	Pale cordrush	N/A
<i>Gahnia sieberiana</i>	Saw sedge	N/A
<i>Imperata cylindrica</i>	Blady Grass	N/A
<i>Leersia hexandra</i>	Swamp rice grass	N/A
<i>Machaerina rubiginosa</i>	Soft twigrush	N/A
<i>Telmatoblechnum indicum</i>	Bungwall fern	N/A

Table notes:

* Preferred species for Koala foraging/breeding

Preferred species for Koala shelter

Ground cover planting is not a mandatory component of this 5-year plan but must form a component for future iterations of this document across the remaining 15 years of Offset Delivery. Following iterations must take into account the natural resilience of the site and where assisted regeneration has facilitated ground layer regeneration. Ground cover plantings must consider the microtopography of the site and account for each species hydrological niche and tolerances within the landscape. This plan allows for adaptive management and where replacement planting occurs then ground layer plantings may form a component where competition from exotic species or site maintenance will not hinder establishment.

To track and verify the successful development of the Coastal Swamp Sclerophyll Forest TEC within the proposed offset site (specifically transitioning the Category X ex-pasture land in AU12 into the ecological community and AU11 progression into higher quality condition thresholds), a monitoring framework will be applied. This will employ monitoring specific conservation advice key diagnostic criteria and Condition Threshold assessments in the TEC's conservation advice. Monitoring will occur concurrently with MHQA surveys at 5, 10, 15 and 20 year intervals.

The supplementary planting area encompasses 15.64 ha of natural regrowth with patches of dense exotic pasture. To account for natural regrowth across 90% of the total area, supplementary planting will occur across 1.58 ha. The Assisted Regeneration component is divided into three stages/units delivered over two years (refer Table 5-3) followed by the unit going on-maintenance.

Table 5-3 Supplementary planting specifications.

Assisted regeneration unit	Year	Area (ha)	Area (ha) including reduced 90% regrowth	Plant numbers
AR1	1	2.75	0.275	443
AR2	2	10.31	1.031	1,650
AR3	2	2.58	0.258	411
Total		15.64	1.564	2,471

Table 5-4 Management actions – Rehabilitation and regeneration

Management actions	Activity provider
■ The ecological restoration plan will contain annual key performance indicators which align to the objectives of this OMP, against which the management actions will be assessed and reported against. ■ Encouragement of natural regeneration through weed management (refer Section 5.3) in patches of poor to moderate habitat quality and implement restoration activities (i.e. infill planting) to achieve high habitat quality. This is inclusive of restoring degraded patches of the ecological community to meet the minimum condition thresholds of the TEC (refer Coastal Swamp Sclerophyll Forest TEC conservation advice (DAWE, 2021)). ■ Where restoration activities are implemented, or where damage to naturally recruiting trees is observed, measures that will protect and support the regeneration to maturity (e.g. provide tree guards to minimise grazing or trampling damage risk) will be provided. ■ Supplementary planting where canopy cover is below 10% – prioritising foraging, breeding and shelter species for Koala. ■ Regeneration and restoration actions will consider the impact of periodic inundation on the activities to be undertaken in such areas, and their likely effectiveness, as well as the timing of such activities. ■ Stags, logs and mature and old-growth trees with hollows will be maintained within the proposed offset site to provide important habitat for fauna. ■ Manual thinning of dense Melaleuca stands to increase Diameter at Breast Height (DBH) values where density exceeds five trees per square metre. ■ Monitoring of Coastal Swamp Sclerophyll Forest TEC Key Diagnostic Criteria and Condition Threshold assessments as per the conservation advice.	SCRC offset team or suitably qualified bush regeneration contractor. SCRC offset team or suitably qualified bush regeneration contractor.

5.2 Management Action 2: Pest management

Pests are considered a key threatening process and have the potential to further disrupt Koala population movements and the availability of critical foraging and breeding resources. The control of pests is a fundamental measure to protecting and restoring existing ecological values, improving biodiversity, and improving ecological condition of the habitat within the proposed offset site.

Pest abundance fluctuates spatially and temporally in response to changing environmental conditions and resource availability. This requires pest control to be closely tied with ongoing monitoring, before and after active control. A pest management plan will be drafted within 1 year from the commencement of the action. This plan will establish goals to identify key pest species, deploy targeted reduction measures, and outline clear corrective actions. Under this framework, pest monitoring and management will be undertaken on an annual (yearly) basis, including:

- Pest control
- Annual pre-control monitoring/assessment
- Additional control (if required).

Results of pest relative activity level, which will be used by a specialist pest control professional, to determine the extent of pest control response required to reduce and/or maintain the annual relative activity. Relative activity will be based on classes for each species should be determined by a suitably qualified fauna expert prior to commencement.

Pest control is to be conducted as close as possible (i.e. within 12 months) after the commencement of the OMP, with the extent and duration determined by the SCRC, based on baseline assessment results. While pest control efforts will be guided by pest abundance. All control measures for pest species will be undertaken in accordance with guidance provided by the Centre for Invasive Species Solutions, the *Biosecurity Act 2014* (Qld) and the *Animal Care and Protection Act 2001* (Qld), Sunshine Coast Biosecurity Plan 2024, and SCRC Feral Animal Prevention and Control Program.

Annual pest control will be determined by the outcome of the annual monitoring event.

Post-control monitoring will commence within 1 month of pest control being completed, and occur at the same fixed locations surveyed during pre-control monitoring. Results of post-control monitoring will be used to determine the annual post-control pest relative activity level and determine whether additional follow up control and monitoring is required (refer Section 6.3.1).

Management objectives, actions, timing and responsible parties for pest fauna management strategy across the proposed offset site are summarised in Table 5-5.

Table 5-5 Management actions – Pest management

Management actions	Activity provider
Pest Management Plan to be drafted within 1 year from the commencement of the action.	SCRC offset team or suitably qualified and/or licenced pest specialist.
Initial pest control as defined within Pest Management Plan.	SCRC offset team or suitably qualified and/or licenced pest specialist.
Ongoing pest control as defined within the Pest Management Plan.	SCRC offset team or suitably qualified and/or licenced pest specialist.

5.3 Management Action 3: Weed management

Weed management is a critical component in optimising the ecological integrity and functionality of habitats within the proposed offset site. Surrounding patches of urban and industrial land use and clearing have led to the introduction and encroachment of a variety of environmental weeds from edge effects. A reduction in non-native plant species facilitates the re-establishment of native species richness, and the recruitment of native foraging canopy species. This process will increase the accessibility and availability of resources, such as food and shelter, critical for the survival of the Koala, as detailed in the national recovery plan for Koala (DAWE, 2022b). The application of an integrated weed management strategy, which consolidate biological, cultural, mechanical, fire and chemical control methods, will have demonstrated efficacy in achieving these ecological goals.

South African pigeon grass (*Setaria sphacelata* var. *sericea*), in particular, increases biomass not only smothering out native species, but creating a ladder effect into shrub and canopy species during fires, effectively irrevocably altering the ecosystem structure. Thus, targeted control of South African pigeon grass and other invasive plant species is essential for improving food and shelter availability for the target offset MNES. Additionally, dense grass may obstruct movement for Koalas, thereby impeding their access to suitable habitat and increasing predation risk. Weed coverage can also affect the Coastal Swamp Sclerophyll Forest TEC, with elevated levels causing the reduction of key diagnostic characteristics and condition thresholds. Table 5-6 details the actions required for effective weed management.

Table 5-6 Management actions – Weed management

Management strategy	Management action	Activity provider
Weed prevention	- All vehicles and machinery entering the proposed offset site must be inspected for weeds and seeds prior to entry and cleaned down if required. Persons inspecting vehicles for weeds and seeds are trained in a recognised unit of competency. - Ensure all imported topsoil and mulches are weed free and undertake regular weed hygiene inspections for all machinery entering the site to prevent introduction of new weed infestations. Material transportation will be restricted to nominated vehicle access tracks and maintain vehicles as per the Qld Vehicle and machinery cleandown procedures	SCRC offset team or suitably qualified and licenced bush regenerator.
Weed control	Management scheduling and techniques will be licensed weed control (commercial operator) person/ practitioner in accordance State and local guidelines. Scheduling will be determined based on required effort to reach interim and completion targets and defined in the Ecological Restoration Plan.	SCRC offset team or suitably qualified and licenced bush regenerator.

5.4 Management Action 4: Fire management

The objective of the fire management action within proposed offset site is to safeguard and enhance biodiversity values through strategies such as fuel reduction and planned burning. This management action has been developed to align with offset objectives and support the habitat requirements of the target offset MNES.

The strategy considers several factors, including:

- Commonwealth approved conservation advice for the Coastal Swamp Sclerophyll Forest TEC and the Koala
- Regional ecosystem classifications, particularly for RE 12.3.5 which is considered analogous to the Coastal Swamp Sclerophyll Forest TEC
- Planned Burn Guidelines specifically for the South-east Queensland bioregion (Department of Environment and Science, 2022b)
- Prescribed burning regimes
- Adjacent land uses
- The SCRC operational fire management and historical fire patterns in the area.

The primary focus of fire management planning is to reduce threats associated with unplanned fires while simultaneously enhancing habitat quality for target offset MNES. The anticipated benefits of effective fire management for target offset MNES include:

- Protection and enhancement of biodiversity values through the implementation of appropriate fire regimes
- Improvement of habitat quality
- Reduction of risks associated with uncontrolled fires, thereby promoting ecological resilience.

The fire management guidelines for RE 12.3.5 (*Melaleuca quinquenervia* open forest on coastal alluvium) prescribe planned and unplanned burn intervals between 6 to 20 years for mixed grass/shrub, with a 25 to 70% burn mosaic. Historical fire scar mapping indicates that large scale burns occurred in 2015 and 2017. Several smaller burns occurred throughout the 2000s, primarily in the northern section of the lot. Consequently, the habitat in the proposed offset site is classified as 'within interval', indicating that it has experienced an adequate frequency of burns. However, this classification does not imply that burning should be avoided during the life of the offset. In fact, prescribed burns may be conducted as frequently as every 6 years, noting that more frequent fire regimes and intensity may kill *Melaleuca* species (DAWE 2021).

Additionally, the intent of the fire management actions is to achieve a mosaic patchwork burn over the length of the offset to support the following for the target offset MNES:

- Achieving an understory that allow easy accessibility to improve Koala movement
- Prevent high intensity canopy fires, likely to destroy target offset MNES habitat
- Promote seedling recruitment of canopy species and other fire obligate species.

Fire management planning will assess fire related risks and determine appropriate actions and timing to be implemented to benefit the target offset MNES. This will include the implementation of a structured risk assessment and industry best practice risk mitigation activities (AS ISO 31000), including preparation and operational aspects of hazard reduction burns as per SCRC standards to effectively manage the proposed offset site.

Fire Management Units/Zones should be established to delineate areas for mosaic burning planning purposes.

Table 5-7 Proposed offset site management actions – Fire management

Management actions	Activity provider
Develop a Fire Management Plan with Fire Management Units/Zones to integrate with SCRC Digital Bushfire Management Plan within 12 months of commencement of the action	SCRC offset team or suitably qualified fire ecologist/practitioner
Update Digital Bushfire Management Plan	SCRC offset team or suitably qualified fire ecologist/practitioner
Annual fuel load hazard assessment	SCRC offset team or suitably qualified fire ecologist/practitioner
Develop a prescribed burn plan prior to all prescribed burns, developed and implemented by a suitably qualified fire ecologist. All prescribed burn plans must be developed in accordance with this OMP and the regional ecosystem fire management guidelines.	SCRC offset team or suitably qualified fire ecologist/practitioner
Conduct planned burns as prescribed by the prescribed burn plan. This action may be optional, particularly if unplanned burns have occurred.	SCRC offset team or suitably qualified fire ecologist/practitioner
Monitor canopy structure and health one month post burns to assess any potential damage. Any reduction in overall habitat quality since the previous monitoring event to trigger a corrective action to restore as per Section 9.	SCRC offset team or suitably qualified fire ecologist/practitioner

5.5 Management Action 5: Flood management

Following significant rainfall events defined as exceeding 100 mm over a 24-hour period, the offset site will undergo a specific flood management response to address potential damage to planted vegetation. Follow-up inspections must be conducted at least one month after such an event to allow floodwaters to recede and reveal the full extent of the impact. During these inspections, the primary action will be the reestablishment of any planting mortalities caused by the flooding. Additionally, debris (such as sediment, litter, or large organic matter) that has been deposited and poses a risk of smothering or damaging surviving plants must be carefully removed from the vegetation (but not taken away from the offset site). Post-replanting, monitoring will be implemented as per the Rehabilitation and regeneration monitoring actions (refer Table 6.1) to determine the success and survival rate of the replaced plants and ensure the site progresses towards completion criteria. Species listed in Table 5-2 are especially suited to swamp sclerophyll environments and have been selected for their flood resilience and tolerance for wet conditions.

5.6 Management Action 6: Access tracks and exclusion fencing

At present, no formal access tracks exist around the perimeter of the broader reserve or within the proposed offset site. Given the density of surrounding vegetation and the swampy nature of portions of the site, controlled off-track access will be required to safely and efficiently undertake the management and monitoring actions detailed in this OMP, including weed control, pest management, rehabilitation, fire management, monitoring and reporting activities.

Proposed access track locations have been mapped in Figure 5-2. Any access tracks established will be minimal in extent and designed to avoid significant alteration to existing hydrological regimes, soil structure or vegetation communities. Track placement will utilise existing disturbed or lower-value areas where practicable, avoid drainage lines and areas subject to prolonged inundation, and be constructed in a manner that maintains natural water flows. Access tracks will be used strictly for operational purposes associated with offset delivery and ongoing management and will not facilitate public access.

The proposed offset site is currently being regularly accessed and grazed by domestic livestock, including horses, goats and cattle, and evidence of degradation through trampling and grazing was observed during site assessments. Uncontrolled livestock access has the potential to adversely affect regeneration potential, damage existing vegetation, compact soils and undermine the achievement of rehabilitation and habitat quality performance targets.

An assessment of existing fencing and boundary integrity will be undertaken, and reinstatement, repair or installation of exclusion fencing will be implemented within 12 months of the commencement of the action, where required to prevent livestock access to the proposed offset site. Exclusion fencing will be designed to be fit-for-purpose, durable and sympathetic to ecological values, while allowing for maintenance access and fauna movement where appropriate. Installation of barbwire fencing will be avoided at all costs, as it presents an unnecessary risk of injury to fauna (including Koala) and livestock, and alternative wildlife-friendly fencing designs will be adopted where exclusion fencing is required. The line wire and strand configuration is to be implemented as per the SCRC specifications (with the exception of "fauna gap" wildlife access point- to exclude goat grazing risk) in Appendix D. The exclusion of livestock from the proposed offset site is a prerequisite for successful rehabilitation. Accordingly, fence assessment and reinstatement works will be completed prior to the commencement of any proposed enrichment planting or assisted regeneration activities, to ensure planted and naturally regenerating vegetation is protected from grazing and trampling impacts and to maximise the likelihood of achieving offset performance targets and completion criteria.

Map by: WF Date: 4/06/2026 File path: C:\Users\Walker.Feng\Aurecon Group\522936 - Caloundra Transport Corridor Upgrade - GIS\Pro\522936_biocondition_figures\522936_biocondition_figures.aprx



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, © State of Queensland (Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development) 2025



Legend

- Minor roads
- Watercourse
- Proposed offset site
- Proposed access tracks

Revision: A

Date: 4/06/2026

A3 scale: 1:4,000

0 40 80 120 160 Metres



Caloundra Transport Corridor Upgrade

Figure 5-2 Location of proposed access tracks

Coordinate system: GDA2020 MGA Zone 56

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6 Monitoring actions

A monitoring and evaluation plan has been developed as part of this OMP, to assess the success of the management actions to maintain and improve the extent and habitat values for the target offset MNES applicable to this OMP. Monitoring results, as well as the interim milestones (refer Section 4.2), will be used to track the progress of the offset delivery and identify if corrective actions (refer Section 9) and/or adaptive management measures are to be implemented (refer Section 8.2).

The monitoring and evaluation plan is described in the sections below. These monitoring objectives are designed to measure the effectiveness of the proposed management actions and provide for 'early-control' (management actions are effective). Through detailed monitoring practices it can be determined whether the management actions have resulted in an ecological gain or maintenance of the Coastal Swamp Sclerophyll Forest TEC and Koala habitat quality, and successful control of pest and weed species within the proposed offset site.

Four monitoring sites have been established for the Coastal Swamp Sclerophyll Forest TEC and Koala habitat (refer Figure 3-1). The monitoring sites will be used throughout the implementation of the OMP to assess the progress in relation to the specified performance targets and completion criteria, which will be reported as stipulated in Section 7 or otherwise stated by the Project EPBC Act controlled action approval conditions.

6.1 Habitat quality success indicators monitoring

Monitoring habitat value will be consistent with the methodology of the *Guide to determining terrestrial habitat quality* (Version 1.2) and MHQA (refer Appendix B) and the criteria weighting in Appendix C. Monitoring for habitat values will take a quantitative (measurable) and in some cases qualitative (descriptive) approach to aid precision and justification of decisions. As per the MHQA methodology, qualitative data is to be adequately supported by robust scientific evidence. Transect sites for habitat assessments will occur at the same coordinates of the original transect for uniformity in results. Habitat value assessments will be carried out by suitably qualified persons. Star pickets at the origin, 50 m mark and end have been established for easy location of transect line. Scores will be compared to the reference benchmark for the RE 12.3.5, which is analogous to the Coastal Swamp Sclerophyll Forest TEC, in addition to the condition thresholds and key diagnostics of the TEC. Figure 3-1 shows the location of the monitoring sites.

These attributes will assist in indicating the progress towards ecological maturity and increase in conditions for Coastal Swamp Sclerophyll Forest TEC and Koala habitat.

Habitat quality monitoring will be completed in years 5, 10, 15 and 20 to determine if the habitat quality score has been maintained or improved for the proposed offset site. Baseline data will be used to establish the starting condition of the environment. Where the habitat quality assessments do not show improvements in each of the habitat attributes, and the overall habitat quality for the proposed offset site, the adaptive management framework (refer Section 8.2) and performance criteria (refer Section 4.1) will be used to review the management actions and corrective actions (refer Section 9) that may be required to be implemented. The habitat quality monitoring is to be reported in the annual reporting period in the years of assessment (refer Section 7).

To track and verify the successful development of the Coastal Swamp Sclerophyll Forest TEC within the Rainforest Drive Reserve (specifically transitioning the Category X ex-pasture land in AU12 into the ecological community and AU11 progression into higher quality condition thresholds), a monitoring framework will be applied. This will employ monitoring specific conservation advice Key Diagnostic Criteria and Condition Threshold assessments in the TEC's conservation advice. Monitoring will occur in each TEC patch concurrently with MHQA surveys at 5, 10, 15 and 20 year intervals.

6.2 Rehabilitation and regeneration monitoring

The progress and success of the Coastal Swamp Sclerophyll Forest TEC and Koala habitat restoration will be monitored and assessed annually. Rehabilitation planning and implementation will be led by SCRC. Timing of monitoring is dependent upon the bush regeneration contractor. Any planting that occurs at the proposed offset site will have a prior commitment plan to maintain care of the newly planted vegetation, including the watering, mulching, weeding and use or removal of tree guard as specified in the technical specification prepared within 12 months of the OMP commencement (refer Table 5-4).

Monitoring of rehabilitated planting will include:

- Spatial data and photos of the location and extent of rehabilitated areas
- Prior to an annual replacement planting event to determine the required quantity, density and species diversity as determined by the ecological restoration plan
- Annual collection of photo evidence at the same time each year, that details the success or failure of the rehabilitated plant or area, time of event, and location
- Baseline mapping will be consulted before each rehabilitation to establish the starting condition of the environment to measure performance
- For all rehabilitated areas and using the GPS points for reference, datasheets will detail the following information:
 - Success/survival of planted stock
 - Average health and height of planted stock
 - Regeneration of naturally occurring native species
 - The presence of weed species within the rehabilitation area.

The collection of this data will be used to aid the precision and confidence of decisions and the state and rate of change to inform timely decisions on the effectiveness of the management actions and whether corrective actions are required.

Assessment against the key diagnostic characteristics and condition thresholds as stipulated in Sections 2.1 and 2.3 of the approved conservation advice for the CSSF TEC must be undertaken on year 5, 10, 15 and 20 (alongside MHQA monitoring).

Yearly monitoring should also be undertaken for inspection of the fencing to ensure no breach of the perimeter fencing has occurred from livestock or wild animals. Any signs of injured wildlife related to entanglement should be noted and investigated.

If a fence breach, wire sag, or structural failure is identified during an inspection, repair or reinstatement works, and removal of livestock, will be completed within seven business days of detection to maintain the boundary.

Any observation of wildlife entanglement, injury, or mortality along the fence line will be reported to Department of Environment, Tourism, Science and Innovation (DETSI) within 24 hours of discovery. Each log entry must record the exact GPS coordinates, species, type of wire interaction, and probable cause.

Injured native fauna will be safely extracted by a registered wildlife carer or veterinarian immediately upon discovery. A formal internal investigation into the structural cause of the injury or mortality will be completed within five business days, and if a specific fence design element is found to pose an ongoing hazard, retrofitting actions, such as installing additional high-visibility sight sleeves, will be carried out within 14 days. All fence inspection logs, breach records, and wildlife incident data will be compiled and submitted to the department in the annual environmental compliance.

Table 6-1 Proposed offset site monitoring – Rehabilitation and regeneration

Monitoring actions	Timing	Activity provider
Audit inspections to be conducted where any dead plantings are to be replaced	Annually prior to a replacement planting event	SCRC offset team or suitably qualified bush regeneration contractor ¹ .
Follow up inspections to be conducted at least 1 month after large rainfall events (>100 mm over 24 hours) where any damaged plantings are to be replaced, and debris carefully removed to prevent further damage.	Large rainfall events (>100 mm over 24 hours) within the first 5 years of establishment.	SCRC offset team or suitably qualified bush regeneration contractor.
Habitat quality assessments using MHQA to determine if the habitat quality score has been maintained and improved by 3 point or more by year 20 for the proposed offset site for the Koala and 3 or more points for the Coastal Swamp Sclerophyll Forest TEC.	MHQA undertaken at years 5, 10, 15, and 20.	SCRC offset team or suitably qualified and experienced person.
Assessment of the Coastal Swamp Sclerophyll Forest TEC against the key diagnostic characteristics and condition thresholds	Undertaken at years 5, 10, 15, and 20.	SCRC offset team or suitably qualified and experienced person.
Fencing integrity and wildlife injury monitoring	Undertaken yearly and ad hoc during planting and weed control events.	SCRC offset team or suitably qualified and experienced person.

Table note:

1 A suitably qualified bush regeneration contractor conducting monitoring should be independent of the primary contractor.

6.3 Pest and weed monitoring

6.3.1 Pest monitoring

The potential for pest animal abundance fluctuations in response to changing environmental conditions mandates that ongoing monitoring is required to adequately respond to this threatening process. Monitoring is required both before and after active control (refer Section 5.2). As such, pest monitoring will be undertaken on an annual (yearly) basis in accordance with the Pest Management Plan outlined in Table 5-5, including:

- Pest control (refer Section 5.2). Pest animal control is to be conducted as close as possible (i.e. within 12 months) after the commencement of the OMP.
- Annual pre-control monitoring/assessment (in conjunction with rehabilitation and regeneration monitoring) for the first 5 years, followed by monitoring during year 5, 10, 15, 20 (as part of the MHQA surveys)
- Additional control (if required) (refer Section 5.2).

Baseline assessment (initial pre-control assessment) will be used to determine the annual baseline level of pests across the proposed offset site and will be completed by the deployment of a minimum of three cameras over a period of 12 days at repeatable, fixed locations. These fixed locations will consider the spatial coverage and habitat variation across the proposed offset site, and will ensure that all target offset MNES habitats are assessed.

To supplement the formal annual monitoring events, incidental observations of pests (i.e. pest sighted whilst work is being undertaken for other activities) will also be recorded and included within the annual compliance reporting (refer Section 7), however will not inform Activity Index or Habitat Quality (threat) scores to avoid issues of standardised repeatability. Observations of pest are to include the following:

- Pest species
- Location of observation
- Date and time of observation
- Number of individuals
- Age class (juvenile/sub-adult/adult)

- Sex (male/female).

Results of baseline assessment will be used to determine the baseline pest relative activity level, which will be used by a specialist pest control professional, to determine the extent of pest control response required to reduce and/or maintain the annual relative activity (refer Section 5.2).

Pest monitoring will be completed by a suitably qualified and licenced pest management practitioner.

Monitoring of pest will include:

- GPS coordinated mapping to determine presence and location of sighting/evidence of presence (e.g. scats, tracks) will be recorded within the proposed offset site
- Recording and calculation of AI (as per methodology in Section 3.5.1). Only years 5, 10, 15 and 20 the scores will be incorporated into the MHQA scoring.
- A copy of the previous year's data and baseline mapping will be consulted before and after the assessments to determine any notable changes
- Create or collate data with previous years to develop an excel document listing all GPS points and pest occurrences for ongoing monitoring purposes and annual compliance reporting
- Maintain and monitor any long-term preventions and mitigation measures for grazing animals (e.g. fences or tree guards in place)
- Targeted trapping/shooting programs or a previously confirmed controlled management method will be implemented at the end of the monitoring period if deemed suitable.

Monitoring of pest and outcomes will be reported annually in the compliance report (refer Section 7). Where no pest are recorded in a monitoring period, monitoring will be reduced to every second year.

A summary of monitoring required to inform ongoing pest animal management, is summarised in Table 6-2.

Table 6-2 Proposed offset site monitoring – Pests

Monitoring actions	Timing	Activity provider
Baseline assessment (initial pre-control assessment).	■ Baseline monitoring to be undertaken within 3 months of OMP commencement.	SCRC offset team or suitably qualified or suitably qualified and licenced pest specialist.
Annual pre-control monitoring/assessment.	■ On an annual basis, prior to ongoing pest control activities. ■ Post monitoring treatments to occur within 3 months of a monitoring event which trigger management actions	SCRC offset team or suitably qualified or suitably qualified and licenced pest specialist.

The pest monitoring data will support informed decision-making by improving confidence in the effectiveness of management actions and identifying when corrective measures are needed (refer adaptive management in Section 8.2).

6.3.2 Weed monitoring

Weed monitoring will occur on an annual basis for the first 5 years and in year 5, 10, 15 and 20.

Timing of the monitoring will be consistent across years to ensure consistency with the baseline assessment. Annual monitoring species identified as Weeds of National Significance (WoNS), weed species listed under the *Biosecurity Act 2014* (Qld), species listed in the Coastal Swamp Sclerophyll TEC conservation advice (Appendix B of the conservation advice), or other tall non-native grass species in Section 3.6.2 will include:

- GPS coordinated mapping to identify and define the location of weed infestations, the relative density of weeds and the spatial coverage of weeds within the proposed offset site
- A recorded datasheet, either hard-copy or tablet form, to identify the year, date, time, observed weed species, photo location, direction, and any other notes about the weed coverage
- A copy of the previous year's data and baseline mapping will be consulted before and after the assessments to determine any notable changes and establish the starting condition of the environment

- Create or collate data with previous years to develop an excel document listing all GPS points and a weed survey map for ongoing monitoring purposes and annual compliance reporting.

Post-treatment monitoring of weeds will be completed in areas of active weed control (refer Section 5.3) to assess effectiveness of specific areas of weed control and inform future management actions. Weed monitoring will also be undertaken across the proposed offset site to assess effectiveness of weed control against performance criteria. Post-treatment monitoring will occur within six weeks of active weed control and Weed monitoring will occur annually.

A summary of monitoring required to inform ongoing weed management, is summarised in Table 6-3.

Table 6-3 Proposed offset site monitoring – Weed management

Monitoring action	Timing	Activity provider
■ Post-treatment monitoring will be completed in areas of active weed control to assess effectiveness of specific areas of weed control and inform future management actions. ■ Weed monitoring will also be completed across the proposed offset site to assess effectiveness of weed control against performance criteria (refer Section 4.1.4).	■ Weed monitoring will occur annually for the first 5 years, followed by monitoring during years 5, 10, 15 and 20 ■ Follow up weed treatment to occur within 1-3 months of monitoring events which trigger management actions	SCRC offset team or suitably qualified and licenced bush regenerator.

7 Reporting actions

The SCRC will prepare a Project Annual Compliance Report associated with the key metrics of this OMP. The Annual Compliance Report will be provided to DCCEEW for each 12 month period following the date of commencement of the proposed action and will continue for the duration of the OMP (i.e. 20 years), or otherwise in accordance with an annual date that has been agreed to in writing by the Commonwealth Minister for the Environment and Water or their delegate. The Project Annual Compliance Report will be consistent with the DCCEEW *Annual Compliance Report Guidelines* (DCCEEW, 2023a) (refer Appendix E and Appendix F)

The Project Annual Compliance Report will address how the conditions of the proposed offset site have changed in relation to the progress on OMP performance targets, interim milestones, completion criteria, management actions and monitoring actions during the 12 month period. The effectiveness of management actions and monitoring actions in achieving or contributing to achieving the completion criteria will also be included in the Annual Compliance Report. The Annual Compliance Report is adapted to document evidence that is both measurable and transparent.

Any non-compliance with the requirements of the OMP will be made transparent within the Annual Compliance Report.

During the first 5 years of the OMP, SCRC will review the suitability/success of the management actions. If the findings of this review require the OMP to be revised (i.e. outside of adaptive management), the revised OMP will be submitted to DCCEEW for review and approval prior to implementation. The periodic technical review and evaluation of the OMP will be undertaken by a relevant review committee, which will include a suitably qualified ecologist/s. Technical reviews will address, at a minimum, monitoring, risks, and response to risk levels and changing circumstances.

8 Risk assessment, adaptive management and auditing

This section provides the following information:

- Risk assessment associated with the delivery of the offset (refer Section 8.1)
- Details of how the proposed OMP will adopt an adaptive management strategy (refer Section 8.2).

8.1 Risk assessment

A qualitative risk assessment which considers the risks of achieving the objectives and outcomes for the proposed offset site is presented in this section.

The risk assessment has been prepared in accordance with the EPBC Act *Environmental Management Plan Guidelines* (DCCEEW, 2024) and characterises risk as low, medium, high or severe (refer Table 8-1), as derived from the risk likelihood (i.e. highly likely, likely, possible, unlikely or rare) (refer Table 8-2) and the risk consequence (i.e. minor, moderate, high, major or critical) (refer Table 8-3).

The risk analysis assesses the risk of failure to achieve the OMP performance targets and completion criteria. It is necessary to re-evaluate and modify the risk analysis and contingency measures throughout the duration of the implementation of the OMP, particularly if any unforeseen risks emerge or any negative outcomes identified are greater than expected.

During the first 5 years of the OMP monitoring and Project Annual Compliance Reporting, SCRC will annually review management commitments in this OMP, and if the findings of the review result in the need to revise the OMP, it will be revised and submitted to DCCEEW for review and approval prior to its implementation. It is noted that events are only addressed once in the risk assessment under the most relevant management objective, however some events are likely to impact multiple management objectives. The risk analysis is presented in Table 8-4.

Table 8-1 Risk categories

		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

Source: DCCEEW (2024)

Table 8-2 Risk likelihood

Qualitative measure of likelihood	
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

Table 8-3 Risk consequence

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

Table 8-4 Risk analysis

Management objective/ outcome	Performance targets and/or completion criteria	Event circumstance	Relevant management measure/s to manage risk of failure to achieve performance targets and/or completion criteria	Risk assessment			Risk mitigation monitoring and reporting
				Likelihood	Consequence	Residual Risk level	
Legal security	To legally secure approved offset properties for conservation.	Failure to legally secure approved offset site.	Legally secure the offset site by way of VDec under the <i>Vegetation Management Act 1999</i> (Qld) and statutory covenant under the <i>Land Title Act 1994</i> (Qld)	Rare	Moderate	Low	- Proposed action cannot commence without legally securing the offset site with a VDec. - Statutory covenant to be in place within 12 months of securing the VDec.
Increase habitat quality	The species richness and condition of the habitat quality for the two target offset MNES will be maintained or increased between each successive habitat quality assessment. Recovery of native plant species and recruitment of canopy species.	Failure to uplift the quality of habitat for the two target offset MNES associated with this OMP.	- Foraging, breeding and shelter trees prioritised for replanting efforts. - Practice hygiene procedures when entering and leaving the site, cleaning tools, boots and equipment. Follow procedures set out in the <i>DCCEEW Arrive Clean, Leave Clean guidelines</i> (DotE, 2015). - Weed and pest management.	Unlikely	Moderate	Low	- Ongoing monitoring to occur for the duration of the OMP. - Habitat quality assessments (MHQA) to be undertaken every 5 years for the Coastal Swamp Sclerophyll Forest TEC and habitat identified for the Koala. - Habitat quality assessment report will compile and make an assessment of photo point monitoring data, and habitat quality results. - Habitat quality assessment report will undertake recalculation of the proposed offset site score to determine condition trajectory and ascertain if the proposed offset site has achieved the outcome. Adaptive management, review and amendments to the OMP to occur if trajectory not on track. - A detailed report will be submitted to DCCEEW at an interval not exceeding 5 years.

Management objective/ outcome	Performance targets and/or completion criteria	Event circumstance	Relevant management measure/s to manage risk of failure to achieve performance targets and/or completion criteria	Risk assessment			Risk mitigation monitoring and reporting
				Likelihood	Consequence	Residual Risk level	
Weed management	Reduce weed infestations to the target levels as species within Section 3.7 of this OMP, assessed through annual monitoring.	Failure to control weeds.	■ Baseline weed mapping listed in Section 4.3 within the proposed offset site completed and a weed management strategy developed and implemented within 12 months of OMP commencement. ■ Initial treatment of all species identified as Weeds of National Significance (WoNS), weed species listed under the <i>Biosecurity Act 2014</i> (Qld), species listed in the Coastal Swamp Sclerophyll TEC conservation advice (Appendix B of the conservation advice), or other tall non-native grass species identified in the baseline mapping within 12 months of OMP commencement. ■ Ongoing treatment – frequency to be advised by annual performance and compliance reporting. Frequency will be high initially and drop off over the 20-year period.	Possible	Moderate	Medium	■ Weed mapping and strategy within 12 months of OMP commencement, initial treatment within 12 months. ■ Monitoring and maintenance of WoNS, restricted matters as defined by the <i>Biosecurity Act 2014</i> (Qld) and locally significant weeds within the proposed offset site and annual compliance reports. ■ Ongoing treatment – frequency to be advised by annual performance and compliance reporting.
Pest management	Occurrence of pest remains at or below levels estimated through baseline biodiversity assessments.	Failure to reduce the threat of introduced pest.	■ Development of a pest control program/management strategy within the proposed offset site in line with regional pest management strategies within 12 months of commencement. ■ Annual updates to the pest control program based on monitoring outcomes.	Possible	Moderate	Medium	■ Monitoring and maintenance of pest within the proposed offset site and annual compliance reports.

Management objective/ outcome	Performance targets and/or completion criteria	Event circumstance	Relevant management measure/s to manage risk of failure to achieve performance targets and/or completion criteria	Risk assessment			Risk mitigation monitoring and reporting
				Likelihood	Consequence	Residual Risk level	
Fire management	Maintain burn interval regimes in accordance with RE 12.3.5 fire management guidelines as defined in the Queensland REDD for the duration of the offset period.	A high intensity uncontrolled fire occurs within the proposed offset site which causes loss of habitat.	- Actions as directed by the local authority which may include prescribed burning or other techniques undertaken in consultation with the Queensland Rural Fire Brigade to manage fuel loads. - Implementation of appropriate corrective actions identified in Section 9.	Possible	Moderate	Medium	- Annual monitoring requirements to review access tracks, fire breaks, fuel loads and outcomes of controlled burns or other management techniques. - If wildfire occurs in the proposed offset site, the following actions will be undertaken: - Implement fire control - Repair any fire breaks and access tracks - Stay informed through the Rural Fire Service - Assess damage caused by the wildfire and monitor for natural regeneration. 1 month post burn habitat quality monitoring to occur with triggers to remediate if overall habitat quality has reduced since the last monitoring event. - Where natural regeneration is failing to thrive, assist natural regeneration through direct seeding and planting. - Monitoring to occur post re-planting to determine success of replaced plants – as per monitoring actions in Table 6-1.
Public access	No evidence of unauthorised access, off-track disturbance, or vegetation trampling within the offset site.	Uncontrolled public access (e.g. pedestrian off-track access, trampling) leading to habitat damage.	- Design and install highly visible, durable, and clear signage at reserve entry points. - Signage includes clear directives (e.g. "Environmental protection area, please keep out").	Unlikely	Moderate	Low	- Annual inspection of offset site for signs of unauthorised access or formation of new tracks. - Reporting: Record location and extent of access/damage in the annual compliance report. - Block access to unauthorised tracks and where necessary rehabilitate track.

Management objective/ outcome	Performance targets and/or completion criteria	Event circumstance	Relevant management measure/s to manage risk of failure to achieve performance targets and/or completion criteria	Risk assessment			Risk mitigation monitoring and reporting
				Likelihood	Consequence	Residual Risk level	
Flood management	Reestablishment of planting mortalities from large flooding events	100 mm of rainfall over 24 hours	Follow up inspections to be conducted at least 1 month after large rainfall events (>100 mm over 24 hours) where any damaged plantings are to be replaced, and debris carefully removed to prevent further damage.	Possible	Moderate	Medium	- Monitoring to occur post re-planting to determine success of replaced plants – as per monitoring actions in Table 6-1. - During La Nina event avoid, where possible, planting around peak rainfall periods (e.g. mid to late summer) to circumvent any exceptional risks of prolonged inundation.

8.2 Adaptive management of offset delivery

Adaptive management will be implemented to facilitate the success of the milestone targets and monitoring programs as outline in this OMP. An adaptive implementation program will be used to ensure uncertainty is reduced over time, and that the completion criteria are attained and maintained over the period of approval. As indicated in Section 8.1, adaptive management is a key component in reducing uncertainty associated with future risk. As more information becomes available following ongoing performance monitoring, the management and monitoring regime will be reviewed and revised to maximise the likelihood of attaining and maintaining the outcomes to be achieved by implementing the OMP.

Adaptive management will be used to incorporate changes in any of the following areas:

- Assimilation of new data or information – such as, updates to conservation advice or new threat abatement plans relevant to the species or community
- Project coordination and scheduling – to manage unforeseen disruptions to schedule such as inclement weather on contractor works for management actions and environmental consultant monitoring events
- Annual review of risks – to refresh the mitigation actions/measures should new threats be identified or stochastic events such as unplanned fires or floods occur
- Annual plan review of management measure effectiveness – to increase the frequency or change the method of management actions where monitoring performance criteria are not met
- Contingency for unplanned incidents – such as stochastic events including unplanned fires or floods.

9 Corrective actions

If performance targets and completion criteria identified within Section 4 are not met, an adaptive management strategy (refer Section 8.2) is to be adopted to ensure compliance (i.e. in instances of drought, fire, disease, or planting failure). In instances where weeds persist within the proposed offset site, or excessive mortality within revegetation zones, management strategies are to be reevaluated and updated to ensure that performance targets, interim milestones and completion criteria are met. Reviews of the proposed offset site management will occur every 3 years and/or upon failure to meet the performance targets, interim milestones or completion criteria. If it is found that the completion criteria are not met within the timeframe, the following corrective actions will be adopted:

- Where the habitat quality assessment score drops below the 4 out of 10 for the Coastal Swamp Sclerophyll Forest TEC, and 3 out of 10 for the Koala habitat or does not reach the required habitat score at the interim milestone checkpoints, management actions to restore and improve habitat will be increased in frequency and at a higher rate of control until the completion criteria are achieved
- If species identified as Weeds of National Significance (WoNS), weed species listed under the *Biosecurity Act 2014* (Qld), species listed in the Coastal Swamp Sclerophyll TEC conservation advice (Appendix B of the conservation advice), or other tall non-native grass species, or pests are detected, the management actions and frequency of the management actions will be increased until the completion criteria have been achieved
- Where vegetation rehabilitation has a success rate of below 60%, the active regeneration measures will be repeated until the completion criteria are achieved
- In the instance of unplanned fires or flooding during the monitoring interval, any negative impacts to the habitat quality score will be regarded. Areas effected will be compared to monitoring sites that remain unaffected and were previously at the same, or nearest to, the quality of the affected site. Any resulting disturbance as a consequence of these instances, for instance weed infestation, will be managed to ensure the completion criteria for that value is attained.

Any alterations to any component of this OMP will be reviewed and approved by the DCCEEW and to be accompanied by an adaptive management statement which clearly outlines the plan component to be altered and the reasoning for the alteration.

10 Implementation and monitoring schedules

Implementation of management measures, monitoring and the timing of these components is a key determining factor that will influence the successful delivery of the OMP. A summary of management measures, monitoring requirements and their associated timing is provided in Table 10-1 and Table 10-2, respectively. A risk assessment that assesses the potential to achieve this schedule is contained within Section 8.1.

Table 10-1 Implementation schedule

Management objective/ outcome	Performance targets and/or completion criteria	Management measure/s	Timing	Activity provider	Related monitoring activity
1. Increase habitat quality	The species richness and condition of the habitat quality for the two target offset MNES will be maintained or increased between each successive habitat quality assessment. Recovery of native plant species and recruitment of canopy species.	- Foraging, breeding and shelter trees should be prioritised for replanting efforts - Practice hygiene procedures when entering and leaving the site, cleaning tools, boots and equipment. Follow procedures set out in the DCCEEW Arrive Clean, Leave Clean guidelines (DotE, 2015). - Weed and pest management.	- Throughout the life of the offset. - Habitat quality assessments (MHQA) to be undertaken every 5 years for the Coastal Swamp Sclerophyll Forest TEC and habitat identified for the Koala. - A detailed report will be submitted to DCCEEW at an interval not exceeding 5 years.	Environmental professional/s that are suitably qualified and directed by the proposed offset site manager.	- Ongoing monitoring to occur for the duration of the OMP. - Monitoring will occur every five years for the duration of the OMP. - The detailed report will compile and make an assessment of photo point monitoring data, and habitat quality results. - The summary report will undertake recalculation of the proposed offset site score to determine condition trajectory and ascertain if the proposed offset site has achieved the outcome.
2. Weed management	Reduce weed infestations to the target levels as species within Section 4.3 of this OMP, assessed through annual monitoring.	- Baseline weed mapping listed in Section 4.3 within the proposed offset site completed and a Ecological Restoration Plan developed and implemented within 12 months of OMP commencement. - Initial treatment of all WoNS identified in the baseline mapping within 12 months of OMP commencement. - Ongoing treatment – frequency to be advised by annual performance and compliance reporting. Frequency will be high initially and drop off over the 20-year period.	- Weed mapping and strategy within 12 months of OMP commencement, initial treatment within 12 months. - Ongoing treatment – frequency to be advised by annual performance and compliance reporting.	Environmental professional/s that are suitably qualified and directed by the proposed offset site manager.	Monitoring and maintenance of WoNS, restricted matters as defined by the <i>Biosecurity Act 2014</i> (Qld) and locally significant weeds within the proposed offset site and annual compliance reports.

Management objective/ outcome	Performance targets and/or completion criteria	Management measure/s	Timing	Activity provider	Related monitoring activity
3. Pest management	Occurrence of pest remains at or below levels estimated through baseline biodiversity assessments.	- Development of a Pest Management Plan within the proposed offset site in line with regional pest management strategies within 12 months of commencement. - Annual updates to the pest animal control program based on monitoring outcomes.	Annual assessment.	Environmental professional/s that are suitably qualified and directed by the proposed offset site manager	Monitoring and maintenance of pest within the proposed offset site and annual compliance reports.
4. Fire management	- Maintain appropriate fire regimes to minimise the risk of high-intensity burns, protect Coastal Swamp Sclerophyll Forest TEC structure and function, and support Koala habitat quality and movement. - Fire regimes are implemented in accordance with RE 12.3.5 fire guidelines and approved prescribed burn plans. - Fire events do not result in a measurable decline in habitat quality scores for the Coastal Swamp Sclerophyll Forest TEC or Koala habitat. - Fire management supports progression toward habitat quality uplift targets and completion criteria.	- Establish Fire Management Units/Zones and integrate with the SCRC Digital Bushfire Management Plan. - Bushfire management plan (BMP) to be implemented - Prepare site-specific prescribed burn plans prior to any planned burns. - Implement mosaic prescribed burns where required to reduce fuel loads and enhance habitat structure, consistent with ecological requirements. - Undertake post-fire inspections and rehabilitation where necessary to address canopy damage, erosion or secondary weed invasion.	- Fire Management Units/Zones established and BMP within 12 months of OMP commencement. - Prescribed burns implemented as required throughout the life of the offset, in accordance with approved burn intervals and seasonal conditions. - Post-fire inspections following any planned or unplanned fire event.	SCRC offset team or suitably qualified fire ecologist/practitioner.	- Annual inspections of fuel loads, fire breaks and access infrastructure. - Post-fire monitoring of canopy health, recruitment and weed incursion. - Habitat quality monitoring (MHQA) every five years to confirm no decline below baseline and continued progress toward completion criteria.

Management objective/ outcome	Performance targets and/or completion criteria	Management measure/s	Timing	Activity provider	Related monitoring activity
5. Flood management	- Flood events do not result in a sustained decline in native vegetation cover, recruitment success or habitat quality scores. - Any flood-related planting losses are remediated to maintain progress toward rehabilitation and habitat quality uplift targets.	- Undertake targeted inspections following significant rainfall events (>100 mm in 24 hours). - Replace flood-damaged or lost plantings and stabilise affected areas where required. - Remove deposited debris that poses a risk to vegetation while retaining organic material onsite. - Adjust rehabilitation techniques, timing or species selection through adaptive management where recurrent flooding impacts are identified.	- Inspections conducted at least one month after qualifying rainfall events. - Replanting and remediation undertaken as soon as practicable following inspections. - Ongoing throughout the life of the offset	SCRC offset team or suitably qualified bush regeneration contractor.	- Rehabilitation and regeneration monitoring (including survival rates and recruitment) following significant rainfall events defined as exceeding 100 mm over a 24-hour period. - Inclusion of flood events, impacts and corrective actions in annual compliance reports.
6. Access track and exclusion fencing	- Access tracks and exclusion fencing enable delivery of management actions without causing measurable declines in habitat quality, hydrology or connectivity. - Livestock are fully excluded from the proposed offset site for the duration of the offset period. - No unauthorised access or informal track formation persists within the offset site.	- Establish minimal-impact access tracks at mapped locations, avoiding Coastal Swamp Sclerophyll Forest TEC patches, drainage lines and prolonged inundation areas where practicable. - Repair, reinstate or install wildlife-friendly exclusion fencing to prevent livestock access. - Inspect and maintain access tracks and fencing to ensure long-term functionality and minimise erosion, compaction or hydrological change. - Implement remediation measures where unauthorised access or infrastructure failure is detected.	- Access tracks established and fencing assessed within 12 months of OMP commencement. - Exclusion fencing in place prior to commencement of rehabilitation or supplementary planting works. - Annual inspections and maintenance for the duration of the offset period.	SCRC offset team or suitably qualified contractor, under direction of the offset site manager and suitably qualified ecologist where required.	- Annual site inspections for evidence of erosion, informal access, livestock presence or infrastructure failure. - Recording of access and fencing condition, incidents and corrective actions in annual compliance reports. - Habitat quality and rehabilitation monitoring to confirm no adverse impacts associated with access infrastructure.

Table 10-2 Monitoring schedule

Monitoring activity	Management needs/ questions addressed	Parameter/s measured	Survey/monitoring guidelines	Monitoring frequency	Reliability
1. Ecological condition	Improvement of habitat scores.	As per MHQA methodology	As per MHQA methodology.	■ Every 5 years.	Certain
2. Weeds	Success of the control measures.	Weed cover and species present.	Visual site inspection by suitably qualified bush regenerators.	■ Weed mapping and strategy within 12 months of commencement, initial treatment within 12 months. ■ Ongoing treatment – frequency to be advised by annual performance and compliance reporting.	Certain
3. Pests	Success of the control measures.	Relative activity of pests and control measures undertaken.	Wildlife camera surveys.	■ Annually.	Certain

11 Conclusion

The Project OMP for the proposed offset site has been developed in accordance with the overarching principles and aims of the EPBC Act Environmental Offsets Policy (DSEWPC, 2012a), request for additional information required for assessment by preliminary documentation for the Caloundra Transport Corridor Upgrade Project (EPBC 2024/09956). Adherence to the management actions and commitments contained within this document will ensure that the proposed offset will be delivered to the required standard in the specified timeframes.

12 References

- Atlas of Living Australia, 2026. *Atlas of Living Australia. Open access to Australia's biodiversity data*. [online] Available at: <https://www.ala.org.au> [Accessed 26 March 2026].
- Aurecon (2026a). *Caloundra Transport Corridor Upgrade Project Preliminary Documentation (EPBC 2024/09956)*. Prepared in response to Department of Climate Change, Energy, the Environment and Water request for additional information required for assessment by Preliminary Documentation (dated 14 November 2024).
- Aurecon (2026b). *Caloundra Transport Corridor Upgrade Offset Proposal*. Appendix J of the *Caloundra Transport Corridor Upgrade Project Preliminary Documentation (EPBC 2024/09956)*
- Bean A.R. 2024. Rhamnaceae. In Queensland Herbarium 2025. Census of the Queensland Flora and Fungi 2024. Queensland Department of Environment, Science and Innovation, Queensland Government.
- Briscoe, N. J., Handasyde, K. A., Griffiths, R. S., Porter, W. P., Krockenberger, A., & Kearney, M. R. (2014). Tree-hugging koalas demonstrate a novel thermoregulatory mechanism for arboreal mammals. *Biology Letters*, 10(6), 20140235. <https://doi.org/10.1098/rsbl.2014.0235>
- Chenoweth EPLA and Bushland Restoration Services (2012). *South East Queensland Ecological Restoration Framework: Manual*. Prepared on behalf of SEQ Catchments and South East Queensland Local Governments, Brisbane
- Department of Agriculture, Water and the Environment (2021). *Conservation Advice for the Coastal swamp sclerophyll forests of south-eastern Australia*. Available at: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/171-conservation-advice.pdf>
- Department of Agriculture, Water and the Environment (2022a). *Conservation Advice for Phascolarctos cinereus (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory*. Available at: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/85104-conservation-advice-12022022.pdf>
- Department of Agriculture, Water and the Environment (2022b). National Recovery Plan for the Koala *Phascolarctos cinereus* (combined populations of Queensland, New South Wales and the Australian Capital Territory). Available at: [National Recovery Plan for the Koala Phascolarctos cinereus \(combined populations of Queensland, New South Wales and the Australian Capital Territory\) - DCCEEW](#)
- Department of Climate Change, Energy, the Environment and Water (2023a). Annual Compliance Report Guidelines – Reporting under the Environment Protection and Biodiversity Conservation Act 1999. Canberra. Available at: [Annual Compliance Report Guidelines](#).
- Department of Climate Change, Energy, the Environment and Water (2023b). *Offsets Assessment Guide*. Last updated 23 October 2023. Available at: [Offsets assessment guide - DCCEEW](#).
- Department of Climate Change, Energy, the Environment and Water (2024). *Environmental Management Plan Guidelines, Commonwealth of Australia*. March 2024. Version 1.2. Department of Climate Change, Energy, the Environment and Water, Canberra. Accessed of 05/08/2025. Available at: <https://www.dcceew.gov.au/sites/default/files/documents/environmental-management-plan-guidelines.pdf>.
- Department of Environment and Heritage Protection (DEHP) (2017). *Guide to determining terrestrial habitat quality*. Version 1.2. Queensland Department of Environment and Science, Brisbane. Available at: Guide to determining terrestrial habitat quality
- Department of Environment and Science (2021). *Regional ecosystem description database*. Queensland Department of Environment and Science, Brisbane. Accessed on 14/11/2022. Available at: <https://www.data.qld.gov.au/dataset/regional-ecosystem-description-database>.
- Department of Environment and Science (2022a). *BioCondition Benchmarks*. Queensland Department of Environment and Science, Brisbane. Accessed on 2/11/2022. Available at: <https://www.qld.gov.au/environment/plants-animals/biodiversity/benchmarks#benchmarks>.

Department of Environment and Science (2022b) Queensland Parks and Wildlife Service Planned Burn Guidelines: Southeast Queensland bioregion of Queensland. Queensland Parks and Wildlife Service. Department of Environment and Science, Queensland Government.

Department of Environment, Water, Heritage and the Arts (2010a). *Survey guidelines for Australia's threatened bats: Guidelines for detecting bats listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999*. Available at:

<https://www.dcceew.gov.au/sites/default/files/documents/survey-guidelines-bats.pdf>

Department of Sustainability, Environment, Water, Population and Communities (2011). *Survey guidelines for Australia's threatened mammals: Guidelines for detecting mammals listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999*. Available at:

<https://www.dcceew.gov.au/sites/default/files/documents/survey-guidelines-mammals.pdf>

Department of Sustainability, Environment, Water, Population and Communities (2012a). *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*. Canberra: Department of Sustainability, Environment, Water, Population and Communities. Available at:

<http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>.

Department of Sustainability, Environment, Water, Population and Communities (2012b). *How to use the Offsets Assessment Guide*. Last updated 14 July 2022. Available at: [How to use the Offsets assessment guide](#).

Department of the Environment (2013). *Matters of National Environmental Significance: Significant impact guidelines 1.1*, Environment Protection and Biodiversity Conservation Act 1999. Available at:

https://www.awe.gov.au/sites/default/files/documents/nec-guidelines_1.pdf

Department of the Environment (2015). *Arrive Clean, Leave Clean*. Commonwealth of Australia 2015.

Available at: [Arrive Clean, Leave Clean: Help prevent the spread of invasive plant diseases and weeds threatening our native plants, animals and ecosystems](#).

Graham, M., and Taylor, K. (2018.5). Fire, Weeds and the Native Vegetation of New South Wales. A report prepared by the Hotspots Fire Project. NSW Rural Fire Service/ Nature Conservation Council. Accessed here: <http://hotspotsfireproject.org.au/download/fire-weeds-and-native-vegetation-of-nsw.pdf>

Jenks, K. E., Chanteap, P., Damrongchainarong, K., Cutter, P., Cutter, P., Redford, T., Lynam, A. J., Howard, J., and Leimgruber, P. 2011. Using relative abundance indices from camera-trapping to test wildlife conservation hypotheses – an example from Khao Yai National Park, Thailand. *Tropical Conservation Science* Vol. 4 (2):113--131. Available online: www.tropicalconservationscience.org

Mella, V. S. A., Cooper, C. E., Karr, M., Krockenberger, A., Madani, G., Webb, E. B., & Krockenberger, M. B. (2024). Hot climate, hot koalas: the role of weather, behaviour and disease on thermoregulation. *Conservation Physiology*, 12(1), coae032. <https://doi.org/10.1093/conphys/coae032>

Mitchell, D. L., Soto-Berelov, M., & Jones, S. D. (2021). Regional variation in forest canopy height and implications for koala (*Phascolarctos cinereus*) habitat mapping and forest management. *Forests*, 12(11), 1494. <https://doi.org/10.3390/f12111494>

Neldner, V.J., Wilson, B.A., Dillewaard, H.A., Ryan, T.S., Butler, D.W., McDonald, W.J.F, Richter, D., Addicott, E.P. and Appelman, C.N. (2023) *Methodology for survey and mapping of regional ecosystems and vegetation communities in Queensland*. Version 7.0. Updated December 2023. Queensland Herbarium, Queensland Department of Environment and Science, Brisbane.

New South Wales Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) (2026) NSW National Parks and Wildlife Service: Monitoring standard for large feral animals. Available at [Monitoring standard for large feral animals](#)

Queensland Herbarium (2015). *BioCondition: A Conditional Assessment Framework for Terrestrial Biodiversity in Queensland. Assessment Manual*. Version 2.2. Queensland Herbarium, Queensland Department of Environment and Science, Brisbane. Accessed on 1/11/2022. Available at: https://www.qld.gov.au/data/assets/pdf_file/0029/68726/BioCondition-assessment-manual.pdf.

Queensland Herbarium (2018) *Technical Descriptions of Regional Ecosystems*, (2018) (Queensland Department of Environment, Science and Innovation: Brisbane).

Standards Reference Group Society for Ecological Restoration Australasia (2021) *National Standards for the Practice of Ecological Restoration in Australia*. Edition 2.2. Society for Ecological Restoration Australasia. Accessed on 11/11/2022. Available at: <http://www.seraustralasia.com/standards/home.html>.

Sunshine Coast Regional Council (2022). Koala Conservation Plan. Environment Levy Program. Sunshine Coast Regional Council. Available at: https://assets-au-SCRC.kc-usercontent.com/330b87ea-148b-3ecf-9857-698f2086fe8d/0ae000b1-708e-4b03-b07f-780ccb6daf0a/Koala%20Conservation%20Plan%20October%202022.pdf?utm_source=sunshine%2Bcoast%2Bcouncil&utm_medium=website

Youngentob K., Marsh K., Skewes J. (2021) *A review of Koala habitat assessment criteria and methods*. Available at: <https://www.dcceew.gov.au/sites/default/files/documents/review-Koala-habitat-assessment-criteria-and-methods-2021.pdf>.

Appendix A

Profiles of protected matters applicable to the proposed offset site

Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland Threatened Ecological Community

The Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland threatened ecological community (Coastal Sclerophyll Swamp Forest TEC) includes the plants, animals and other organisms typically associated with forested palustrine wetlands, or swamp forests, found in the temperate to subtropical coastal valleys of Australia's east coast. The Coastal Sclerophyll Swamp Forest TEC often has a layered canopy, dominated by melaleucas and/or *Eucalyptus robusta*. The ecological community occurs between the Great Dividing Range and the coastline from near Gladstone in Queensland, through to the south coast of New South Wales.

The structure of the Coastal Swamp Sclerophyll Forest TEC varies from open woodland to closed forest with a crown cover of at least 10% and typically no more than 70%. The understorey has a diverse range of hydrophytic plants ranging from freshwater sedges, ferns and grasses.

The following key diagnostic characteristics from the Coastal Swamp Sclerophyll Forest TEC conservation advice (Department of Agriculture, Water and the Environment (DAWE) 2021) identify the ecological community:

- Occurs on the mainland and islands near to the coast (within 20 km) from South East Queensland to south-eastern NSW
- Occurs in coastal catchments typically below 20 m ASL, but occasionally up to 220 m ASL.
- Occurs on hydric soils with inundation patterns ranging from intermittent to episodic.
- The vegetation structure varies from tall closed to open forest to woodland, to dense (closed) shrubland or scrub forest. Minimum crown cover is at least 10%, but it is more typically in the range 50% to 70%.
- The canopy is typically dominated or co-dominated by *Melaleuca quinquenervia* and/or *Eucalyptus robusta*.
- Other tree species may occur in the canopy (or sub-canopy) in some areas, but they are not dominant across a patch
- The understorey typically includes a variable ground layer, depending on the canopy cover and inundation rate/period.

The main ongoing threats to this TEC include changed hydrological regimes, vegetation clearance, invasive fauna, impacts associated with fragmentation of remnants, disturbance from urbanisation and recreational activity, diseases and pathogens, altered fire regimes and weeds.

The Coastal Swamp Sclerophyll Forest TEC has been extensively cleared for development purposes because it primarily occurs on flat and relatively fertile soils. Clearing has dramatically decreased its extent, and the resulting fragmentation has made the TEC more vulnerable to threats such as weed invasion.

Weeds compete with native species for space, light, water and nutrients. They also suppress and out-compete mid-storey and canopy trees. Transformer weeds are highly invasive plants with the potential to seriously alter the structure and function of the TEC they invade, thereby 'transforming' them into a different system.

Urbanisation results in impacts such as the invasion of bushland by domestic dogs and cats, rubbish dumping, trampling, garden escapes, firewood collection, impacts from vehicles, the creation of informal trails, and arson. Urbanisation also increases pressure to reduce bushfire fuel loads that may be detrimental to the ecological community.

Koala

The Koala is a medium-sized, arboreal marsupial endemic to Australia, with a range from north-eastern Queensland to the southeast corner of South Australia.

Within Queensland, the highest density of the Koala population occurs in South East Queensland. Lower densities occur through central and eastern areas (Youngentob et al. 2021).

Koalas naturally inhabit a range of temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by *Eucalyptus* species and their habitat can be broadly defined as any forest or woodland containing species that are known Koala food trees, or shrubland with emergent food trees. The distribution of this habitat is largely influenced by land elevation, annual temperature and rainfall patterns, soil types and the resultant soil moisture availability and fertility. Preferred food and shelter trees are naturally abundant on fertile clay soils.

In coastal lowlands in Queensland, Koalas are also found in vegetation communities dominated by *Melaleuca* or *Casuarina* species (Youngentob et al. 2021).

The following habitat critical to the survival of the species has also been defined in the species' conservation advice (DAWE 2022a):

- Whether the habitat is used during periods of stress (examples: flood, drought or fire)
- Whether the habitat is used to meet essential life cycle requirements (examples: foraging, breeding, nesting, roosting, social behaviour patterns or seed dispersal processes)
- The extent to which the habitat is used by important populations
- Whether the habitat is necessary to maintain genetic diversity and long-term evolutionary development
- Whether the habitat is necessary for use as corridors to allow the species to move freely between sites used to meet essential life cycle requirements
- Whether the habitat is necessary to ensure the long-term future of the species or ecological community through reintroduction or re-colonisation, and
- Any other way in which habitat may be critical to the survival of a listed threatened species or a listed threatened ecological community.

Koalas are folivores, feeding primarily during the dawn, dusk or night periods. The Koala's diet is restricted mainly to *Eucalyptus* spp.; however, they may also consume foliage of related genera (Family: Myrtaceae), including *Corymbia* spp., *Angophora* spp. and *Lophostemon* spp. (Youngentob et al. 2021).

Whilst Koalas maintain a defined home-range, they are not considered to be territorial, and there may be significant overlap in the distribution of home-ranges. Home range size is also variable with those occurring within poorer quality habitat, being relatively larger in size, when compared to those that are located within higher quality habitat.

Koalas have naturally low fecundity, with females potentially producing a single offspring a year, with births occurring within the warmer months of the year (e.g. October through to May). The estimated lifespan of wild Koalas is generally greater than 15 years in females and 12 years in males.

The main threats to the Koala include:

- Habitat loss and fragmentation
- Mortality associated with dog attacks and vehicle strikes
- Disease (i.e. Chlamydiosis)
- Climate change and drought
- Other threats such as Bell Miner Associated Dieback and Myrtle rust, both of which impact the health and quantity of available forage (DAWE, 2022a).

Appendix B

Methodology to assess habitat quality

Modified Habitat Quality Assessment

For land-based offsets, the proposed offset site is measured by undertaking a habitat quality assessment in accordance with the EPBC Act Offsets Assessment Guide (DCCEEW, 2023b) and *How to use the Offsets Assessment Guide* (DSEWPC, 2012b). The unpublished MHQA methodology (DCCEEW, 2024) was chosen as the preferred and most thorough method of assessing habitat quality at the impact and proposed offset site. The MHQA adapts the methodology outlined in the Queensland *BioCondition Assessment Manual* (Version 2.2) (Queensland Herbarium, 2015) and the *Guide to determining terrestrial habitat quality* (Version 1.2) (DEHP, 2017). The MHQA introduces an additional habitat factor, the species stocking rate, in order to satisfy the requirements of EPBC Act Offset Policy Principles. Further modifications include the changes to categorisation of the assessment criteria for species habitat indexes, as presented and justified in Appendix C.

The method utilises benchmark scores to ensure assessments are measured to a known standard, repeatable and consistent in determining habitat quality. Two rounds of habitat quality assessments were conducted at the impact area and at the proposed offset site by two suitably qualified ecologists in March 2026.

This MHQA approach is appropriate for the Koala as it quantifies available habitat features. Attributes such as the density of large trees, the quality and extent of foraging, breeding and shelter habitat, are weighted in scoring within each Assessment Unit (AU). Surveys for the Koala were incorporated into justification for species stocking rate attributes in accordance with *A review of Koala habitat assessment criteria and methods* (Youngentob et al. 2021). The specific methods deployed for Koala surveys located at the Project impact area included thermal drone surveys, bioacoustic monitoring, and Koala scat detection dogs.

Initial confirmation that the Coastal Swamp Sclerophyll Forest TEC occurs within the proposed offset site was undertaken using the criteria identified in the key diagnostics and condition threshold outlined in the Coastal Swamp Sclerophyll Forest TEC conservation advice (DAWE 2021). The location of appropriate habitat for the Coastal Swamp Sclerophyll Forest TEC subject to this OMP within the proposed offset site boundary is mapped in Figure 2-2.

Assessment Units

In determining habitat quality scores, habitat areas are first delineated into AUs. An AU refers to an area or a group of areas within the matter area (i.e. the proposed offset site or impact area) that is homogenous in vegetation community classification (i.e. Regional Ecosystem (RE)) and broad condition state (i.e. remnant, regrowth or non-remnant). Each AU reflects a particular community with similar structure, function and quality of habitat. Sampling sites were then selected for each AU and site-based attribute data and species habitat attribute data was collected at each sampling site.

Vegetation assessments were undertaken in accordance with Neldner et al. (2022) and comprised quaternary assessments to determine REs and broad condition status. Sample site locations were chosen within a representative assessment unit. AUs consist of relatively homogeneous vegetation patches characterised by a distinct RE and broad condition state.

Within Rainforest Drive Reserve offset area, two AUs were identified. The two AUs were observed to be in alignment with the required habitat for all target offset MNES required for the proposed offset and are described as follows:

- AU11 (15.64 ha) – representative of RE 12.3.5 (*Melaleuca quinquenervia* on coastal alluvium) in a regrowth condition status – two sampling transects were conducted in this AU
- AU12 (13.71 ha) – representative of RE 12.3.5 in a cleared broad condition status – two sampling transects were conducted in this AU.

Habitat quality scoring

Sampling transects were completed using the methodologies described by the *Guide to determining terrestrial habitat quality* (Version 1.2) (DEHP, 2017). The approach for assessing habitat quality for the Koala weighs habitat quality for species using three key indicators, being site context, site condition, and species stocking rate, with the default ratios being 30%, 30% and 40%, respectively. The ratio at which these indicators make up a species overall habitat quality were adjusted based on a variety of factors, including:

- The cryptic nature and detectability of the species
- The species' stochastic or intermittent use of habitat
- The significance of specific attributes within the indicators (e.g. the quality and availability of food and foraging/breeding habitat, threats, patch size, and connectivity).

Table B.1 presents a summary of the indicator weightings with associated justification used in the assessment of habitat quality for each of the target offset MNES subject to this OMP.

Table B.1 Habitat quality Indicator weightings

Matter	Ratio	Justification
Coastal Swamp Sclerophyll Forest TEC	70% Site condition 30% Site context	Default weightings considered suitable based on community requirements.
Koala habitat	30% Site Condition 30% Site Context 40% Species stocking rate	Default weightings provided by DCCEEW for MHQA considered suitable based on species habitat requirements and detectability.

Site condition

Site condition data was collected within 100 m x 50 m areas (including various sub-plots) for each AU, weighted in accordance with the Terrestrial Habitat Quality Guide and compared to BioCondition benchmark values for the relevant RE benchmark (Queensland Herbarium, 2025). Quality and availability of food, foraging/breeding habitat and shelter was also incorporated into the assessment of site condition (refer for further explanation of weighting and justification).

The quality assessments measured the following site-based condition attributes:

- Large trees
- Tree canopy height
- Recruitment of canopy species
- Tree canopy cover (%)
- Shrub layer cover (%)
- Coarse woody debris
- Non-native plant cover
- Native perennial grass cover (%)
- Native plant species richness for four lifeforms (trees, shrubs, grasses, forbs and other)
- Leaf-litter cover
- Quality and availability of food and foraging/breeding habitat (for fauna values only)
- Quality and availability of shelter (for fauna values only).

It should be noted that these attributes vary from the BioCondition framework and terrestrial habitat guidelines, as DCCEEW (2024) provides guidance to include 'Quality and availability of food and foraging/breeding habitat' and 'Quality and availability of shelter' (both for fauna values only) under the site condition assessment.

As the Project location occurs in South East Queensland, the subregion is considered as fragmented and therefore, landscape attributes, over distance to permanent water, were used to determine the landscape attribute score.

Site context

The habitat quality assessments measured the following landscape attributes for site context:

- Size of patch
- Context
- Connectivity
- Ecological corridors
- Role of site location to TEC overall population in the State
- Threats to the species.

It should be noted that these attributes vary from BioCondition framework and terrestrial habitat quality guidelines, as DCCEEW (2024) provides guidance to include 'Threats', 'Role of the site location' and 'Species mobility capacity' under the site context assessment.

The landscape attributes were calculated and measured using the geospatial systems. The score was derived using calculations provided as prescribed in the *Guide to determining terrestrial habitat quality* (Version 1.2) (DEHP, 2017).

Species stocking rate

Species stocking rates are established using results from surveys conducted with best-practice techniques designed to maximise detectability of the target species, as well as information about the species derived from peer reviewed studies and conservation advice. Surveys were deployed in optimal conditions and applied a survey effort in accordance with the relevant species' survey guidelines. For species with adequate population data, estimated density ranges were derived from database records. The following attributes were assessed for the species stocking rates:

- Presence detected on or adjacent to the site
- Species usage on the site
- Approximate density (per ha)
- Role/importance of species population on site, this attribute was broken down into the following sub-attributes:
 - Key source population for breeding
 - Key source population for dispersal
 - Necessary for maintaining genetic diversity
 - Near the limit of the species range.

The species stocking rate assessments are detailed in DCCEEW (2024). Justification of scores used for the assessment are provided in the Offset Proposal, Appendix I of the Preliminary Documentation (Aurecon, 2026b).

Appendix C

Modified Habitat Quality Assessment results and justification

Offset Site - CSSF TEC					Indicator score per AU		Justification
Key habitat indicator	Habitat Criteria	Indicator	Indicator weighting	Scoring guidance	AU11	AU12	
CSSF TEC							
Habitat index	Role of site location to TEC overall population in the state	-	-	As per the MHQA (i.e. in accorddnce with Queensland Guide to Determining Terrestrial Habitat Quality Version 1.2 (DEHP 2017))	5	1	The patch located at the impact site meets the key diagnositic characteristics and condition thresholds as per the conservation advice of the TEC. As such the AU11 regrowth patches have been given a 5 and the AU12 cleared patches have been given a 1 as they are adjacent to the TEC and have potential to be restored in the future.
	Threats to the TEC	Changed hydrological regime	17%	1 = Severely Altered: Extensive, permanent modifications to surface or groundwater flows (e.g., major drainage or bundling) severely impacting wetland function. 7 = Moderately Altered: Localised or seasonal disruptions to natural hydrology, causing minor variations in soil moisture or inundation periods. 15 = Intact Hydrology: Unaltered, natural hydrological regimes and overland flow paths are maintained across the entire community.	7	7	Historically some minor channels have been dug with minor berms existing from the fill. Overall the majority of the site maintains its natural hydrology.
		Average:			7		
		Native vegetation clearing	17%	1 = Non-remnant / Category X 7 = Remnant (Category B) or High Value Regrowth (Category C) 15 = Category A or Statutory Covenant	7	1	The site contains a mix of remnant/regrowth and Category X vegetation.
		Average:			4		
		Fragmentation of remnants and habitats	16%	1 = The site is functionally isolated from all other suitable patches in the landscape. High edge-to-area ratio with severe barriers to flora/fauna dispersal. 7 = Patchwork habitat structure with localized edge effects, but maintaining partial connectivity corridors to larger regional tracts. 15 = Expansive, well-connected habitat patch with minimal edge-to-interior ratios and intact ecological corridors.	7	1	The site is highly fragmented with AU12 being more exposed to fragmentation effects than AU11 which is currently connected to some remnant vegetation.
		Average:			4		
		Invasive fauna	5%	1 = Activity Index (AI) is more than 1 7 = Activity Index (AI) less than 1 but more than 0.24 15 = Activity Index (AI) is less than 0.24	7	7	Foxes were observed in the offset area during baseline surveys. AI score was 0.35.
		Average:			7		
		Disturbance from urbanisation and recreational activity	10%	1 = Severe edge pressures from adjacent urban zones, unauthorised trail creation, and high human foot traffic. 7 = Periodic, low-impact recreational use confined to managed walking tracks with localised edge effects. Some neighbouring residential development. 15 = Remote from residential development or situated within protected areas with zero edge pressures.	7	7	The site is in an urban area of the Sunshine Coast and there is a moderate risk of disturbance from urbanisation.
		Average:			7		
		Weed	10%	1 = Widespread dominance of weeds displacing native understorey and suppressing recruitment. Defined as exceeding 50% weed cover 7 = Patchy or localized weed distribution, primarily restricted to disturbed edges, with native species dominant in the core. Defined as between 5 and 50% weed cover 15 = Negligible weed presence (e.g., <5% cover) under an active, targeted eradication program.	4	1	Invasive weeds such as Setaria grass and Devil's fig cover much of the site.
		Average:			2.5		
		Diseases and pathogens	5%	1 = Confirmed presence or extreme vulnerability to high-impact pathogens (e.g., Myrtle Rust or Phytophthora) causing dieback. 7 = Low-level, stable presence of disease or proximity to known vectors, with minor structural impacts. 15 = No visible symptoms or evidence of pathogens, backed by active monitoring and biosecurity protocols.	15	15	The site has no unusal risks for diseases or pathogens.
		Average:			15		
		Grazing pressures	5%	1 = High, unsustainable pressure from livestock or feral herbivores causing soil compaction and loss of understorey recruitment. 7 = Low-intensity or managed seasonal grazing regimes that permit partial understorey recovery. 15 = Total exclusion of domestic livestock and effective control of feral herbivores, ensuring natural regeneration.	7	7	The site was formerly a grazing property and there are adjacent grazing properties so there is moderate risk (no cattle currently on site).
		Average:			7		
		Increased frequency of Bushfire	15%	1 = No bushfire management or mitigation measures are implemented within the impact or offset area 7 = Bushfire management measures are implemented within the matter area, but they do not address species specific requirements 15 = A Bushfire Management Plan, incorporating species specific fire management requirements, is actively implemented within the impact or offset area	1	1	No bushfire management plan is currently drafted for the site
		Average:			1		

Offset Site - Koala							
Key habitat indicator	Habitat Criteria	Indicator	Scoring guidance	Indicator weighting	Indicator score per assessment unit (average of transects for each AU)		Justification
Koala							
Species habitat condition	Quality and availability of food and foraging habitat	Total canopy cover % of locally important koala habitat trees (LIKT)	0 = No LIKTs present 2 = LIKT species present but only juvenile trees (less than 10cm Diameter at Breast Height) present 4 = LIKT species present with <20% cover 6 = LIKT species present with ≥ 20-50% cover 10 = LIKT tree species present with ≥ 50% cover	80%	2	0	As described by Youngentob et al. (2021), LIKTs within the South-East Queensland bioregion comprises: <i>Corymbia citriodora</i>, <i>C. henryi</i>, <i>Eucalyptus acmenoides</i>, <i>E. andrewslii</i>, <i>E. baileyana</i>, <i>E. bancroftii</i>, <i>E. brownii</i>, <i>E. camaldulensis</i>, <i>E. campanulata</i>, <i>E. carnea</i>, <i>E. crebra</i>, <i>E. deanei</i>, <i>E. decorticans</i>, <i>E. drepanophylla</i>, <i>E. dunnii</i>, <i>E. dura</i>, <i>E. eugenoides</i>, <i>E. exserta</i>, <i>E. fibrosa</i>, <i>E. grandis</i>, <i>E. hallii</i>, <i>E. helidonica</i>, <i>E. laevopinea</i>, <i>E. latisinensis</i>, <i>E. longirostrata</i>, <i>E. major</i>, <i>E. melanophloia</i>, <i>E. microcarpa</i>, <i>E. microcorys</i>, <i>E. moluccana</i>, <i>E. obliqua</i>, <i>E. ochrophloia</i>, <i>E. orgadophila</i>, <i>E. planchoniana</i>, <i>E. populnea</i>, <i>E. portuensis</i>, <i>E. propinqua</i>, <i>E. psammitica</i>, <i>E. punctata</i>, <i>E. racemosa</i>, <i>E. resinifera</i>, <i>E. robusta</i>, <i>E. saligna</i>, <i>E. seeana</i>, <i>E. siderophloia</i>, <i>E. sideroxylon</i>, <i>E. tereticornis</i> and <i>E. tindaliae</i>. Sporadic <i>E. tereticornis</i> trees were found within AU11. No LIKTs were found in AU12.
			Large trees	0 = no large trees 5 = 0-50% of benchmark 10 = >50% of benchmark	20%	2.5	0
	Quality and availability of shelter habitat	Total canopy cover % of suitable Koala shelter trees (ancillary + LIKT)	0 = 0-10% cover of LIKT and ancillary tree species 4 = 10-20% cover of LIKT and ancillary tree species (>10cm DBH). 7 = 21-50% cover of LIKT and ancillary tree species (>10cm DBH). 10 = 50-100% cover of LIKT and ancillary tree species (>10cm DBH).	80%	7	0	The > 10 cm DBH threshold and list of ancillary species was derived from a review of koala habitat assessment criteria and methods (Youngentob et al., 2021). <i>Melaleuca quinquenervia</i> was the primary canopy species in AU11 with high cover. There was no canopy in AU12.
		Large trees	0 = no large trees 5 = 0-50% of benchmark 10 = >50% of benchmark	20%	2.5	0	Large mature canopy trees were observed on the site. While smaller trees provide supplementary structural elements, larger and more mature canopy trees are critical for diurnal resting and thermoregulation, offering dense shade, stable microclimates, and massive trunks that koalas physically embrace to dissipate body heat (Briscoe et al., 2014; Mella et al., 2024; Mitchell et al., 2021). Consequently, the presence of these substantial trees provides necessary protection against thermal stress and dehydration, establishing them as a foundational component of shelter habitat within the area (Briscoe et al., 2014; Mitchell et al., 2021). A few large non-eucalypt trees were found in AU11. No large trees were found in AU12.
Habitat index	Role of site location to species overall population in the state	-	As per the MHQA (i.e. in accordance with Queensland Guide to Determining Terrestrial Habitat Quality Version 1.2 (DEHP 2017)	100%	4	1	AU11 is primarily CSSF TEC in moderate - good condition. Although it doesn't provide much foraging habitat currently it is shelter and ancillary habitat, likely to be habitat critical. AU12 is cleared land covered in Setaria grass so unlikely to be habitat critical.
	Threats to species	Proximity to roads	1 = High risk of mortality from vehicle strike: Maintained gravel or sealed roads (proxy for regular vehicle speeds of up to 70 km/h) within the site 7 = Moderate risk of mortality from vehicle strike: Unmaintained tracks eg farm tracks (proxy for regular vehicle speeds of up to 50 km/h) within the site 15 = Low risk of mortality from vehicle strike: No vehicle formed tracks associated within or neighbouring the site or maximum mandated speeds of 40 km/h	10%	7	7	Roads adjacent to the site are Rainforest Drive and Meridian Way (quiet, low use roads) and Kawana Way Link Road (busy 80km/hr road south of the site).
		Area occupied by predators (i.e. dogs)	1 = Dog Activity index is more than 1 7 = Dog Activity index is less than 1 but more than 0.24 15 = Dog Activity index is less than 0.24	10%	15	15	No dogs sighted in camera trap pest surveys. One fox sighted. Foxes are a low risk for koalas.
		Broadscale clearing/fragmentation or selective removal of canopy trees	1 = Non-remnant / Category X 7 = Remnant (Category B) or High Value Regrowth (Category C) 15 = Category A or Statutory Covenant	40%	7	1	Broadscale clearing has occurred in the area on the site in the past. The site could be cleared by SCRC in the future. AU11 has a lesser risk of being cleared as it is CSSF TEC and would likely have to be assessed.
		Increased frequency of Bushfire	1 = No bushfire management or mitigation measures are implemented within the impact or offset area 7 = Bushfire management measures are implemented within the matter area, but they do not address species specific requirements 15 = A Bushfire Management Plan, incorporating species specific fire management requirements, is actively implemented within the impact or offset area	40%	1	1	Currently the offset site has a large coverage of South African pigeon grass in the cleared areas which could create hot fires that could reach into the canopy via fuel laddering. Although much of the cleared areas are inundated it would not take long to dry out in a drought. The regrowth areas are primarily <i>Melaleuca quinquenervia</i> which can easily burn.
	Species mobility capacity	-	1 = Severely Restricted - The site is functionally isolated from all other suitable Koala habitat in the landscape. 76-100% reduction in capacity by major barriers 4 = Highly Restricted - Movement is partially restricted by one or more significant barriers that reduce connectivity and increase mortality risk (51-75% reduction in capacity). Barriers are present (e.g., busy secondary roads, buildings or wide cleared paddocks) that periodically or incompletely restrict movement but do not completely isolate a population. 7 = Movement is mostly unconstrained, but minor barriers or limiting factors exist. Connectivity is generally good. Barriers are typically low-impact (e.g., narrow, low-traffic roads, tracks, or minor fencing) that may pose a low-level reduction to mobility (26-50%. Movement paths may contain dense groundcover or have low canopy cover but are still utilised. 10 = The site is fully connected and forms an integral part of a larger, viable Koala habitat network. Movement is unconstrained by natural or artificial barriers (e.g., 0–5% reduction in capacity). Movement corridors are wide, continuous, and safe, allowing for full dispersal and genetic exchange with the broader Koala population.	100%	7	4	While connectivity is generally good to the north of the site through to Maroochy River National Park, to the south connectivity is very poor, with large areas of cleared paddocks and busy major roads (i.e. Caloundra Road) existing between habitat patches. Paddocks whilst may provide movement can lead to an increase in predation (Sparkes et al 2025;) Additionally within the site itself mobility is limited by thick patches of tall Setaria sphacelata grass (AU12) between patches of regrowth vegetation (AU11). Therefore AU12 has been given a lower mobility capacity score than AU11.
Species stocking rate	Approximate density (per ha)	Koala records on ALA within the last 5 years and 5km ² or koalas recorded within or properties adjacent to the offset area ² .	0 = no koala records 10 = 1-10 koala desktop records within 5 km radius within the last 30 years (ALA, 2025) or 1 koala recorded within the offset area or immediately surrounding the offset area 20 = 10-20 koalas desktop records within 5 km radius within the last 30 years (ALA, 2025) or 2 to 3 koalas recorded within or immediately surrounding the offset area 30 = >20 koala desktop records within5 km radius within the last 30 years (ALA, 2025) or ≥4 koalas or immediately surrounding the offset area	100%		10	There are 8 verified koala records with a confirmed date (<30 yrs ago) within 5 km of the offset site.
	Presence detected on or adjacent to site (neighbouring property with connecting habitat)	-	As per the MHQA (i.e. in accordance with Queensland Guide to Determining Terrestrial Habitat Quality Version 1.2 (DEHP 2017)	100%		0	No Koala were observed in the proposed offset site and no records surrounding the offset site. It is considered unlikely to be any koalas present adjacent to the offset site.
	Species usage of the site (habitat type and evidenced usage)	-		100%		5	There was no foraging habitat present for koalas on the offset site. The regrowth patches function as potential dispersal habitat which is a score of 5. Whilst some foraging trees exist they are currently very isolated
	Role/importance of species population on site	-		100%		0	The habitat found on the proposed offset site as it currently stands is unlikely to be important for maintaining genetic diversity. As a foraging location only sporadic LIKTs are present in low densities. Regrowth patches are dominated by Melaleuca quinquenervia. The habitat is unlikely to be a key source for breeding or dispersal nor is it near the limit of the species range.

80%

2

0

As described by Youngentob et al. (2021), LIKTs within the South-East Queensland bioregion comprises: *Corymbia citriodora*, *C. henryi*, *Eucalyptus acmenoides*, *E. andrewsii*, *E. baileyana*, *E. bancroftii*, *E. brownii*, *E. camaldulensis*, *E. campanulata*, *E. camea*, *E. crebra*, *E. deanei*, *E. decorticans*, *E. drepanophylla*, *E. dunnii*, *E. dura*, *E. eugenioides*, *E. exserta*, *E. fibrosa*, *E. grandis*, *E. hallii*, *E. helidonica*, *E. laevopinea*, *E. latisinensis*, *E. longirostrata*, *E. major*, *E. melanophloia*, *E. microcarpa*, *E. microcorys*, *E. moluccana*, *E. obliqua*, *E. ochrophloia*, *E. orgadophila*, *E. planchoniana*, *E. populnea*, *E. portuensis*, *E. propinqua*, *E. psammitica*, *E. punctata*, *E. racemosa*, *E. resinifera*, *E. robusta*, *E. saligna*, *E. seeana*, *E. siderophloia*, *E. sideroxylon*, *E. tereticornis* and *E. tindaliae*.

Sporadic *E. tereticornis* trees were found within AU11. No LIKTs were found in AU12.

	AU11										AU12									
Assessment Unit - Regional Ecosystem	AU11 (12.3.5 regrowth)				AU11 (12.3.5 regrowth)				AU11 (12.3.5 regrowth)		AU12 (12.3.5 cat x)				AU12 (12.3.5 cat x)				AU12 (12.3.5 cat x)	
Site Reference	Benchmark	R01			Benchmark	R03			Average % Ben	Average score	Benchmark	R02			Benchmark	R04			Average % Ben	Average score
	12.3.5	Raw Data	% Benchmark	Score	12.3.5	Raw Data	% Benchm	Score			12.3.5	Raw Data	% Benchm	Score	12.3.5	Raw Data	% Benchm	Score		
Recruitment of woody perennial species in EDL (%)	100	54.5	55%	3	100	83.3	83%	5	69%	4	100	50	50%	3	100	100	100%	5	75%	4
Native plant species richness - trees	3	11	367%	5	3	7	233%	5	300%	5	3	2	67%	2.5	3	1	33%	2.5	50%	2.5
Native plant species richness - shrubs	3	6	200%	5	3	6	200%	5	200%	5	3	0	0%	0	3	0	0%	0	0%	0
Native plant species richness - grasses	3	1	33%	2.5	3	1	33%	2.5	33%	2.5	3	1	33%	2.5	3	0	0%	0	17%	1.25
Native plant species richness - forbs	11	6	55%	2.5	11	6	55%	2.5	55%	2.5	11	1	9%	0	11	1	9%	0	9%	0
Tree canopy height	19	16	84%	5	19	18	95%	5	.	.	19	10	53%	3	19	9	47%	3	.	.
Sub-canopy height	10	6	60%	3	10	10	100%	5	.	.	10	0	0%	0	10	0	0%	0	.	.
Tree canopy height (average of canopy and sub-canopy)				4				5	.	4.5				1.5				1.5	.	1.5
Tree canopy cover	80	37	46%	2	80	38	48%	2	.	.	80	4	5%	0	80	4	5%	0	.	.
Sub-canopy cover	13	5	38%	2	13	7	54%	5	.	.	13	0	0%	0	13	0	0%	0	.	.
Tree canopy cover (average of canopy and sub-canopy)				2				3.5	.	2.75				0				0	.	0
Shrub canopy cover	1	4	400%	3	1	3	300%	3	350%	3	1	0	0%	0	1	0	0%	0	0%	0
Native grass cover	5	3	60%	3	5	0	0%	0	30%	1.5	5	0	0%	0	5	0	0%	0	0%	0
Organic litter	25	21	84%	5	25	62.6	250%	3	167%	4	25	0	0%	0	25	0	0%	0	0%	0
Large trees (non-euc) / ha	181	0	0%	0	181	8	4%	5	2%	2.5	181	0	0%	0	181	0	0%	0	0%	0
Coarse woody debris / ha	903	145	16%	2	903	260	29%	2	22%	2	903	0	0%	0	903	0	0%	0	0%	0
Non-native plant cover	0	70%	0%	0	0	10%	0%	5	0%	2.5	0	95%	0%	0	0	96%	0%	0	0%	0
Site Condition Score				37				46.5		41.75				9.5				9		9.25
MAX Site Condition Score				80				80		80				80				80		80
Site Condition Score - out of 4																				
Site Context																				
Size of patch				2				0		1				2				2		2
Connectedness				2				0		1				4				4		4
Context				4				2		3				2				2		2
Ecological Corridors				6				6		6				6				6		6
Role																				
Threats to the species																				
Site Context Score				14				8		11.00				14				14		14.00
MAX Site Context Score				56				56						56				56		
Site Context Score - out of 3				0.75				0.43						0.75				0.75		

OFFSET - Fauna Species
Koala

Assessment Unit - Regional Ecosystem	AU11 (12.3.5 regrowth)				AU11 (12.3.5 regrowth)				AU11 (12.3.5 regrowth)		AU12 (12.3.5 cat x)				AU12 (12.3.5 cat x)				AU12 (12.3.5 cat x)	
Site Reference	Benchmark	R01			Benchmark	R03			Average % Benchmark Average score		Benchmark	R02			Benchmark	R04			Average % Benchmark Average score	
	12.3.5	Raw Data	% Benchmark	Score	12.3.5	Raw Data	% Benchmark	Score			12.3.5	Raw Data	% Benchmark	Score	12.3.5	Raw Data	% Benchmark	Score		
Recruitment of woody perennial species in EDL (%)	100	54.5	55%	3	100	83.3	83%	5	69%	4	100	50	50%	3	100	100	100%	5	75%	4
Native plant species richness - trees	3	11	367%	5	3	7	233%	5	300%	5	3	2	67%	2.5	3	1	33%	2.5	50%	2.5
Native plant species richness - shrubs	3	6	200%	5	3	6	200%	5	200%	5	3	0	0%	0	3	0	0%	0	0%	0
Native plant species richness - grasses	3	1	33%	2.5	3	1	33%	2.5	33%	2.5	3	1	33%	2.5	3	0	0%	0	17%	1.25
Native plant species richness - forbs	11	6	55%	2.5	11	6	55%	2.5	55%	2.5	11	1	9%	0	11	1	9%	0	9%	0
Tree canopy height	19	16	84%	5	19	18	95%	5	.	.	19	10	53%	3	19	9	47%	3	.	.
Sub-canopy height	10	6	60%	3	10	10	100%	5	.	.	10	0	0%	0	10	0	0%	0	.	.
Tree canopy height (average of canopy and sub-canopy)				4				5	.	4.5	0	0		1.5	0	0		1.5	.	1.5
Tree canopy cover	80	37	46%	2	80	38	48%	2	.	.	80	4	5%	0	80	4	5%	0	.	.
Sub-canopy cover	13	5	38%	2	13	7	54%	5	.	.	13	0	0%	0	13	0	0%	0	.	.
Tree canopy cover (average of canopy and sub-canopy)				2				3.5	.	2.75	0	0	0%	0	0	0	0%	0	.	0
Shrub canopy cover	1	4	400%	3	1	3	300%	3	350%	3	1	0	0%	0	1	0	0%	0	0%	0
Native grass cover	5	3	60%	3	5	0	0%	0	30%	1.5	5	0	0%	0	5	0	0%	0	0%	0
Organic litter	25	21	84%	5	25	62.6	250%	3	167%	4	25	0	0%	0	25	0	0%	0	0%	0
Large trees (non-euc) / ha	181	0	0%	0	181	8	4%	5	2%	2.5	181	0	0%	0	181	0	0%	0	0%	0
Coarse woody debris / ha	903	145	16%	2	903	260	29%	2	22%	2	903	0	0%	0	903	0	0%	0	0%	0
Non-native plant cover	0	0.7	0%	0	0	0.1	0%	5	0%	2.5	0	0.95	0%	0	0	0.96	0%	0	0%	0
Total canopy cover % of locally important koala habitat trees (LIKT) (80%)		0.37		4		0%		0				0%		0		0%		0		
Large trees (% of benchmark) (20%)		0%		0		4%		5				0%		0		0%		0		
Quality and availability of food and foraging habitat				3.2				1		2.1				0				0		0
Total canopy cover % of suitable Koala shelter trees (ancillary + LIKT) (80%)		29.6		7		42.75		7				4		0		4		0		
Large trees (% of benchmark) (20%)		0%		0		4%		5				0%		0		0%		0		
Quality and availability of shelter				5.6				6.6		6.1				0				0		0
Site Condition Score				45.8				54.1		49.95				9.5				9		9.25
MAX Site Condition Score				100				100		100				100				100		100
Site Condition Score - out of 3				1.37				1.62		1.50				0.29				0.27		0.28
Site Context																				
Size of patch				2				0		1				2				2		2
Connectedness				2				0		1				4				4		4
Context				4				2		3				2				2		2
Ecological Corridors				6				6		6				6				6		6
Role of site location to species overall population in the state				4				4		4				1				1		1
Proximity to roads (10%)		7				7						7				7				
Area occupied by predators (i.e. dogs) (10%)		15				15						15				15				
Broadscale clearing/fragmentation or selective removal of canopy trees (40%)		7				7						1				1				
Increased frequency of Bushfire (40%)		1				1						1				1				
Threats to the species				5.4				5.4		5.4				3				3		3
Species mobility capacity				7				7		7				4				4		4
Site Context Score				30.4				24.4		27.40				22				22		22.00
MAX Site Context Score				56				56		56				56				56		56
Site Context Score - out of 3				1.63				1.31		1.47				1.18				1.18		1.18

Species Stocking Rate (SSR)						Site score	
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0	
		No	Yes - adjacent		Yes - on site		
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	5	
		Not habitat	Dispersal	Foraging	Breeding		
Approximate density (per ha)	Score	0	10	20	30	10	
			10				
Role/importance of species population on site*	Score (Total from supplementary table below)	0	5	10		15	0
		0	5 - 15	20 - 35		40 - 45	
Total SRR score (out of 70)						15	
SRR Score (out of 4)						0.86	

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

Final habitat quality score (weighted)	AU11	AU12	Final
Site Condition score (out of 3)	1.50	0.28	
Site Context Score (out of 3)	1.47	1.18	
Species Stocking Rate Score (out of 4)	0.86	0.86	
Habitat Quality score (out of 10)	3.82	2.31	
Assessment Unit area (ha)	15.64	13.71	
Total offset area (ha) for this MNES	29.35	29.35	
Size Weighting	0.53	0.47	
Weighted Habitat Quality Score	2.04	1.08	3.12

rounded

OFFSET - Threatened Ecological Community (meets TEC listing thresholds)
CSSF

Assessment Unit - Regional Ecosystem	AU11 (12.3.5 regrowth)				AU11 (12.3.5 regrowth)				AU11 (12.3.5 regrowth)		AU12 (12.3.5 cat x)				AU12 (12.3.5 cat x)				AU12 (12.3.5 cat x)	
Site Reference	Benchmark	R01			Benchmark	R03			Average % Benc	Average score	Benchmark	R02			Benchmark	R04			Average % Benc	Average score
	12.3.5	Raw Data	% Benchmark	Score	12.3.5	Raw Data	% Benchmark	Score			12.3.5	Raw Data	% Benchmark	Score	12.3.5	Raw Data	% Benchmark	Score		
Recruitment of woody perennial species in EDL (%)	100	54.5	55%	3	100	83.3	83%	5	69%	4	100	50	50%	3	100	100	100%	5	75%	4
Native plant species richness - trees	3	11	367%	5	3	7	233%	5	300%	5	3	2	67%	2.5	3	1	33%	2.5	50%	2.5
Native plant species richness - shrubs	3	6	200%	5	3	6	200%	5	200%	5	3	0	0%	0	3	0	0%	0	0%	0
Native plant species richness - grasses	3	1	33%	2.5	3	1	33%	2.5	33%	2.5	3	1	33%	2.5	3	0	0%	0	17%	1.25
Native plant species richness - forbs	11	6	55%	2.5	11	6	55%	2.5	55%	2.5	11	1	9%	0	11	1	9%	0	9%	0
Tree canopy height	19	16	84%	5	19	18	95%	5	.	.	19	10	53%	3	19	9	47%	3	.	.
Sub-canopy height	10	6	60%	3	10	10	100%	5	.	.	10	0	0%	0	10	0	0%	0	.	.
Tree canopy height (average of canopy and sub-canopy)	0	0		4	0	0		5	.	4.5	0	0		1.5	0	0		1.5	.	1.5
Tree canopy cover	80	37	46%	2	80	38	48%	2	.	.	80	4	5%	0	80	4	5%	0	.	.
Sub-canopy cover	13	5	38%	2	13	7	54%	5	.	.	13	0	0%	0	13	0	0%	0	.	.
Tree canopy cover (average of canopy and sub-canopy)	0	0	0%	2	0	0	0%	3.5	.	2.75	0	0	0%	0	0	0	0%	0	.	0
Shrub canopy cover	1	4	400%	3	1	3	300%	3	350%	3	1	0	0%	0	1	0	0%	0	0%	0
Native grass cover	5	3	60%	3	5	0	0%	0	30%	1.5	5	0	0%	0	5	0	0%	0	0%	0
Organic litter	25	21	84%	5	25	62.6	250%	3	167%	4	25	0	0%	0	25	0	0%	0	0%	0
Large trees (non-euc) / ha	181	0	0%	0	181	8	4%	5	2%	2.5	181	0	0%	0	181	0	0%	0	0%	0
Coarse woody debris / ha	903	145	16%	2	903	260	29%	2	22%	2	903	0	0%	0	903	0	0%	0	0%	0
Non-native plant cover	0	0.7	0%	0	0	0.1	0%	5	0%	2.5	0	95%	0%	0	0	0.96	0%	0	0%	0
Site Condition Score				37				46.5	41.75					9.5				9	9.25	
MAX Site Condition Score				80				80	80					80				80	80	
Site Condition Score - out of 7				3.24				4.07	3.65					0.83				0.79	0.81	
Site Context																				
Size of patch				2				0	1					2				2		2
Connectedness				2				0	1					4				4		4
Context				4				2	3					2				2		2
Ecological Corridors				6				6	6					6				6		6
Role of site location to TEC overall population in the state				5				5	5					1				1		1
Changed hydrological regime (17%)		7				7						7				7				
Native vegetation clearing (17%)		7				7						1				1				
Fragmentation of remnants and habitats (16%)		7				7						1				1				
Invasive fauna (5%)		7				7						7				7				
Disturbance from urbanisation and recreational activity (10%)		7				7						7				7				
Weed (10%)		1				7						1				1				
Diseases and pathogens (5%)		15				15						15				15				
Grazing pressures (5%)		7				7						7				7				
Increased frequency of Bushfire (15%)		1				1						1				1				
Threats to the species				5.9				6.5	6.2					3.92				3.92		3.92
Site Context Score				24.9				19.5	22.20					18.92				18.92		18.92
MAX Site Context Score				46				46	46					46				46		46
Site Context Score - out of 3				1.62				1.27	1.45					1.23				1.23		1.23

UPDATED CALCS

Final habitat quality score (weighted)	AU11	AU12	Final
Site Condition score (out of 7)	3.65	0.81	
Site Context Score (out of 3)	1.45	1.23	
Habitat Quality score (out of 10)	5.10	2.04	
Assessment Unit area (ha)	15.64	13.71	
Total offset area (ha) for this MNES	29.35	29.35	
Size Weighting	0.53	0.47	
Weighted Habitat Quality Score	2.72	0.95	

rounded

OFFSET - KOALA Species

Assessment Unit	AU11																	AU 11 Average Score				
	B.mark	Site R01								Site R03												
Site Reference																						
					Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)				Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)	Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)
Site Condition	12.3.5	Raw Data	% B.mark	Score						Raw Data	% B.mark	Score										
Recruitment of woody perennial species in EDL (%)	100	54.5	54.5%	3	3	5	5	5	3	83.3	83.3%	5	5	5	5	5	5	4	5	5	5	4
Native plant species richness - trees	3	11	366.7%	5	5	5	5	5	5	7	233.3%	5	5	5	5	5	5	5	5	5	5	5
Native plant species richness - shrubs	3	6	200.0%	5	5	5	5	5	5	6	200.0%	5	5	5	5	5	5	5	5	5	5	5
Native plant species richness - grasses	3	1	33.3%	2.5	2.5	2.5	5	5	2.5	1	33.3%	2.5	2.5	5	5	5	2.5	2.5	3.75	5	5	2.5
Native plant species richness - forbs	11	6	54.5%	2.5	2.5	2.5	5	5	2.5	6	54.5%	2.5	2.5	5	5	5	2.5	2.5	3.75	5	5	2.5
Tree canopy height	19	16	84.2%	5	5	5	5	5	5	18	94.7%	5	5	5	5	5	5	5	5	5	5	5
Sub-canopy height	10	6	60.0%	3	3	3	5	5	3	10	100.0%	5	5	5	5	5	5	4	4	5	5	4
Tree canopy height (average of canopy and sub-canopy)				4	4	4	5	5	4			5	5	5	5	5	5	4.5	4.5	5	5	4.5
Tree canopy cover	80	37	46.3%	2	2	5	5	5	2	38	47.5%	2	2	5	5	5	2	2	5	5	5	2
Sub-canopy cover	13	5	38.5%	2	2	5	5	5	2	7	53.8%	5	5	5	5	5	5	3.5	5	5	5	3.5
Tree canopy cover (average of canopy and sub-canopy)				2	2	5	5	5	2			3.5	3.5	5	5	5	3.5	2.75	5	5	5	2.75
Shrub canopy cover	1	4	400.0%	3	3	3	3	5	3	3	300.0%	3	3	3	3	5	3	3	3	3	5	3
Native grass cover	5	3	60.0%	3	3	3	5	5	3	0	0.0%	0	1	1	3	3	0	2	2	4	4	1.5
Organic litter	25	21	84.0%	5	5	5	5	5	5	62.6	250.4%	3	3	3	3	3	3	4	4	4	4	4
Large trees (non-euc) / ha	181	0	0.0%	0	0	0	5	5	0	8	4.4%	5	5	5	5	5	5	2.5	2.5	5	5	2.5
Coarse woody debris / ha	903	145	16.1%	2	2	2	2	5	2	260	28.8%	2	2	2	2	5	2	2	2	2	5	2
Non-native plant cover	0	0.7	0.0%	0	3	5	10	10	0	0.1	0.0%	5	5	10	10	10	5	4	7.5	10	10	2.5
Total canopy cover % of locally important koala habitat trees (LIKT (80%))		0.37		4.0	4	4	4	7	4	0.0%		0.0	4	4	4	4	0	4	4	4	7	2
Large trees (20%)		0.0%		0.0	0	0	5	5	0	4%		5.0	5	5	5	5	5	2.5	2.5	5	5	2.5
Quality and availability of food and foraging habitat				3.2	3.2	3.2	4.2	6.6	3.2			1.0	1	4.2	4.2	4.2	1	2.1	3.7	4.2	5.4	2.1
Total canopy cover % of suitable Koala shelter trees (ancillary + LIKT) (80%)		29.6		7.0	7	7	7	10	7	42.8		7.0	7	7	10	10	7	7	7	8.5	10	7
Large trees (20%)		0.0%		0.0	0	0	5	5	0	4%		5.0	5	5	5	10	5	2.5	2.5	5	7.5	2.5
Quality and availability of shelter				5.6	5.6	5.6	6.6	9	5.6			6.6	6.6	6.6	9	10	6.6	6.1	6.1	7.8	9.5	6.1
Site Condition Score				45.8	48.8	55.8	75.8	85.6	45.8			54.1	55.1	69.8	74.2	80.2	54.1	51.95	62.8	75	82.9	49.95
MAX Site Condition Score				100	100	100	100	100	100			100	100	100	100	100	100	100	101	102	103	104
Site Condition Score - out of 3				1.37	1.46	1.67	2.27	2.57	1.37			1.62	1.65	2.09	2.23	2.41	1.62	1.56	1.87	2.21	2.41	1.44
Site Context																						
Size of patch				2	2	2	2	2	2			0	0	0	0	0	0	1	1	1	1	1
Connectedness				2	2	2	2	2	2			0	0	0	0	0	0	1	1	1	1	1
Context				4	4	4	4	4	4			2	2	2	2	2	2	3	3	3	3	3
Ecological Corridors				6	6	6	6	6	6			6	6	6	6	6	6	6	6	6	6	6
Role of site location to species overall population in the state				4	4	4	4	5	4			4	4	4	4	5	4	4	4	4	5	4
Proximity to roads (10%)		7			7	7	7	7	7		7		7	7	7	7	7	7	7	7	7	7
Area occupied by predators (i.e. dogs) (10%)		15			15	15	15	15	15		15		15	15	15	15	15	15	15	15	15	15
Broadscale clearing/fragmentation or selective removal of canopy trees (10%)		7			15	15	15	15	7		1		15	15	15	15	7	15	15	15	15	1
Increased frequency of Bushfire (40%)		1			15	15	15	15	1		1		15	15	15	15	1	15	15	15	15	1
Threats to the species				5.4	14.2	14.2	14.2	14.2	5.4			5.4	14.2	14.2	14.2	14.2	5.4	14.2	14.2	14.2	14.2	5.4
Species mobility capacity				7	4	4	7	7	7			7	4	4	7	7	7	4	4	7	7	7
Site Context Score				30.4	36.20	36.20	39.20	40.20	30.40			24.40	30.20	30.20	33.20	34.20	24.4	33.20	33.20	36.20	37.20	27.4
MAX Site Context Score				56	56	56	56	56	56			56	56	56	56	56	56	56	56	56	56	56
Site Context Score - out of 3				1.63	1.94	1.94	2.10	2.15	1.63			1.31	1.62	1.62	1.78	1.83	1.31	1.78	1.78	1.94	1.99	1.47

Assessment Unit	AU12																	AU 12 Average Score					
Site Reference	B.mark	Site R02								Site R04													
Site Condition	12.3.5	Raw Data	% B.mark	Score	Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)	Raw Data	% B.mark	Score	Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)	Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)	
Recruitment of woody perennial species in EDL (%)	100	50	50.0%	3	3	5	5	5	3	100	100.0%	5	5	5	5	5	5	4	5	5	5	4	
Native plant species richness - trees	3	2	66.7%	2.5	5	5	5	5	2.5	1	33.3%	2.5	5	5	5	5	2.5	5	5	5	5	2.5	
Native plant species richness - shrubs	3	0	0.0%	0	2.5	5	5	5	0	0	0.0%	0	2.5	5	5	5	0	2.5	5	5	5	0	
Native plant species richness - grasses	3	1	33.3%	2.5	2.5	5	5	5	2.5	0	0.0%	0	2.5	2.5	5	5	0	2.5	3.75	5	5	1.25	
Native plant species richness - forbs	11	1	9.1%	0	2.5	2.5	2.5	2.5	0	1	9.1%	0	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5	2.5	0	
Tree canopy height	19	10	52.6%	3	3	3	3	3	3	9	47.4%	3	3	3	3	3	3	3	3	3	3	3	
Sub-canopy height	10	0	0.0%	0	0	0	2.5	2.5	0	0	0.0%	0	0	0	2.5	2.5	0	0	0	2.5	2.5	0	
Tree canopy height (average of canopy and sub-canopy)				1.5	1.5	1.5	2.75	2.75	1.5			1.5	1.5	1.5	2.75	2.75	1.5	1.5	1.5	2.75	2.75	1.5	
Tree canopy cover	80	4	5.0%	0	2	2	2	5	0	4	5.0%	0	2	2	2	5	0	2	2	2	5	0	
Sub-canopy cover	13	0	0.0%	0	2	2	5	5	0	0	0.0%	0	2	2	2	5	0	2	2	3.5	5	0	
Tree canopy cover (average of canopy and sub-canopy)				0	2	2	3.5	5	0			0	2	2	2	5	0	2	2	2.75	5	0	
Shrub canopy cover	1	0	0.0%	0	3	5	5	5	0	0	0.0%	0	3	5	5	5	0	3	5	5	5	0	
Native grass cover	5	0	0.0%	0	0	1	3	3	0	0	0.0%	0	0	1	3	3	0	0	1	3	3	0	
Organic litter	25	0	0.0%	0	0	3	3	3	0	0	0.0%	0	0	3	3	3	0	0	3	3	3	0	
Large trees (non-euc) / ha	181	0	0.0%	0	0	0	0	0	0	0	0.0%	0	0	0	0	0	0	0	0	0	0	0	
Coarse woody debris / ha	903	0	0.0%	0	0	2	2	5	0	0	0.0%	0	0	2	2	5	0	0	2	2	5	0	
Non-native plant cover	0	0.95	0.0%	0	3	5	10	10	0	0.96	0.0%	0	3	5	10	10	0	3	5	10	10	0	
Total canopy cover % of locally important koala habitat trees (LIKT) (80%)		0.0		0.0	2	2	2	4	0	0.0		0.0	2	2	2	4	0	2	2	2	4	0	
Large trees (20%)		0%		0.0	0	0	0	0	0	0%		0.0	0	0	0	0	0	0	0	0	0	0	
Quality and availability of food and foraging habitat				0.0	1.6	1.6	1.6	3.2	0			0.0	1.6	1.6	1.6	3.2	0	1.6	1.6	1.6	3.2	0	
Total canopy cover % of suitable Koala shelter trees (ancillary + LIKT) (80%)		4.0		0.0	0	4	4	7	0	4.0		0.0	0	4	4	7	0	0	4	4	7	0	
Large trees (20%)		0%		0.0	0	0	0	0	0	0%		0.0	0	0	0	0	0	0	0	0	0	0	
Quality and availability of shelter				0.0	0	3.2	3.2	5.6	0			0.0	0	3.2	3.2	5.6	0	0	3.2	3.2	5.6	0	
Site Condition Score				9.5	26.6	46.8	56.55	65.05	9.5			9	28.6	44.3	55.05	65.05	9	27.6	45.55	55.8	65.05	9.25	
MAX Site Condition Score				100	100	100	100	100	100			100	100	100	100	100	100	100	101	102	103	104	
Site Condition Score - out of 3				0.29	0.80	1.40	1.70	1.95	0.29			0.27	0.86	1.33	1.65	1.95	0.27	0.83	1.35	1.64	1.89	0.27	
Site Context																							
Size of patch				2	2	2	2	2	2			2	2	2	2	2	2	2	2	2	2	2	
Connectedness				4	4	4	4	4	4			4	4	4	4	4	4	4	4	4	4	4	
Context				2	2	2	2	2	2			2	2	2	2	2	2	2	2	2	2	2	
Ecological Corridors				6	6	6	6	6	6			6	6	6	6	6	6	6	6	6	6	6	
Role of site location to species overall population in the state				1	1	1	1	4	1			1	1	1	1	4	1	1	1	1	4	1	
Proximity to roads (10%)		7			7	7	7	7	7	7			7	7	7	7	7	7	7	7	7	7	
Area occupied by predators (i.e. dogs) (10%)		15			15	15	15	15	15	15			15	15	15	15	15	15	15	15	15	15	
Broadscale clearing/fragmentation or selective removal of canopy trees (10%)		1			15	15	15	15	1	1			15	15	15	15	1	15	15	15	15	1	
Increased frequency of Bushfire (40%)		1			1	1	1	1	1	1			1	1	1	1	1	1	1	1	1	1	
Threats to the species				3	8.6	8.6	8.6	8.6	3			3	8.6	8.6	8.6	8.6	3	8.6	8.6	8.6	8.6	3	
Species mobility capacity				4	4	4	7	7	4			4	4	4	7	7	4	4	4	7	7	4	
Site Context Score				22	27.60	27.60	30.60	33.60	22.00			22.00	27.60	27.60	30.60	33.60	22	27.60	27.60	30.60	33.60	22	
MAX Site Context Score				56	56	56	56	56	56			56	56	56	56	56	56	56	56	56	56	56	
Site Context Score - out of 3				1.18	1.48	1.48	1.64	1.80	1.18			1.18	1.48	1.48	1.64	1.80	1.18	1.48	1.48	1.64	1.80	1.18	

Species Stocking Rate (SSR)						Current score	Future score with offset (20 years)	Future score without offset (20 years)
Presence detected on or adjacent to site (neighbouring property with connecting habitat)	Score	0	5		10	0	0	0
		No	Yes - adjacent		Yes - on site			
Species usage of the site (habitat type & evidenced usage)	Score	0	5	10	15	5	15	5
		Not habitat	Dispersal	Foraging	Breeding			
Approximate density (per ha)	Score	0	10	20	30	10	10	10
		0						
Role/importance of species population on site*	Score (Total from supplementary table below)	0	5	10		0	0	0
		0	5 - 15	20 - 35				
Total SRR score (out of 70)		15				25	15	
SRR Score (out of 4)		0.86				1.43	0.86	

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

Current

Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 3)	1.50	0.28		rounded
Site Context Score (out of 3)	1.47	1.18		
Species Stocking Rate Score (out of 4)	0.86	0.86		
Habitat Quality score (out of 10)	3.82	2.31		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		
Weighted Habitat Quality Score	2.04	1.08	3.12	3.00

5 years

Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 3)	1.56	0.83		rounded
Site Context Score (out of 3)	1.78	1.48		
Species Stocking Rate Score (out of 4)	0.86	0.86		
Habitat Quality score (out of 10)	4.19	3.16		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		
Weighted Habitat Quality Score	2.24	1.48	3.71	4.00

10 years

Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 3)	1.88	1.37		rounded
Site Context Score (out of 3)	1.78	1.48		
Species Stocking Rate Score (out of 4)	0.86	0.86		
Habitat Quality score (out of 10)	4.52	3.70		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		
Weighted Habitat Quality Score	2.41	1.73	4.14	4.00

Koala Offset Detailed scores

15 years

Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 3)	2.25	1.67		
Site Context Score (out of 3)	1.94	1.64		
Species Stocking Rate Score (out of 4)	0.86	0.86		
Habitat Quality score (out of 10)	5.05	4.17		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		rounded
Weighted Habitat Quality Score	2.69	1.95	4.64	5.00

20 years

Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 3)	2.49	1.95		
Site Context Score (out of 3)	1.99	1.80		
Species Stocking Rate Score (out of 4)	1.43	1.43		
Habitat Quality score (out of 10)	5.91	5.18		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		rounded
Weighted Habitat Quality Score	3.15	2.42	5.57	6.00

No offset

Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 3)	1.50	0.28		
Site Context Score (out of 3)	1.47	1.18		
Species Stocking Rate Score (out of 4)	0.86	0.86		
Habitat Quality score (out of 10)	3.82	2.31		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		rounded
Weighted Habitat Quality Score	2.04	1.08	3.12	3.00

OFFSET - CSSF Threatened Ecological Community

Assessment Unit	AU11												AU 11 Average Score									
Site Reference	B.mark	Site R01					Site R03															
					Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)				Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)	Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)
Site Condition	12.3.5	Raw Data	% B.mark	Score						Raw Data	% B.mark	Score										
Recruitment of woody perennial species in EDL (%)	100	54.5	54.5%	3	3	5	5	5	3	83.3	83.3%	5	5	5	5	5	5	4	5	5	5	4
Native plant species richness - trees	3	11	366.7%	5	5	5	5	5	5	7	233.3%	5	5	5	5	5	5	5	5	5	5	5
Native plant species richness - shrubs	3	6	200.0%	5	5	5	5	5	5	6	200.0%	5	5	5	5	5	5	5	5	5	5	5
Native plant species richness - grasses	3	1	33.3%	2.5	2.5	2.5	5	5	2.5	1	33.3%	2.5	2.5	5	5	5	2.5	2.5	3.75	5	5	2.5
Native plant species richness - forbs	11	6	54.5%	2.5	2.5	2.5	5	5	2.5	6	54.5%	2.5	2.5	5	5	5	2.5	2.5	3.75	5	5	2.5
Tree canopy height	19	16	84.2%	5	5	5	5	5	5	18	94.7%	5	5	5	5	5	5	5	5	5	5	5
Sub-canopy height	10	6	60.0%	3	3	3	5	5	3	10	100.0%	5	5	5	5	5	5	4	4	5	5	4
Tree canopy height (average of canopy and sub-canopy)				4	4	4	5	5	4			5	5	5	5	5	5	4.5	4.5	5	5	4.5
Tree canopy cover	80	37	46.3%	2	2	5	5	5	2	38	47.5%	2	2	5	5	5	2	2	5	5	5	2
Sub-canopy cover	13	5	38.5%	2	2	5	5	5	2	7	53.8%	5	5	5	5	5	5	3.5	5	5	5	3.5
Tree canopy cover (average of canopy and sub-canopy)				2	2	5	5	5	2			3.5	3.5	5	5	5	3.5	2.75	5	5	5	2.75
Shrub canopy cover	1	4	400.0%	3	3	3	3	5	3	3	300.0%	3	3	3	3	5	3	3	3	3	5	3
Native grass cover	5	3	60.0%	3	3	3	5	5	3	0	0.0%	0	1	1	3	3	0	2	2	4	4	1.5
Organic litter	25	21	84.0%	5	5	5	5	5	5	62.6	250.4%	3	3	3	3	3	3	4	4	4	4	4
Large trees (non-euc) / ha	181	0	0.0%	0	0	0	5	5	0	8	4.4%	5	5	5	5	5	5	2.5	2.5	5	5	2.5
Coarse woody debris / ha	903	145	16.1%	2	2	2	2	5	2	260	28.8%	2	2	2	2	5	2	2	2	2	5	2
Non-native plant cover	0	0.7	0.0%	0	3	5	10	10	0	0.1	0.0%	5	5	10	10	10	5	4	7.5	10	10	2.5
Site Condition Score				37	40.0	47.0	65.0	70.0	37.0			46.5	47.5	59.0	61.0	66.0	46.5	43.8	53.0	63.0	68.0	41.8
MAX Site Condition Score				80	80	80	80	80	80			80	80	80	80	80	80	80	80	80	80	80
Site Condition Score - out of 7				3.24	3.50	4.11	5.69	6.13	3.24			4.07	4.16	5.16	5.34	5.78	4.07	3.83	4.64	5.51	5.95	3.65
Site Context																						
Size of patch				2	2	2	2	2	2			0	0	0	0	0	0	1	1	1	1	1
Connectedness				2	2	2	2	2	2			0	0	0	0	0	0	1	1	1	1	1
Context				4	4	4	4	4	4			2	2	2	2	2	2	3	3	3	3	3
Ecological Corridors				6	6	6	6	6	6			6	6	6	6	6	6	6	6	6	6	6
Role of site location to TEC overall population in the state				5	5	5	5	5	5			5	5	5	5	5	5	5	5	5	5	5
Changed hydrological regime (17%)	7				15	15	15	15	7	7			15	15	15	15	7	15	15	15	15	7
Native vegetation clearing (17%)	7				15	15	15	15	7	7			15	15	15	15	7	15	15	15	15	7
Fragmentation of remnants and habitats (16%)	7				7	7	7	7	7	7			7	7	7	7	7	7	7	7	7	7
Invasive fauna (5%)	7				7	7	7	7	7	7			7	7	7	7	7	7	7	7	7	7
Disturbance from urbanisation and recreational activity (10%)	7				7	7	7	7	7	7			7	7	7	7	7	7	7	7	7	7
Weed (10%)	1				7	15	15	15	1	7			7	15	15	15	7	7	15	15	15	4
Diseases and pathogens (5%)	15				15	15	15	15	15	15			15	15	15	15	15	15	15	15	15	15
Grazing pressures (5%)	7				15	15	15	15	7	7			15	15	15	15	7	15	15	15	15	7
Increased frequency of Bushfire (15%)	1				15	15	15	15	1	1			15	15	15	15	1	15	15	15	15	1
Threats to the community				5.9	11.72	12.52	12.52	12.52	5.9			6.5	11.72	12.52	12.52	12.52	6.5	11.72	12.52	12.52	12.52	6.2
Site Context Score				24.9	30.7	31.5	31.5	31.5	24.9			19.50	24.7	25.5	25.5	25.5	19.5	27.7	28.5	28.5	28.5	22.2
MAX Site Context Score				46	46	46	46	46	46			46	46	46	46	46	46	46	46	46	46	46
Site Context Score - out of 3				1.62	2.00	2.06	2.06	2.06	1.62			1.27	1.61	1.66	1.66	1.66	1.27	1.81	1.86	1.86	1.86	1.45

Assessment Unit	AU12																							AU 12 Average Score				
Site Reference	B.mark	Site R02									Site R04																	
						Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)					Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)		Future score with offset (5 yrs)	Future score with offset (10 yrs)	Future score with offset (15 yrs)	Future score with offset (20 yrs)	Future score without offset (20 yrs)			
Site Condition	12.3.5	Raw Data	% B.mark	Score							Raw Data	% B.mark	Score															
Recruitment of woody perennial species in EDL (%)	100	50	50.0%	3		3	5	5	5	3	100	100.0%	5		5	5	5	5	5		5	5	5	5	4			
Native plant species richness - trees	3	2	66.7%	2.5		5	5	5	5	2.5	1	33.3%	2.5		5	5	5	5	2.5		5	5	5	5	5			
Native plant species richness - shrubs	3	0	0.0%	0		2.5	5	5	5	0	0	0.0%	0		2.5	5	5	5	0		5	5	5	5	5			
Native plant species richness - grasses	3	1	33.3%	2.5		2.5	5	5	5	2.5	0	0.0%	0		2.5	2.5	5	5	0		2.5	3.75	5	5	2.5			
Native plant species richness - forbs	11	1	9.1%	0		2.5	2.5	2.5	2.5	0	1	9.1%	0		2.5	2.5	2.5	2.5	0		2.5	3.75	5	5	2.5			
Tree canopy height	19	10	52.6%	3		3	3	3	3	3	9	47.4%	3		3	3	3	3	3		5	5	5	5	5			
Sub-canopy height	10	0	0.0%	0		0	0	2.5	2.5	0	0	0.0%	0		0	0	2.5	2.5	0		4	4	5	5	4			
Tree canopy height (average of canopy and sub-canopy)				1.5		1.5	1.5	2.75	2.75	1.5			1.5		1.5	1.5	2.75	2.75	1.5		4.5	4.5	5	5	4.5			
Tree canopy cover	80	4	5.0%	0		2	2	2	5	0	4	5.0%	0		2	2	2	5	0		2	5	5	5	2			
Sub-canopy cover	13	0	0.0%	0		2	2	5	5	0	0	0.0%	0		2	2	2	5	0		3.5	5	5	5	3.5			
Tree canopy cover (average of canopy and sub-canopy)				0		2	2	3.5	5	0			0		2	2	2	5	0		2.75	5	5	5	2.75			
Shrub canopy cover	1	0	0.0%	0		3	5	5	5	0	0	0.0%	0		3	5	5	5	0		3	3	3	5	3			
Native grass cover	5	0	0.0%	0		0	1	3	3	0	0	0.0%	0		0	1	3	3	0		2	2	4	4	1.5			
Organic litter	25	0	0.0%	0		0	3	3	3	0	0	0.0%	0		0	3	3	3	0		4	4	4	4	4			
Large trees (non-euc) / ha	181	0	0.0%	0		0	0	0	0	0	0	0.0%	0		0	0	0	0	0		2.5	2.5	5	5	2.5			
Coarse woody debris / ha	903	0	0.0%	0		0	2	2	5	0	0	0.0%	0		0	2	2	5	0		2	2	2	5	2			
Non-native plant cover	0	0.95	0.0%	0		3	5	10	10	0	0.96	0.0%	0		3	5	10	10	0		4	7.5	10	10	2.5			
Site Condition Score				9.5		25	42	51.75	56.25	9.5			9		27	39.5	50.25	56.25	9		43.75	53	63	68	41.75			
MAX Site Condition Score				80		80	80	80	80	80			80		80	80	80	80	80		80	80	80	80	80			
Site Condition Score - out of 7				0.83		2.19	3.68	4.53	4.92	0.83			0.79		2.36	3.46	4.40	4.92	0.79		3.83	4.64	5.51	5.95	3.65			
Site Context																												
Size of patch				2		2	2	2	2	2			2		2	2	2	2	2		2	2	2	2	2			
Connectedness				4		4	4	4	4	4			4		4	4	4	4	4		4	4	4	4	4			
Context				2		2	2	2	2	2			2		2	2	2	2	2		2	2	2	2	2			
Ecological Corridors				6		6	6	6	6	6			6		6	6	6	6	6		6	6	6	6	6			
Role of site location to TEC overall population in the state				1		4	4	4	5	1			1		4	4	4	5	1		4	4	4	5	1			
Changed hydrological regime (17%)		7				7	7	15	15	7	7				7	7	15	15	7		7	7	15	15	7			
Native vegetation clearing (17%)		1				15	15	15	15	1	1				15	15	15	15	1		15	15	15	15	1			
Fragmentation of remnants and habitats (16%)		1				7	7	7	7	1	1				7	7	7	7	1		7	7	7	7	1			
Invasive fauna (5%)		7				7	7	7	7	7	7				7	7	7	7	7		7	7	7	7	7			
Disturbance from urbanisation and recreational activity (10%)		7				7	7	7	7	7	7				7	7	7	7	7		7	7	7	7	7			
Weed (10%)		1				7	15	15	15	1	1				7	15	15	15	1		7	15	15	15	1			
Diseases and pathogens (5%)		15				15	15	15	15	15	15				15	15	15	15	15		15	15	15	15	15			
Grazing pressures (5%)		7				15	15	15	15	7	7				15	15	15	15	7		15	15	15	15	7			
Increased frequency of Bushfire (15%)		1				1	1	1	1	1	1				1	1	1	1	1		1	1	1	1	1			
Threats to the species				3.92		8.26	9.06	10.42	10.42	3.92			3.92		8.26	9.06	10.42	10.42	3.92		8.26	9.06	10.42	10.42	3.92			
Site Context Score				18.92		26.26	27.06	28.42	29.42	18.92			18.92		26.26	27.06	28.42	29.42	18.92		26.26	27.06	28.42	29.42	18.92			
MAX Site Context Score				46		46	46	46	46	46			46		46	46	46	46	46		46	46	46	46	46			
Site Context Score - out of 3				1.23		1.71	1.76	1.85	1.92	1.23			1.23		1.71	1.76	1.85	1.92	1.23		1.71	1.76	1.85	1.92	1.23			

Current score				
Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 7)	3.65	0.81		Rounded
Site Context Score (out of 3)	1.45	1.23		
Habitat Quality score (out of 10)	5.10	2.04		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		
Weighted Habitat Quality Score	2.72	0.95	3.67	4.00

CSSF Offset Detailed score

5 years

Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 7)	3.83	2.28		Rounded
Site Context Score (out of 3)	1.81	1.71		
Habitat Quality score (out of 10)	5.64	3.99		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		
Weighted Habitat Quality Score	3.00	1.86	4.87	5.00

10 years

Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 7)	4.64	3.57		Rounded
Site Context Score (out of 3)	1.86	1.76		
Habitat Quality score (out of 10)	6.50	5.33		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		
Weighted Habitat Quality Score	3.46	2.49	5.95	6.00

15 years

Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 7)	5.51	4.46		Rounded
Site Context Score (out of 3)	1.86	1.85		
Habitat Quality score (out of 10)	7.37	6.32		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		
Weighted Habitat Quality Score	3.93	2.95	6.88	7.00

20 years

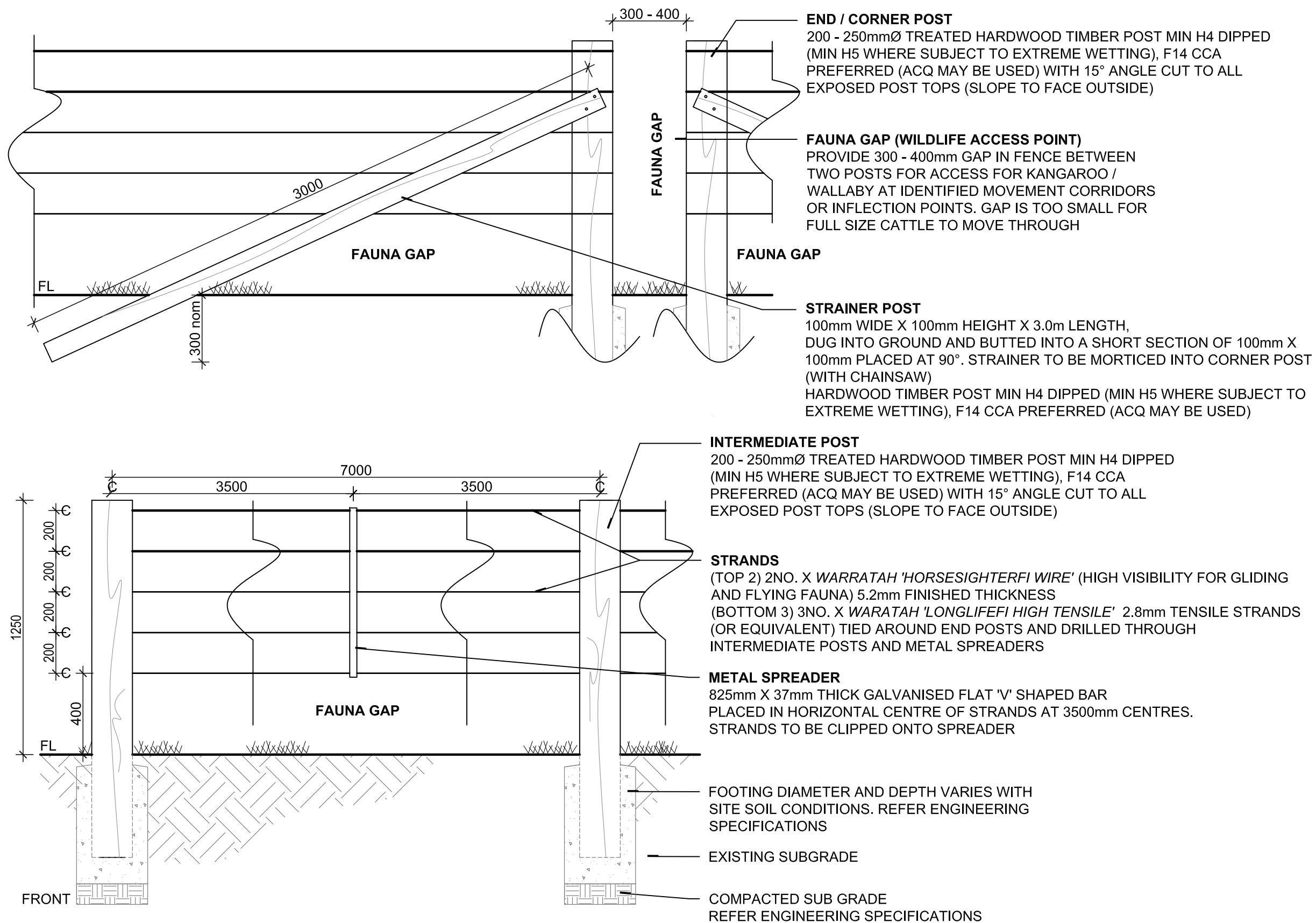
Final habitat quality score (weighted)	AU11	AU12	Final	
Site Condition score (out of 7)	5.95	4.92		Rounded
Site Context Score (out of 3)	1.86	1.92		
Habitat Quality score (out of 10)	7.81	6.84		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		
Weighted Habitat Quality Score	4.16	3.20	7.36	7.00

No offset

Final habitat quality score (weighted)	AU3	AU4	Final	
Site Condition score (out of 7)	3.65	0.81		Rounded
Site Context Score (out of 3)	1.45	1.23		
Habitat Quality score (out of 10)	5.10	2.04		
Assessment Unit area (ha)	15.64	13.71		
Total offset area (ha) for this MNES	29.35	29.35		
Size Weighting	0.53	0.47		
Weighted Habitat Quality Score	2.72	0.95	3.67	4.00

Appendix D

Offset fencing specifications



metal spreader



FAUNA FRIENDLY FENCE
Type 2 - timber posts and strands

PLEASE NOTE:

- THESE DRAWINGS ARE A GUIDELINE ONLY AND ARE 'NOT FOR CONSTRUCTION'.
- INDIVIDUAL SITE APPLICATION MAY REQUIRE AMENDMENT AND CERTIFICATION BY OTHERS.
- FIXINGS AND FINISHES - REFER TO TECHNICAL DRAWING INDEX AND SPECIFICATIONS.

*(OR EQUIVALENT)

1 TYPICAL DETAIL - FAUNA FRIENDLY FENCE PANEL

SCALE 1:20

OPEN SPACE LANDSCAPE INFRASTRUCTURE MANUAL (LIM)

Appendix E

DCCEEW Annual Compliance Report Guidelines (2023)



Australian Government

Department of Climate Change, Energy,
the Environment and Water

Annual Compliance Report Guidelines

Reporting under the *Environment
Protection and Biodiversity
Conservation Act 1999*



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Acknowledgement of Country

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.

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Introduction

The purpose of this document is to provide guidance to approval holders preparing Annual Compliance Reports required by condition of their *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval. Information about the EPBC Act assessment and approval process is available on the Department of Climate Change, Energy, the Environment and Water's (department's) website at dcceew.gov.au/environment/epbc.

These guidelines provide an overview of the responsibilities of both the approval holder and the role of the department after an approval is issued. They provide guidance on the required content and formatting of the Annual Compliance Report, and a sample compliance table to be included in every Annual Compliance Report.

1.1 Compliance reports prepared to satisfy other regulations or regulatory bodies

The department understands that in addition to meeting EPBC Act obligations, approval holders may need to prepare a compliance report to satisfy the requirements of other regulations or regulatory bodies. Accordingly, the department recognises that the format of Annual Compliance Reports may need to vary, and will accept reports prepared for other regulators providing they include the information specified in these guidelines and the conditions compliance table described in Section 4.1 and Appendix A. The reports must clearly articulate the different requirements included for each regulator.

1.2 Roles and responsibilities

Approval holders are responsible for self-regulation and implementing systems and practices to ensure their actions are compliant with EPBC Act requirements. The department recognises that members of the regulated community will voluntarily comply with legislation if they are provided with the correct guidance and assistance.

1.3 Department's Compliance and Enforcement Branch

The department's Compliance and Environment Branch delivers the compliance and audit regime for approvals issued under the EPBC Act and is responsible for guiding and assisting EPBC approval holders to ensure they meet the obligations set out in an approval. Requests for assistance or clarification are encouraged and must be sent in writing to epbcmonitoring@dcceew.gov.au.

1.4 Service Charter

The [Departmental client service charter](#) sets out the standards of service clients can expect from us, their rights and responsibilities and how to find out more about the department.

1.5 Non-compliance

The department undertakes a range of compliance activities to ensure the regulated community is aware of their obligations under the EPBC Act. When contraventions occur, the EPBC Act provides enforcement options that include a range of criminal and civil penalties, and civil and administrative remedies.

Compliance activities include monitoring inspections, desk top document reviews and compliance audits in accordance with the department's published [Compliance Policy](#). Desktop document reviews are undertaken to determine the status of approvals and compliance with conditions. Approval holders are required to assist with these reviews. Approvals subject to a full compliance audit are chosen via a risk-focussed strategic selection process as part of the audit program. This document is not intended to provide guidance to approval holders directed to undertake a full compliance audit under section 458 of the EPBC Act. Please refer to the [Independent Audit and Audit Report Guidelines](#) for further information.

1.6 Annual Compliance Reports

Annual Compliance Reports help to ensure projects with the potential to impact on matters protected under the EPBC Act are implemented as approved. The reports help the Australian Government to understand how well approval conditions are being understood and implemented, plus they contribute to improving the effectiveness of the department's operations. Further information can be found on the department's website at dcceew.gov.au/environment/epbc/compliance/audits

Under the EPBC Act, approval holders must maintain accurate records of all activities associated with or relevant to the conditions of approval so that they can be made available to the department on request. Such documents may be subject to audit and used to verify compliance. In some cases, this requirement may be added as a condition attached to an approval.

1.7 Compliance Policy

The department's approach to compliance is set out in its published Compliance Policy, which is available on its website at: dcceew.gov.au/about/commitment/compliance-policy

Approval holders must self-report potential non-compliances upon becoming aware of them or in accordance with the conditions of approval. Self-reporting enables the department to address and assist with instances of non-compliance early and may help to prevent the issue from becoming more severe. In some cases, this requirement may be added as a condition attached to an approval.

Format of the Annual Compliance Report

2.1 General

Each page of the Annual Compliance Report must include the EPBC approval number, the name of the project, the date of the report and sequential page numbering. Reports are to be submitted to the department via email to epbcmonitoring@dcceew.gov.au. If your report exceeds the allowable size for email attachments, please contact the department at the above email to arrange an alternate submission method. Submissions must be titled 'Annual Compliance Report' with the project name and EPBC approval number. The time period of the report must be clearly stated (e.g., 10 October 2023 to 9 October 2024).

2.2 Digital requirements

The department uses an electronic document management system. The complete report (text, figures, and appendices) must be supplied as an Adobe Acrobat PDF file. At a minimum, the PDF document is to be bookmarked to the major components (e.g., contents, main report, and appendices). Where this is not possible, the department will accept individual components in common formats. Where individual digital components are supplied, please provide a file list and the corresponding report reference.

Electronic data will be accepted via email or via online storage services with prior arrangement.

2.3 Revised reports

The department may request that an Annual Compliance Report be revised and resubmitted. A resubmitted report must be accompanied by an electronic copy of the document showing tracked changes from the previous report.

2.4 Requirements for maps, plans and attachments

All maps, plans and attachments must conform to the following standards.

Scale – An appropriate standard metric scale must be chosen to best represent the information required (e.g., 1:25 000, 1:10 000 and 1:5000).

Datum – Plans and cross sections must refer to Australian Height Datum.

Title Block – Plans must have a title block in the lower right-hand corner of the sheet with the following information:

- EPBC number and project name
- title and number of the plan
- author
- scale
- date.

Legend – Plans must have a clear and comprehensive legend to identify the symbols and colours used.

Maps, plans, figures, images, and attachments must:

- use metric measurements throughout
- show a graphic bar scale
- show any local grid lines and standards
- have a north point or orientation of sections
- include a key.

2.5 Delivery address

Compliance reports must be titled 'Annual Compliance Report' with the project name and EPBC approval number, clearly labelled beneath the title.

Annual Compliance Reports must be forwarded to epbcmonitoring@dcceew.gov.au.

The above email address can be used if you are seeking assistance on preparing a compliance report.

Content of the Compliance Report

3.1 Declaration of accuracy

Under sections 490 and 491 of the EPBC Act, a person must not knowingly provide information to the department that is false or misleading. The extract below must be considered in the context of the EPBC Act as whole, including any related sections and any relevant definitions. You must seek your own legal advice regarding interpretation of the sections.

490 Providing false or misleading information in response to a condition on an approval or permit

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

- (a) the person is the holder of an environmental authority; and
- (b) a condition attached to the environmental authority requires the person to provide information; and
- (c) the person provides information in response (or purportedly in response) to the requirement; and
- (d) the person is reckless as to whether the information is false or misleading in a material particular.

Note: The fault element in paragraph (1)(d) can be demonstrated by proof of knowledge. See subsection 5.4(4) of the *Criminal Code*.

(2) The offence is punishable on conviction by:

- (a) imprisonment for a term not more than 2 years, a fine not more than 120 penalty units, or both, if it is proved the person knew the information was false or misleading: or
- (b) imprisonment for a term not more than 1 year, a fine not more than 60 penalty units, or both, if it is proved the person was reckless as to whether the information was false or misleading.

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

491 Providing false or misleading information to authorised officer etc.

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

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

(b) knows the recipient is:

(i) an authorised officer; or

(ii) the Minister; or

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

(iv) a commissioner;

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

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

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

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

The declaration below must be attached to the compliance report and signed by the approval holder. **Even if the approval holder has sub-contracted the project (or part thereof), or the preparation of the compliance report, the responsibility for accuracy still lies with the approval holder.**

Declaration of accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed _____

Full name (please print) _____

Position (please print) _____

Organisation (please print including ABN/ACN if applicable) _____

Date ____/____/____

3.2 Document version control

The document version control system must be a simple system for ensuring version control and documenting details of key changes to the document over time. It must identify changes and include details of timing, people responsible, and reasons for those changes.

3.3 Table of contents

The table of contents must contain:

- all section headings and page numbers
- all figures, tables, plans and maps (which must be numbered)
- all appendices (with meaningful titles, including sub-appendices if any); if appendices contain a collation of data, include a summary of the contents.

3.4 Description of activities

The description of activities section must contain a description of the approved action and details of the current activities undertaken during the period covered by the report. The compliance report must clearly identify:

- EPBC number
- project name
- approval holder and ACN or ABN
- the approved action
- location of the project
- person accepting responsibility for the report – signed declaration (see above)
- dates for the reporting period of the report
- date of preparation of the report.

3.5 Addressing all approval conditions

The compliance report must:

- demonstrate all conditions of the EPBC approval have been considered and addressed.
- List the conditions of the EPBC approval, including any variations to those conditions, noting if compliance or non-compliance with each condition has been achieved.
- If a management plan is required under an approval condition:
 - the specifics in a management plan that support an approval condition must be detailed in the compliance report; and
 - material must be provided demonstrating that the requirements of that plan have been implemented.

3.6 EPBC approval conditions and the compliance table

As part of every compliance report, a conditions compliance table in a similar format to that in Appendix A is required. The table must include:

- Condition number and reference.
- Full wording of the condition as per the EPBC approval.
- Designation regarding compliance or non-compliance.
- Summary of evidence to support the compliance designation.
- Any references to any other parts of the compliance report that may relate to that approval condition.

The report must include a clear statement that operations were, or were not, compliant with the EPBC conditions of approval, which must be supported by a summary of evidence clearly demonstrating the conclusion that compliance with the condition was (or was not) met. Supporting data such as flora and fauna surveys, photograph monitoring and groundwater monitoring data must be provided as appendices.

3.7 Designations to record findings

The following designations must be used to record findings in compliance reports:

Compliant

‘Compliance’ is achieved when all the requirements of a condition have been met, including the implementation of management plans or other measures required by those conditions.

Non-compliant

A designation of ‘non-compliant’ must be given where the requirements of a condition or elements of a condition, including the implementation of management plans and other measures, have not been met.

Not applicable

A designation of ‘not applicable’ must be given where the requirements of a condition or elements of a condition fall outside of the scope of the current reporting period. For example, a condition that applies to an activity that has not yet commenced.

3.8 Correcting non-compliances

Findings of non-compliance must be accompanied by a summary detailing any corrective measures taken and include:

- if the department was notified of the non-compliance and, if so, when, and how and to whom.
- The relevant condition number and reference.
- Who detected the non-compliance.
- Date when the non-compliance was detected.
- How the non-compliance was/will be corrected.
- Who (the actual person completing the correction) was/is responsible for correcting the non-compliance.
- Date when correction measures were/will be commenced and/or completed or the time frame for correction.
- What measures have been/ will be taken to avoid recurrence.

Instances of non-compliance included in previous compliance reports not fully corrected at the end of the reporting period must have a progress update in the subsequent report and an assessment of the effectiveness of the measures taken.

3.9 New environmental risks

The compliance report must discuss any new environmental risks that have become apparent during the reporting period. New environmental risks may include new pests or diseases, new information on groundwater levels, unexpected erosion etc. If new risks are identified, there must be a risk analysis and reporting. A commitment to revise the appropriate management plan (if required) must be included in the compliance report.

3.10 Other information

Any additional monitoring information or environmental research relevant to the EPBC approval and approval conditions can be included in the relevant section or appended to the compliance report. Appendices can be attached to support reporting against the EPBC approval conditions. Colour photographs and/or aerial photography can provide an excellent time record of the operation and should be included. Any additional information such as supporting documentation, consultant studies and reports must be appended.

Appendix A:

4.1 EPBC Approval Conditions Compliance Table Example

Condition Number/ reference e.g., '3(c)'	Condition Include the complete wording of the condition, and/or sub-condition that is being addressed	Is the project compliant with this condition? Compliant or Non-Compliant or Not applicable	Evidence/Comments Evidence to support claims regarding compliance or non-compliance
1	Within 10 business days of the date of commencement of the action, the person taking the action must advise the department in writing of the actual date of commencement.	Compliant	The action commenced on 15 June 2016 (see Appendix 1 – attached copy of the notification to the department) – Compliant
2	To mitigate impacts on listed migratory bird species the person taking the action must provide a 200-metre vegetation setback and boundary fencing between the golf course boundary on Lot 1 and the estuary. The setback must be in place prior to commencement of the action.	Non-compliant	The 200-metre vegetation setback and boundary fencing between the golf course boundary on Lot 1 and the estuary was not in place until after commencement of the action.
3	Prior to commencement of the action, the person taking the action must prepare and submit for the Minister's approval, a Fern Environmental Management Plan for the <i>Hypothetical Fern species</i> within the 200-metre vegetation setback required	Compliant	The action commenced on 15 June 2016. Yes, the Fern Environmental Management Plan was submitted prior to commencement of the action and approved on 30 March 2016.

	under condition 2 of this approval. The approved plan must be implemented. The plan must include: • A 10-year monitoring program of Fern numbers and distribution within the 200-metre vegetation setback. • A seven-year program of weed control for the setback area. • Procedures for managing impacts on ferns in the setback area if the monitoring program finds that the fern population numbers drop below 50. This includes notifying the department of this drop in population and the management actions undertaken.		The approved monitoring program requires fern population surveys to be undertaken once every two years. Two surveys have been undertaken so far (in July 2018 and July 2020) and the <i>Hypothetical Fern species</i> population continues to be stable at 73 specimens. Weed control activities were last undertaken in September 2020. Appendix 2 lists all the requirements of the Fern Environmental Management Plan and states how the requirements have been met. It includes a summary of the survey results and weed control records.
4	Prior to commencement of the action, the person taking the action must prepare and submit for the Minister's approval, a Fauna Management Plan to minimise impacts on the <i>Hypothetical Potoroo species</i>. The approved plan must be implemented.	Non-compliant	The action commenced on 15 June 2016. No, the Fauna Management Plan was not submitted prior to commencement of the action. No, the Fauna Management Plan was not approved by the Minister. However, the Fauna Management Plan was prepared and has been implemented (Appendix 3 lists all the requirements of the management plan and states how the requirements have been met).

Annual Compliance Report Guidelines

5(a)	Within 10 business days of the date of completion of construction of the clubhouse car park extension, highlighted as Car park 4 in the map at Attachment A, the approval holder must advise the department in writing that construction of the car park is complete.	Not applicable	Construction of the clubhouse car park extension has not yet commenced. We expect to commence work on it in August 2023 and complete it by March 2026.
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Appendix F

Annual report template

Annual Report

DRAFT

Proponent and Approval Action

Detail	
EPBC Reference Number:	
Project Name:	
Proponent:	
ABN:	
Proposed Action:	
Location of Action:	
Reporting Period:	
Date Prepared:	

Declaration of Accuracy

Signed

SIGN

Full name

Position

Organisation

Date

XX/YY/20XX

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1 Introduction

1.1 Purpose of this Report

1.2 Location of project

1.3 Matters of National Environmental Significance

1.4 Summary of compliance outcomes for the reporting period

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2 Description of Offset

2.1 Offset Location

2.2 Description of the Offset

DRAFT

Insert figure

Figure 1: **Offset locality**

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2.3 Offset Progress

2.4 Approval History

The date of the EPBC Act approval, and the compliance reporting dates, and status of the annual compliance reports are provided in Table 1 and Table 2.

Table 1 Relevant dates for EPBC Act Approval

Approval Number	Date of Decision	Expiry Date

Table 2 Chronology of Compliance Reports

Reporting Dates	Report No.	Status
xx xxxx 20xx – xx xxxx 20xx	x	Completed (this report)

3 Offset monitoring and reporting methodology

The requirements and scheduling of monitoring and reporting of the offset areas are detailed in Section 6 of the OMP and are summarised in this section. The requirements of the monitoring and reporting are a combination of site survey work and record keeping and collation.

Table 3 Yearly or 5-yearly inspections and monitoring

Audit inspections to be conducted where any dead plantings are to be replaced	Annually prior to a replacement planting event
■ Follow up inspections to be conducted at least 1 month after large rainfall events (>100 mm over 24 hours) where any damaged plantings are to be replaced, and debris carefully removed to prevent further damage.	■ Large rainfall events (>100 mm over 24 hours) within the first 5 years of establishment.
■ Habitat quality assessments using MHQA to determine if the habitat quality score has been maintained and improved by 3 point or more by year 20 for the proposed offset site for the Koala and 1 or more points for the Coastal Swamp Sclerophyll Forest TEC.	■ MHQA undertaken at years 5, 10, 15, and 20.
■ Assessment of the Coastal Swamp Sclerophyll Forest TEC against the key diagnostic characteristics and condition thresholds	■ Undertaken at years 5, 10, 15, and 20.
■ Fencing integrity and wildlife injury monitoring	■ Undertaken yearly and ad hoc during planting and weed control events.

3.1 Yearly monitoring progress

Background and details of yearly monitoring. Details and of personnel conducting annual inspection, date of inspection, weather conditions (regional monthly rainfall observations). Summary of yearly offset conditions. Evidence of pest plants, pest animals, fire, flood damage.

3.1.1 Management actions report

Description of actions over the course of the year, timing, outcomes, and any subsequent recommendations.

3.2 5-yearly monitoring progress

Background and details of 5-yearly monitoring including results of habitat quality assessments and TEC assessment against key diagnostic criteria and condition thresholds.

4 Conclusions and recommendations

4.1 Conclusion

The Project establishment works are well underway with vegetation clearing works almost completed. Earthworks have commenced and preparations for building works is occurring. No works associated with rail infrastructure have commenced. The Project's compliance status is noted in the table above, with one matter undergoing on-going consultation with DCCEEW.

4.2 Recommendations

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5 List of Appendices

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