



ECOLOGICAL ASSESSMENT REPORT

PROPOSED SUBDIVISION - LOT 59, LYSDALE ROAD, WONDAI

Supporting documentation for the Development Application to South
Burnett Regional Council and referral to the State Assessment and Referral
Agency

Trend | Environmental
Consultants

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2025

Prepared on behalf of
**CAMERON ANSELL AND
STUART NICHOLSON**



EXECUTIVE SUMMARY

Trend Environmental was engaged by Cameron Ansell and Stuart Nicholson to prepare an Ecological Assessment Report to support a Development Application for the proposed subdivision of Lot 59 SP184725, Lysdale Road, Wondai, Queensland 4606 (the project area). The project area is located within the South Burnett Regional Council (SBRC) local government area, covering 37.12 hectares (ha), and is proposed to be subdivided from one lot into 40 rural residential lots ranging in size from 4,002 metres (m)² to 14.33 ha. The proposal is code assessable under the *SBRC Planning Scheme 2017 v2.0* and triggers referral to the State Assessment Referral Agency (SARA) for assessment against *State Code 16: Native Vegetation Clearing* under the State Development Assessment Provisions (SDAP).

This Ecological Assessment Report was prepared to:

- Verify ecological values mapped under the *Biodiversity Areas Overlay* of the *SBRC Planning Scheme 2017* and regulated vegetation under the *Vegetation Management Act 1999* (Qld);
- Assess the potential impacts of the proposed subdivision on ecological values;
- Identify avoidance, minimisation, and mitigation measures to protect ecological values and ecosystem processes; and
- Address the assessment benchmarks for the Biodiversity Areas Overlay of the *SBRC Planning Scheme 2017* and State Code 16: Native Vegetation Clearing under the State Development Assessment Provisions (SDAP) to support the development application.

Key Ecological Values

The key ecological values verified within the project area included:

- **Regulated Vegetation (Category B, Remnant):** 30.54 ha verified within the project area, characterised by least concern Regional Ecosystems (REs 12.5.1, 12.5.1e, and 12.5.7).
- **Non-remnant Vegetation (Category X):** 6.58 ha.
- **MSES Wildlife Habitat:** 2.78 ha mapped for the special least concern Short-beaked Echidna (*Tachyglossus maculeatus*).
- **Watercourses:** Two stream order 1 watercourses traverse the project area, flowing south to north. One in the centre of the project area and one in the very east.
- **Waterway Barrier Works:** Two low-risk waterways recognised for fish passage under the *Fisheries Act 1994* (Qld) were confirmed, with one crossing required for a new road. These works will be undertaken as accepted development in compliance with the relevant provisions.
- **Threatened Species:** While habitat values for species such as the Koala are present, no threatened fauna were recorded during field surveys and the project area is not mapped as essential habitat for threatened species under the *Nature Conservation Act 1992* (Queensland; Qld). All recorded flora and fauna were least concern under this Act.

Potential Impacts

The proposed subdivision requires clearing of regulated vegetation and MSES, resulting in direct impacts to:

- 15.06 ha of MSES Regulated Vegetation (Category B least concern REs); and
- 1.35 ha of MSES Wildlife Habitat for the special least concern, Short-beaked Echidna.

Indirect impacts during construction may include:

- Introduction and spread of invasive weeds;
- Noise, vibration, and disturbance to fauna;
- Dust generation and reduced air quality;
- Waste generation and potential contamination from fuel, oil, and chemicals;
- Erosion and sediment runoff from disturbed soils.



Avoidance, Minimisation, and Mitigation

The proposed development has implemented the hierarchy of management principles: avoid, minimisation and mitigate:

- **Avoidance:** Development has been prioritised within the northwestern Category X (non-remnant) area which does not contain biodiversity areas on the OM5 Overlay Map, and watercourses have been fully avoided to maintain ecological connectivity through the implementation of larger lots and building envelopes where lots intersect with the watercourses.
- **Minimisation:** Where development was required outside of Category X (non-remnant) areas, these have been constrained to Category B (remnant) least concern REs only. A total of 15.48 ha (40.57%) of Category B vegetation will be retained (which includes 1.43 ha of MSES Wildlife Habitat (special least concern animal) for the Short-beaked Echidna), ensuring habitat continuity to the north and along watercourses.
- **Mitigation:** Construction-phase measures will include a Construction Environmental Management Plan (CEMP), an Erosion and Sediment Control Plan, weed management, and fauna management protocols (including pre-clearance surveys and spotter-catcher supervision) to mitigate indirect impact to biodiversity areas during construction.

While some clearing of regulated vegetation and biodiversity overlay areas are required to facilitate the subdivision, the development has been designed to avoid and minimise ecological impacts to the greatest practicable extent, with retention of significant areas of remnant vegetation and protection of watercourses built into the design. Mitigation measures will also ensure indirect impacts are managed appropriately. On this basis, the proposed development is considered compliant with the intent of the Biodiversity Areas Overlay assessment benchmarks within the Reconfiguring a Lot Code and Rural Residential Zone Code of the SBRC Planning Scheme 2017 and State Code 16: Native Vegetation Clearing of the SDAP.



INTRODUCTION

1.1 PROJECT BACKGROUND

Trend Environmental was engaged by Cameron Ansell and Stuart Nicholson to prepare an Ecological Assessment Report to support a development application for a proposed subdivision on Lot 59 SP184725, at Lysdale Road, Wondai, Queensland 4606 (herein referred to as the project area; location shown in Map 1, Appendix B).

This project area is located within the South Burnett Regional Council (SBRC) local government area and covers a total area of 37.12 hectares (ha). The proposed subdivision is subject to development approval under the *Planning Act 2016* (Queensland; Qld), with assessment undertaken against the *SBRC Planning Scheme 2017 v2.0*, and referral to the State Assessment and Referral Agency (SARA) for assessment against State Code 16: Native Vegetation Clearing within the State Development Assessment Provisions (SDAP).

The Development Application is for Reconfiguring a Lot. The plan for the lot is to subdivide from one lot into 40 lots (design plans provided in Appendix A). The new lots will range in size from 4,002 metres (m)² to 14.33 ha.

The project area is zoned RR1 Rural Residential under the *SBRC Planning Scheme 2017 v2.0*. A Reconfiguring a Lot application within the RR1 Rural Residential zone is code assessable where proposed lots meet the minimum size of 4,000 m², as specified in *Table 8.4.2 – Minimum Lot Dimensions* of the planning scheme. As all proposed lots exceed this minimum requirement, the application is code assessable against the Reconfiguring a Lot Code and the Rural Residential Zone Code of the planning scheme. These codes incorporate the relevant Biodiversity Areas Overlay assessment benchmarks.

This Ecological Assessment Report provides the results of an ecological assessment related to the verification of attributes mapped on the *Biodiversity Areas Map* within the *SBRC Planning Scheme 2017*, regulated vegetation protected under the *Vegetation Management Act 1999* (Qld), and other relevant state and Commonwealth ecological values. This report has been prepared to address the *Biodiversity Areas Overlay* requirements of the *SBRC Planning Scheme 2017*, and the *State Code 16: Native Vegetation Clearing* requirements under the SDAP. To do this, this report provides the following:

- An assessment of the relevant ecological values and ecosystem processes on and adjacent to the project area;
- Assessment of the potential impacts of the proposed development on these ecological values; and
- Identification of avoidance, minimisation and mitigation measures required for the long-term protection of ecologically values and ecosystem processes on the project area.
- Assessment against the relevant assessment benchmarks for *Biodiversity Areas Overlay* and *State Code 16: Native Vegetation Clearing*.

Table 1 below describes the applicant and development attributes of the project area.

Table 1
Project area
attributes

| Attribute | Details |
|---|---|
| Applicant | Cameron Ansell and Stuart Nicholson |
| Local Government Area | South Burnett Regional Council |
| Lot on Plan | 59 SP184725 |
| Total area of lot | 37.12 hectares |
| Tenure | Freehold |
| Address | Lysdale Road, Wondai QLD 4606 |
| Planning Scheme | South Burnett Regional Council Planning Scheme 2017 v2.0 |
| Zoning | RR1 - Rural Residential |
| Biodiversity Areas Overlay Map Attributes | Regulated vegetation (Category B) Wildlife habitat (special least concern) |
| Vegetation Management Mapping | Regulated vegetation containing Category B (remnant) and Category X (Non-remnant) Least concern regional ecosystems Two stream order one watercourses |



1.2 PROPOSED PROJECT DISTURBANCE

To undertake the proposed subdivision, vegetation clearing will be required which will impact on mapped attributes on the *Biodiversity Areas Overlay Map* within the *SBRC Planning Scheme 2017*. Not all native vegetation within the project area will be cleared however, with the watercourses in the centre and eastern portion the project area to remain undisturbed. For the purpose of the impact assessment however it is assumed that vegetation clearing will occur on all proposed lots, with the exception of Lot 21, 29, 30 and 31 shown in the plans in Appendix A. As a result, the native vegetation to retained within the project area is 15.48 ha.

1.3 PROJECT AREA DESCRIPTION, ENVIRONMENTAL SETTING AND SURROUNDING LAND USE

1.3.1 Bioregion and Habitat Context

The project area is located within the Southeast Queensland bioregion, within the South Burnett subregion. The South East Queensland bioregion lies mostly in Southeast Queensland but extends to Coffs Harbour in New South Wales (NSW). The bioregion spans an area of 7,804,921 ha.

The bioregion is one of the most biodiverse bioregions in Australia, home to eucalypt forests and woodlands, with rainforests on mountain slopes and in stream valleys and wallum heaths near the coast. The climate ranges from sub-tropical in the east through to temperate in the uplands (EHP, 2016). There is a wide variety of soils, vegetation, climate and topography within this bioregion. The Southeast Queensland bioregion has over 300 threatened animal and plant species.

The project area occurs on a slight elevation from north to south. Elevations over the project area range from 336 - 356m Australian Height Datum (AHD). Two vegetation management watercourses (stream order 1) occur within the project area: one in the centre and one in the east of the project area. Much of the project area is mapped as Category B (remnant) vegetation, with a relatively large parcel of Category X (non-remnant) vegetation in the north western corner of the project area (regulated vegetation areas defined under the *Vegetation Management Act 1999*; Qld; Vegetation Management Report provided in Appendix E).

The majority of the landscape in the vicinity of the project area has been subject to vegetation clearing, and modification for development, leaving much of the remaining vegetation communities fragmented. This has implications for species dispersal, particularly for threatened species. The immediate vicinity of the project area contains development for rural residential housing purposes (urban development can be seen in the imagery in Map 2, Appendix B).

1.3.2 Geology and Land Zones

Surface geology mapping assists in verifying land zones within a project area, which is a critical component to verifying regional ecosystems and habitats within a project area. The Queensland Government QResGlobe mapping tool (using surface geology layers) identified the project area as containing *stratified units (including volcanic and metamorphic) from the Tertiary period* (Table 2).

These geology layers provide an indication that Land Zone 5 (*Tertiary-early Quaternary extensive, uniform near level or gently undulating plains with sandy or loamy soils. Includes dissected remnants of these surfaces. Also includes plains with sandy or loamy soils of uncertain origin, and plateau remnants with moderate to deep soils usually overlying duricrust*) is present within the project area (land zones provided as the second numeral in the RE codes provided in Table 2).

The two watercourses within the project area are classified as stream order 1 and exhibit only minor alluvial influence from overland flow. The field assessment confirmed these features as Land Zone 5 (Tertiary-early Quaternary loamy and sandy plains and plateaus) with limited alluvial development.

Table 2
Surface geology mapped

| Unit Name | Map Symbol | Age | Lithology Description |
|-----------|------------|----------|--|
| Td-QLD | Td-SEQ | Tertiary | Duricrusted palaeosols at the top of deep weathering profiles, including ferricrete and silcrete; duricrusted old land surfaces. |

1.3.3 Catchment Context

The project area is located in the South Burnett region of Queensland and lies within the Burnett River catchment, specifically in the Barambah Creek sub-catchment. The Burnett River catchment is one of Queensland's major river systems and an important ecological, agricultural, and water resource area.



The catchment covers an area of approximately 33,00 kilometre (km)² and extends from the Great Dividing Range in the west to the Coral Sea. There are four major tributaries: Auburn River, Nogoia River, Barambah Creek, and Boyne River. The project area is situated near the headwaters of Barambah Creek and its minor tributaries, which flow west to east. Barambah Creek eventually flows into the Burnett River system, which discharges into the Coral Sea near Bundaberg.

The Burnett River catchment area receives an average annual rainfall of approximately 688 to 747 millimetres (mm). This rainfall results in an annual river discharge of about 1076 gigalitres (GL) to the coast.

1.3.4 Climate

The Wondai region typically experiences a subtropical climate with distinct seasonal patterns. Annual rainfall is an average of 776.2 mm, with most rain falling in the summer and early autumn months (December to March). Winter and early spring are typically drier months, with lower humidity experienced (BoM, 2025).

1.4 HISTORY AND LAND USE OF THE PROJECT AREA

Historical imagery of the project area was obtained from QImagery and Google Earth, with the earliest image dating back to 1951 (Figure 1). The following details the timeline of clearing and regrowth within the site, and development within the surrounding landscape:

- **1951** - Shows the site (yellow inset) contained intact remnant vegetation. Many areas surrounding the site however, had been cleared for agriculture.
- **1971** - A small area in the northwest of the project area had been cleared by 1971, with a dam was installed adjacent. The balance of the project area remained intact with remnant vegetation. Residential development in Wondai township, to the east of the project area was evident.
- **1986** - The cleared area in the northwest corner of the project area had undergone further clearing, extending slightly south.
- **2002** - Limited maintenance of the cleared area in the northwest had occurred, with evidence of vegetation having started to regrow in this area. Infill of residential housing was evident to the south of the project area
- **2012** - Further regrowth in the northwest corner of the project area was evident. Additional areas directly to the southeast of the project area had been cleared for residential purposes.
- **2025** - Current day landscape with a balance of 6.58 ha of non-remnant vegetation and 30.54 ha of remnant vegetation within the project area. The project area is surrounded by a mix of residential properties and some intact habitat areas. Most connectivity for the site is evident to the north.

From these images it is evident that the project area remained uncleared until sometime between 1951 and 1971 when an area in the northwest was cleared and then extended during the following decade. Since 1986 however, the cleared area was left unmaintained, and regrowth vegetation became established. No further clearing has been undertaken on the site since 1986.



Imagery from 1951
Source: QImagery QAP0214081



Imagery from 1971
Source: QImagery QAP2163112



Imagery from 1986
Source: QImagery QAP4423187



Imagery from 2002
Source: Google Earth 2002



Imagery from 2012
Source: Google Earth 2012



Imagery from 2025
Source: Google Earth 2024

Figure 1
Historical
imagery of the
project area since
1951



METHODOLOGY

2.1 DESKTOP ASSESMENT

2.1.1 Methodology

A desktop assessment was undertaken to characterise and identify potential ecological values that may be present within the project area. This desktop assessment included a review of literature, and a review of all relevant publicly available environmental databases, maps and relevant environmental legislation to identify the ecological values that could potentially occur within the project area or in close proximity, and could potentially be impacted by the proposed development.

The databases reviewed during the desktop assessment include those listed in Table 3 and where relevant the resulting reports and maps have been provided in Appendix E. This review informed the likelihood of occurrence assessment for the project (provided in Appendix C).

Table 3
Information sources reviewed during the desktop assessment

| Type | Source |
|--|--|
| Legislation | Local <i>South Burnett Regional Council Planning Scheme 2017 v2.0</i> |
| | State <i>Vegetation Management Act 1999, Nature Conservation Act 1992, Fisheries Act 1994, Water Act 2000, Environmental Protection Act 1994, Environmental Offsets Act 2014</i> |
| | Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i> |
| Imagery | Queensland Globe 2025 |
| | Google Earth Pro 2025 |
| | QImagery Historical Imagery |
| | Detailed Surface Geology 1:100,00 |
| Planning Maps | <i>South Burnett Regional Council Planning Scheme 2017 – Biodiversity Areas Overlay Map</i> |
| Database Searches/Maps/ Reports | State Planning Policy Interactive Mapping System |
| | DCCEEW <i>EPBC Act</i> Protected Matters Search Tool (PMST; 20km buffer; updated September 2025) |
| | Department of Natural Resources, Mines and Energy (DNRME) Vegetation Management Report |
| | Matters of State Environmental Significance (MSES) Report |
| | Department of Environment, Tourism, Science and Innovation (DETSI) WildNet species lists (20km buffer; updated September 2025) |
| Atlas of Living Australia (ALA) Species Occurrence Records | |
| Reports and Plans | All conservation and listing advice for threatened species; DCCEEW SPRAT |

2.1.2 Likelihood of Occurrence Assessment

Threatened ecological communities (TECs), threatened and migratory species, if found present within the project area, can cause constraints to development due to the potential for impacts. From a desktop perspective, a likelihood of occurrence assessment can be undertaken to determine the likelihood these communities and species will be found within the project area, which provides an indication of potential impacts from the proposed development. This assessment can also inform the



field ecological assessment identifying the TECs, threatened and migratory species most likely to occur that should be targeted for verification purposes.

A likelihood of occurrence assessment was undertaken to determine the likelihood TECs, threatened and migratory species would be found within the project area (likelihood of occurrence assessment provided in Appendix C). Threatened ecological communities and species, and migratory species were identified using the EPBC Act PMST, the WildNet species record database and ALA species records (relevant database search result reports are provided in Appendix E).

The likelihood of occurrence assessment identified the TECs, threatened and migratory species that were considered 'known to occur', 'likely to occur', 'may occur' or 'unlikely to occur' within 20 km of the project area, based on the definitions provided in Table 4. These definitions were used as a guide, and a species may have been given a different likelihood term depending on behaviour (e.g., aerial or cryptic nature making it more or less likely to occur regardless of nearby records). The likelihood of occurrence assessment results have been provided in Appendix C of this report. These likelihood of occurrence results have been reviewed post the field assessment to provide evidence of species records or species habitat within the project area.

Table 4
Explanation of terms used in the likelihood of occurrence assessment

| Terms | Definition |
|-------------------|--|
| Known to occur | Recorded on the project area during field surveys. |
| Likely to occur | For TECs, the project area supports a corresponding RE as listed in the TEC Approved Conservation Advice or Listing Advice. For threatened and migratory species, the project area contains the species preferred habitat with associated habitat attributes (e.g., microhabitats), AND numerous recent (<10 years) and adjacent (<20 km) individuals have been recorded. |
| May occur | For threatened and migratory species, the project area contains suitable or marginally suitable habitat AND isolated records (<10 years) in an adjacent area (<20 km). |
| Unlikely to occur | For TECs, the project area does not support a corresponding RE as listed in the TEC Approved Conservation Advice or Listing Advice. For threatened and migratory species, the project area does not support the species habitat and associated habitat features, regardless of species records within the adjacent area or within the region OR suitable habitat occurs within the project area, but no records in the adjacent area (<20 km). |

2.2 FIELD ASSESSMENT

2.2.1 Methodology

A field assessment was conducted by Clayton Bell, a suitably qualified ecologist in 2023 whereby ecological data was collected to support a map amendment request using a Property Map of Assessable Vegetation (PMAV) through the Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development (DNRMMRRD).

A PMAV is a property-scale map that shows the boundaries of vegetation categories on a property. Once a PMAV is certified, it replaces the regulated vegetation management map for determining the location and extent of the different areas of vegetation under the *Vegetation Management Act 1999* (Qld).

The ecological data collected for this PMAV application included:

- Quaternary surveys undertaken in accordance with the *Methodology of surveying and mapping regional ecosystems and vegetation communities* (Neldner et al., 2023) within all vegetated areas, to verify the mapped REs and to characterise the floristic composition and structure of the vegetation communities.
- Vegetation categorisation surveys to characterise the vegetation into vegetation communities based on dominant canopy species and vegetation structures.
- Vegetation community delineation surveys to field validate the extent of the vegetation communities.
- Recording of all flora species observed, as well as any restricted invasive species listed under the *Biosecurity Act 2014* (Qld) or considered Weeds of National Significance (WoNs) recognised under the *National Established Weed Priorities (NEWP) Framework*.



These data have been utilised within this ecological assessment report, along with interpretation of the following based on current photographs and video of the ecosystems within the project area, desktop available information (historical and current aerial imagery, species records lists, and local knowledge of the project area):

- Assessment of vegetation communities to confirm if they likely meet the key diagnostic criteria and condition thresholds of the threatened ecological communities (TEC) identified as likely to occur during the desktop assessment.
- Assessment of the suitability of the vegetation to provide habitat for threatened flora species listed under the *Nature Conservation Act 1992* (Qld) and/or the *EPBC Act* (Cth).
- Assessment of the vegetation communities to confirm the suitability of them providing habitat for the threatened and migratory fauna species identified as potentially present during the desktop assessment.

2.3 REPORTING

2.3.1 Desktop and Field Assessment Results

Results from the desktop and field assessments have been provided throughout this report.

2.3.2 Nomenclature

Taxonomic nomenclature used for the description of flora species within this report was according to the Census of Queensland Flora and Fungi 2023 (Bean, 2024). Where relevant, species have been listed by family name in alphabetical order.

2.4 ASSUMPTIONS AND LIMITATIONS

2.4.1 Third Party Data

The content in this report, including the assessment of project impacts, is based on information available at the time the report was prepared. Information has been obtained from third party sources (refer to *Section 2.1.1 Methodology*) and, while due diligence has been taken to ensure the accuracy of these data, Trend Environmental makes no statements regarding the reliability or completeness of these data.



DESKTOP ASSESMENT RESULTS

3.1 DATABASE OVERVIEW

All relevant databases applicable to the project area were reviewed and the results of this desktop assessment provided in Table 5.

Table 5

Information sources relevant to the project are

| Database Source | Search Results | Applicability | Database Reference |
|---|---|---|---|
| LOCAL GOVERNMENT | | | |
| <i>South Burnett Regional Council Planning Scheme 2017 Biodiversity Areas Overlay Map</i> | Regulated vegetation (Category B) and Wildlife habitat (special least concern) were mapped within the project area. | Yes | Biodiversity Overlay Map 05, provided in Appendix E |
| STATE GOVERNMENT | | | |
| Vegetation Management Report | Regulated Vegetation Management Map | Category B (Remnant vegetation) was mapped throughout most of the project area, with Category X (non-remnant) vegetation mapped in the northwestern portion of the project area. | Yes Vegetation Management Report in Appendix E |
| | Vegetation Management Supporting Map | The Category B vegetated areas on the project area were mapped as containing: <ul style="list-style-type: none"> Heterogenous polygon of least concern regional ecosystems 12.5.1e and 12.5.7b Homogenous polygon of least concern regional ecosystem 12.5.1. In addition, two stream order 1 watercourses were mapped within the project area. | Yes Vegetation Management Report in Appendix E |
| Matter of State Environmental Significance (MSES) Report | MSES | The following MSES were mapped: <ul style="list-style-type: none"> MSES Wildlife habitat (special least concern) MSES Regulated vegetation (Category B) | Yes MSES Report in Appendix E |
| COMMONWEALTH GOVERNMENT | | | |
| Protected Matters Search Tool Report | Matters of National Environmental Significance | The following MNES were listed in the PMST as potentially occurring: <ul style="list-style-type: none"> Eight threatened ecological communities 57 threatened species Ten migratory species | Yes PMST Report to Appendix E |

3.2 DESKTOP REVIEW RESULTS

3.2.1 Biodiversity Overlay Map

The *Biodiversity Areas Overlay Map* within the *SBRC Planning Scheme 2017* is applicable to category of development for the project, with assessment for any mapped attributes required. A review of the *Biodiversity Areas Overlay Map* identified the presence of the following attributes within the project area:

- Regulated vegetation (Category B); and
- Wildlife habitat (special least concern).

The *Biodiversity Areas Overlay Map* showing the project area is provided OM5 in Appendix E.



3.2.2 Desktop Mapped Regulated Vegetation

In Queensland, regulated vegetation refers to native vegetation protected under the *Vegetation Management Act 1999* (Qld). Under the Act, regulated vegetation is classified into categories that reflect its level of protection:

- Category A – Vegetation subject to offsets or compliance notices
- Category B – Remnant vegetation
- Category C – High-value regrowth vegetation
- Category R – Reef regrowth watercourse vegetation
- Category X – Exempt clearing work on Freehold, Indigenous and Leasehold land (non-remnant vegetation)

Clearing within Category X areas is generally exempt from approval, whereas clearing within Categories A, B, C, or R may require development approval under the State Development Assessment Provisions (SDAP) referral process, unless the clearing meets exempt or accepted development criteria.

Vegetation within Categories A, B, C, and R is described and mapped by the Queensland Herbarium as regional ecosystems (REs). Vegetation communities within a bioregion that consistently associate with specific geology, landform, and soil conditions (Neldner et al., 2023). The regional ecosystems and their associated regulated vegetation categories mapped within the project area are listed in Table 6 (Vegetation Management Report, Appendix E).

Mapping identified Category B (remnant vegetation) across much of the project area, with a relatively large patch of Category X (non-remnant vegetation) in the northwestern portion. The Category B area comprised one large, heterogeneous polygon of least concern REs 12.5.1e and 12.5.7b, and two smaller, homogeneous polygons of least concern RE 12.5.1, located in the far eastern and southeastern corners of the project area. These regional ecosystems are shown in Map 2, Appendix B.

All vegetation within the project area was surveyed to field-verify the regulated vegetation and RE mapping.

Table 6
Regional ecosystems mapped within the project area

| RE | Description | Category ¹ | Structure | VMA Class ² |
|---------|---|-----------------------|-----------|------------------------|
| 12.5.1 | <i>Open forest complex with Corymbia citriodora subsp. variegata on subcoastal remnant Tertiary surfaces. Usually deep red soils</i> | B | Mid-dense | LC |
| 12.5.1e | <i>Eucalyptus crebra and Angophora leiocarpa +/- Corymbia intermedia, E. longirostrata, Eucalyptus major, Eucalyptus tereticornis, Eucalyptus acmenoides or Eucalyptus portuensis, C. citriodora subsp. variegata woodland to open forest. Occurs on remnant Tertiary surfaces.</i> | B | Mid-dense | LC |
| 12.5.7 | <i>Corymbia citriodora subsp. variegata +/- Eucalyptus portuensis or E. acmenoides, Eucalyptus fibrosa subsp. fibrosa open forest on remnant Tertiary surfaces. Usually deep red soils</i> | B | Mid-dense | LC |

¹ Regulated vegetation category: Category B (remnant vegetation), Category C (high-value regrowth), Category R (reef regrowth watercourse vegetation).

² Vegetation Management Act (VMA) 1999 (Qld) Class: EN = Endangered, OC = Of Concern, LC = Least Concern.

3.2.3 Wetlands and waterways

3.2.3.1 Vegetation Management Act Watercourses and Wetlands

Wetlands and watercourses are afforded protection under the *Vegetation Management Act 1999* (Qld). A review of the Vegetation Management Supporting Map (Appendix E) identified no wetlands within the project area. However, two stream order 1 watercourses were mapped traversing the central and eastern portions of the site, flowing south to north (Vegetation Management Report, Appendix E). The vegetation management watercourses are shown in Map 2, Appendix B.

3.2.3.2 Fish Passage (Waterway Barrier Works) watercourses

The project area contains two green (low risk of impacts) waterways, mapped within the Department of Agriculture and Fisheries (DAF) Queensland waterways for waterway barrier works mapping, protected under the *Fisheries Act 1994* (Qld). These waterways are shown in Map 3, Appendix B.



3.2.3.3 High Ecological Significant Wetlands and Watercourse, and Great Barrier Reef Wetlands

No high ecological significant wetlands, watercourses or Great Barrier Reef wetlands protected under the *Environmental Protection Act 1994* (Qld) were mapped within the project area.

3.2.3.4 Fish habitat areas

No fish habitat areas, protected under the *Fisheries Act 1994* (Qld) were mapped within the project area.

3.2.4 State-listed Threatened Species

3.2.4.1 Protected Flora Survey Trigger Mapping

No areas of 'high-risk' for protected plants on the flora survey trigger map occur within the project area (Vegetation Management Report provided in Appendix E).

3.2.4.2 Essential habitat

Essential habitat is defined under the *Vegetation Management Act 1999* (Qld) as habitat for endangered, vulnerable or near-threatened wildlife (protected wildlife; EVNT) prescribed under the *Nature Conservation Act 1992* (Qld). The project area is not mapped as containing essential habitat mapping (Vegetation Management Report provided in Appendix E).

3.2.4.3 WildNet Conservation significant Species Records

The WildNet conservation significant species database provides threatened species records for a specified area. Twenty-two state-listed threatened flora and fauna species were recorded within 20 km buffer of the project area (WildNet Species List provided within Appendix C).

3.2.4.4 State-listed Threatened Wildlife Habitat

Modelled habitat mapping for threatened species provides an indication of where State-listed threatened species habitat is likely to occur. The MSES modelled habitat suitability mapping based on State-mapped regulated vegetation mapping identified areas of wildlife habitat for the Short-beaked Echidna, *Tachyglossus aculeatus*, within the eastern portion of the project area (MSES Report provided in Appendix E).

3.2.5 Commonwealth Matters

The *EPBC Act* (Cth) PMST report (updated 24 September 2025) identified MNES that were known to occur or may occur within the area of interest (20km buffer; EPBC PMST results provided in Appendix E). This report identified:

- Eight TECs
- 57 threatened species
- Ten migratory species

3.2.6 Results of the Likelihood of Occurrence Assessment for Threatened and Migratory Species

A determination of the likelihood of presence of TECs was undertaken by reviewing whether any of the corresponding REs listed within the relevant DCCEEW Conservation or Listing Advice were mapped within the project area (likelihood of occurrence assessment for TECs provided in Appendix C). Based on these, no TECs were considered likely to occur within the project area due to no mapped presence of corresponding REs (Table 7).

The likelihood of occurrence assessment was also completed for MNES threatened species, and migratory species (Appendix C). This assessment identified one Commonwealth-listed threatened flora species (*Zieria inexpectata*), three Commonwealth-listed threatened fauna species (three mammals), and one migratory bird species as likely to or may occur within the project area (Table 8).



Table 7
TECs
potentially
occurring
within the
project area

| TEC Community | Status ¹ | Presence | Corresponding REs ² |
|---|---------------------|-------------------|---|
| Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant) TEC | EN | Unlikely to occur | No corresponding REs mapped in the project area |
| Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions | EN | Unlikely to occur | No corresponding REs mapped in the project area |
| Lowland Rainforest of Subtropical Australia | CE | Unlikely to occur | No corresponding REs mapped in the project area |
| Poplar Box Grassy Woodland on Alluvial Plains TEC | EN | Unlikely to occur | No corresponding REs mapped in the project area |
| Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions | EN | Unlikely to occur | No corresponding REs mapped in the project area |
| Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions | EN | Unlikely to occur | No corresponding REs mapped in the project area |
| Weeping Myall Woodlands | EN | Unlikely to occur | No corresponding REs mapped in the project area |
| White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland | CE | Unlikely to occur | No corresponding REs mapped in the project area |

¹ EPBC Act (Cth): CE = Critically Endangered, EN = Endangered, VU = Vulnerable

² These REs are considered to be the TEC if they meet the descriptions, diagnostic criteria and condition thresholds within the relevant Conservation or Listing Advice for each TEC.

Notes: TECs that are unlikely to be present in the project area, due to lack of suitable REs, have been greyed out.

Table 8
Threatened and
migratory species
potentially
occurring within
the project area

| Family | Scientific Name | Common Name | Status | | Likelihood of Occurrence ³ |
|--------------------------|-------------------------------------|----------------------------------|------------------|------------------|---------------------------------------|
| | | | QLD ¹ | CTH ² | |
| PLANTS | | | | | |
| Rutaceae | <i>Zieria inexpectata</i> | - | EN | - | May occur |
| MAMMALS | | | | | |
| Petauridae | <i>Petaurus australis australis</i> | Yellow-bellied Glider (southern) | VU | VU | May occur |
| Phascolarctidae | <i>Phascolarctos cinereus</i> | Koala | EN | EN | Likely to occur |
| Pteropodidae | <i>Pteropus poliocephalus</i> | Grey-headed Flying-fox | - | VU | May occur |
| MIGRATORY SPECIES | | | | | |
| Apodidae | <i>Apus pacificus</i> | Fork-tailed Swift | - | Mi, M | Likely to occur |

¹ Queensland (Qld) Status (Nature Conservation Act 1992): EX = Extinct, EW = Extinct in Wild, CR = Critically Endangered, EN = Endangered, VU = Vulnerable, NT = Near Threatened or LC = Least Concern.

² Commonwealth (Cth) Status (EPBC Act): EX = Extinct, EW = Extinct in Wild, CE = Critically Endangered, EN = Endangered, VU = Vulnerable, M = marine, Mi = Migratory

³ Data in the 'Likelihood of Occurrence' column corresponds to information provided in Appendix B – categories used include likely to occur or may occur.

3.2.7 Corridors and Connectivity

Connectivity areas are considered an MSES under *Queensland's Environmental Offsets Act 2014* (Qld). The native vegetation in the project area has some marginal connectivity with native vegetation on the property to the north, and the riparian vegetation along the watercourses to the north and northeast of the project area. This vegetation however has marginal connectivity with other habitat areas in the greater landscape.

The project area is not located within the state or regional biodiversity corridor (Queensland Globe) and is nearly 10km from the nearest mapped corridor (Barambah Creek, which is located to the east of Wondai).

3.2.8 Terrestrial Weeds

The search of the Queensland WildNet species database identified 78 flora species within 20 km of the project area that are introduced to Queensland. Some of these species are listed as restricted invasive plants (Category 3) under the *Biosecurity Act 2014 (Qld)* and Weeds of National Significance. These invasive species included:

- Madeira vine, *Anredera cordifolia*



- Ornamental Asparagus, *Asparagus africanus*
- Cat's Claw Creeper, *Dolichandra unguis-cati*
- Lantana, *Lantana camara*.
- Creeping Lantana, *Lantana montevidensis*
- *Opuntia stricta*
- Velvety Tree Pear, *Opuntia tomentosa*

3.2.9 Pest Animals

The search of the Queensland WildNet pest species database identified records for 20 pest fauna species that are introduced to Queensland within 20 km of the project area. These species included the Cane Toad, Northern Mallard, Rock Dove, Spotted Dove, House Sparrow, Indian Peafowl, Common Myna, Common Starling, Monarch, Cabbage White, European Cattle, Dog, Red Fox, Cat, European Brown Hare, Rabbit, House Mouse, Goldfish, Mosquitofish, and House Gecko.

Of these, the Dog, Red Fox, Cat, Rabbit and Mosquitofish are listed as restricted invasive terrestrial animals under the *Biosecurity Act 2014 (Qld)*.



FIELD ASSESSMENT RESULTS

4.1 FIELD-VERIFIED REGULATED VEGETATION

All areas of project area were assessed to determine the vegetation class (i.e., non-remnant, high-value regrowth or remnant) and identify the representative regional ecosystems and vegetation communities. This assessment was completed in accordance with the *Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities (Neldner et al., 2023)*.

The field ecological survey of the project area identified Category B (remnant; 30.53 ha), and Category X (non-remnant vegetation; 6.58ha) vegetation areas on the project area. The Category B (remnant) areas were characterised by least concern REs 12.5.1, 12.5.1e and RE 12.5.7 (Map 2, Appendix B). These mapped areas and corresponding REs were the subject of the PMAV application in 2023, which updated the regulated vegetation areas shown within the Vegetation Management Report for the site (provided in Appendix E).

The largest Category B (remnant) patch (4.45ha) corresponds to a heterogenous polygon of RE12.5.1e/12.5.7 which is 27.0 ha in size. This vegetation community was a mix of *Eucalyptus crebra* (Narrow-leaved Ironbark), *Corymbia citriodora subsp. variegata* (Spotted Gum), *E. moluccana* (Grey Box), *E. tereticornis* (Queensland Blue Gum) and *Angophora leiocarpa* (Smooth-barked Apple). The vegetation had an average median height of 20 m, maximum height of 24 m with an average tree canopy cover estimate of <20%.

The remaining Category B (remnant) patches made up 1.93 ha (far eastern corner) and 1.24 ha (south-eastern corner) of RE12.5.1 and 0.37 ha (north-western corner) of RE12.5.1e/12.5.7 (Map 2, Appendix B).

Other areas of the project area were non-remnant, characterised by an abundance of Acacia and weed species including *Lantana camara* and *Megathyrsus maximus* (Guinea Grass; 6.58 ha). These areas were mapped as Category X (non-remnant) on Map 2 in Appendix B), with the main portion located in the north-western corner of the project area (6.35 ha).

Table 9 lists the field-verified REs and their relevant regulated vegetation category, structure category and VMA Class. Representative photographs of the vegetation within the project area are provided in Figure 2.

| Table 9 Field-verified REs | RE | Description | Category ¹ | Structure | VMA Class ² |
|----------------------------------|---------|---|-----------------------|-----------|---------------------------|
| | 12.5.1 | <i>Open forest complex with Corymbia citriodora subsp. variegata on subcoastal remnant Tertiary surfaces. Usually deep red soils</i> | B | Mid-dense | LC |
| | 12.5.1e | <i>Eucalyptus crebra and Angophora leiocarpa +/- Corymbia intermedia, E. longirostrata, Eucalyptus major, Eucalyptus tereticornis, Eucalyptus acmenoides or Eucalyptus portuensis, C. citriodora subsp. variegata woodland to open forest. Occurs on remnant Tertiary surfaces.</i> | B | Mid-dense | LC |
| | 12.5.7 | <i>Corymbia citriodora subsp. variegata +/- Eucalyptus portuensis or E. acmenoides, Eucalyptus fibrosa subsp. fibrosa open forest on remnant Tertiary surfaces. Usually deep red soils</i> | B | Mid-dense | LC |

¹ Regulated vegetation category: Category B (remnant vegetation), Category C (high-value regrowth), Category R (reef regrowth watercourse vegetation).

² Vegetation Management Act (VMA) 1999 (Qld) Class: EN = Endangered, OC= Of Concern, LC = Least Concern.



Figure 2
Representative
photographs of the
vegetation recorded
within the project area



4.2 FIELD-VERIFIED ATTRIBUTES ON THE BIODIVERSITY AREAS, WATERWAYS AND WETLANDS OVERLAY MAP

Based on field-verified vegetation data, the following MSES occur within the project area (Map 4, Appendix B):

- 30.54 ha of MSES Regulated Vegetation (Category B);
- 2.78 ha MSES Wildlife Habitat (special least concern animal), the Short-beaked Echidna.

The boundaries of these differ to what was previously mapped by SBRC within the *Biodiversity Areas Overlay Map (OM5)* within the *SBRC Planning Scheme 2017*, which have not been updated within the PMAV applied to vegetation areas in 2023..

4.3 FIELD-VERIFIED FLORA AND FAUNA SPECIES

4.3.1 Flora Species

All flora species recorded during the field assessment have been listed in Appendix D. A total of 21 flora species were recorded, 19 of which were native, and two species were introduced. No State-listed threatened flora species listed under the *Nature Conservation Act 1992* (Qld) were found within the project area, nor were any Commonwealth-listed threatened flora species listed under the *EPBC Act* (Cth).

There was one introduced species confirmed on the project area that is considered a Category 3 restricted invasive plant under the *Biosecurity Act 2014* (Qld) and recognised as a WoNS. This species was *Lantana camara*.

4.3.2 Fauna Species

An abundance of microhabitats and land features were present within the remnant areas on the project area. The microhabitats observed on the project area included coarse woody debris, tree hollows, grass tussocks, farm dams, peeling bark, water bodies, vine thickets, leaf litter along with sufficient standing native vegetation at different strata which would contribute to available habitat for shelter for native fauna.

An assessment of the habitat suitability for each fauna group, including an assessment of the habitat suitability for the threatened and migratory species considered potentially occurring, is provided in Table 10. Remnant habitat within the project area provides some extension of habitat for most fauna groups and some threatened fauna species, allowing for some extension of suitable habitat within the species home ranges, in a modified landscape.

Table 10
Assessment of habitat suitability for fauna species on the project area

| Fauna Group | Availability of Habitat |
|-------------|--|
| Amphibians | Bodies of water, crevices, leaf litter and dense ground cover vegetation provide habitat for amphibian species in the project area; however, it is anticipated any amphibian species present would be limited to least concern species, with no threatened amphibian species considered likely to occur during the likelihood of occurrence assessment, due to a lack of suitable habitat within the project area. |
| Birds | <p>Sufficient shelter for foraging, roosting, and nesting is available throughout the remnant vegetation within the project area, with water sources provided by two stream order 1 watercourses and a farm dam. However, the likelihood of occurrence assessment did not identify any threatened bird species as potentially present within the project area.</p> <p>Although the available habitat could be utilised opportunistically by a range of bird species, it is fragmented and exhibits limited connectivity to larger, more continuous tracts of habitat in the surrounding landscape. This lack of connectivity reduces the capacity of the project area to support viable populations of threatened bird species.</p> <p>Accordingly, while the site may provide transient resources such as foraging opportunities or temporary shelter, it is unlikely to function as critical habitat capable of supporting a threatened bird population.</p> |
| Mammals | <p>The project area supports a range of suitable microhabitats for mammals, including tree hollows, woody debris, hollow logs, dense groundcover, and a well-developed shrub layer. These features provide refuge, foraging, and breeding habitat for a diversity of least concern mammal species, such as native rodents, gliders, possums, and bandicoots.</p> <p>The available habitat may also be utilised opportunistically by threatened mammals, including the Koala (<i>Phascolarctos cinereus</i>), Yellow-bellied Glider (<i>Petaurus australis</i>), and Grey-headed Flying-fox (<i>Pteropus poliocephalus</i>) and the special least concern, Short-beaked Echidna. However, similar to bird habitat, the</p> |



Fauna Group Availability of Habitat

remnant vegetation is fragmented and poorly connected to extensive areas of intact habitat, limiting the site's capacity to sustain resident populations of these species.

As a result, while the project area may provide supplementary resources (e.g., foraging or movement corridors) for threatened mammals, it is unlikely to function as core habitat capable of supporting viable populations.

Reptiles Suitable microhabitat features for least concern reptiles do exist, particularly leaf litter, peeling bark, dense groundcover vegetation, woody debris and arboreal termitaria. While this is the case, the reptile species on the project area would be limited to least concern species, with no threatened reptile species considered potentially occurring due to lack of records within the vicinity (likelihood of occurrence assessment provided in Appendix C).

4.4 WATERCOURSE AND WETLANDS

The stream order one watercourses were confirmed during the field survey. These watercourses are ephemeral and general capture overland flow from within the project area (Map 2, Appendix B). No wetland habitat occur within the project area or in close proximity.

Two low-risk waterway recognised for fish passage (waterway barrier works) under the *Fisheries Act 1994* (Qld) were verified within the project area. These are shown in Map 3, Appendix B.

4.5 ASSESSMENT OF THE CONDITION, ECOLOGICAL PROCESSES AND CONNECTIVITY OF THE HABITAT PRESENT

An assessment of the ecological condition and function of the vegetation within the project area was undertaken to evaluate its habitat value and connectivity with the broader natural landscape.

The majority of vegetation within the project area comprises remnant vegetation, characterised by a dominant canopy of mature Eucalyptus and Angophora species. This vegetation is in good condition, supporting numerous large, aged eucalypts that provide an abundance of faunal microhabitats, including tree hollows, peeling bark, coarse woody debris, dense shrub layers, and leaf litter. Collectively, these features offer important resources for common fauna species and may also serve as supplementary habitat for threatened species such as the Koala, although no evidence of Koalas was recorded during field surveys.

Remnant vegetation extends northward into the adjoining property, which also retains habitat values. In contrast, much of the surrounding landscape to the south, east, and west comprises agricultural land or rural residential areas that have been cleared of vegetation. Despite this, linear corridors and stepping-stone patches remain present further afield, providing some degree of connectivity to other habitat areas. Such stepping-stone habitats play a critical role in fragmented landscapes by enhancing species movement and dispersal between larger habitat patches (Lindenmeyer & Fischer, 2006; A. Bennett, 2003).

The ecological functionality of the project area is, however, constrained by surrounding agricultural and residential development. Land clearing, urbanisation, and the associated introduction of exotic species have reduced habitat quality and connectivity, disrupted ecological corridors, and limited opportunities for species movement. Consequently, the broader capacity of the site to support biodiversity is diminished.

In summary, while the remnant vegetation currently contributes to ecological connectivity, particularly with riparian corridors to the north, ongoing and future urban development represents a significant threat. These pressures are likely to result in a gradual decline in ecological function and biodiversity support capacity over time (Garrard et al., 2017).

The vegetation within the project area is of sufficient size to persist despite threatening processes as defined under the *Nature Conservation Act 1992* (Qld), which recognises threatening processes as those capable of:

- (a) threatening the survival of protected areas, areas of major interest, protected wildlife, or wildlife habitat; or
- (b) affecting the capacity of these areas to sustain natural processes.

For the project area, the primary threatening processes include:

- Habitat fragmentation, which restricts species movement and dispersal, limiting access to resources and mates.
- Edge effects, including increased predation pressure, altered microclimatic conditions, and reduced genetic diversity over time.
- Noise and light pollution, which can disrupt wildlife behaviour, foraging activity, and reproductive cycles.



DISCUSSION

5.1 OVERVIEW

The desktop assessment revealed that the project area contained overlay attributes mapped on the *Biodiversity Areas Overlay Map* within the *SBRC Planning Scheme 2017*, and regulated vegetation protected under the *Vegetation Management Act 1999* (Qld), including Category B (remnant) vegetation.

A field ecological survey verified the presence of these ecological values. The field survey confirmed that the majority of the project area contained Category B (remnant; 30.54ha; Map 2, Appendix B). The remnant areas were characterised by least concern REs (12.5.1, 12.5.1e and 12.5.7; Map 2, Appendix B). The remainder of the site was Category X (non-remnant) vegetation at 6.58 ha (Map 2, Appendix B).

All flora and fauna species recorded during the field survey were least concern species under the *Nature Conservation Act 1992* (Qld). The remnant vegetation within the project area would provide suitable habitat for least concern species, and provide some habitat values for threatened species, particularly the endangered Koala. However, this species was not confirmed present in the project area during the field survey. There were two stream order one watercourses that were confirmed present within the project area (Map 2, Appendix B).

Two low-risk waterways recognised for fish passage (waterway barrier works) under the *Fisheries Act 1994* (Qld) were verified within the project area (Map 3, Appendix B). One crossing will be required to accommodate the proposed new road across the western waterway. These works will be undertaken as accepted development, in compliance with the relevant requirements of the *Accepted development requirements for operational work that is constructing or raising waterway barrier works* (DPI, 2025)

The following attributes on the *Biodiversity Areas Overlay Map* within the *SBRC Planning Scheme 2017* were verified in the project area during the field survey (Map 4, Appendix B):

- 30.54 ha of MSES Regulated Vegetation (Category B);
- 2.78 ha of MSES Wildlife Habitat (special least concern animal), the Short-beaked Echidna.

The remnant vegetation areas on the project area extend onto the neighbouring property to the north. Further afield within the landscape however, there is limited connectivity to other habitat due to agriculture and urbanisation. This lack of connectivity of habitat is a key threatening process operating on the project area. While the project area contains habitat values for threatened species, the ecosystem function of the habitat available would be reduced due to disturbance from surrounding land uses.

5.2 POTENTIAL IMPACTS

The development proposes to reconfigure the project area from one lot into 40 lots and will involve the construction of a road network (development plans shown in Appendix A). To undertake the subdivision, regulated vegetation and MSES clearing will be required, which will impact on mapped attributes on the *Biodiversity Areas Overlay Map* within the *SBRC Planning Scheme 2017*. Not all regulated vegetation and MSES on the project area however will be cleared. For the purpose of the impact assessment however it was assumed that vegetation clearing will occur on all proposed lots, with the exception of Lot 21, 29, 30, and 31 shown in the plans in Appendix A. As a result, the native vegetation to retained within the project area is 15.48 ha. This native vegetation was verified as MSES Regulated Vegetation (Category B) on the *Biodiversity Areas Overlay Map*, and Category B (remnant) least concern REs. Part of this retained habitat is also MSES Wildlife Habitat (special least concern animal) for the Short-beaked Echidna, of which 1.43 ha will be retained.

Based on the above, direct impacts to *Biodiversity Areas Overlay attributes* will include:

- 15.06 ha of MSES Regulated Vegetation (Category B);
- 1.35 ha of MSES Wildlife Habitat (special least concern animal) for the Short-beaked Echidna.

Direct impacts to regulated vegetation protected under the *Vegetation Management Act 1999* (Qld) will include:



- 15.06 ha of Regulated Vegetation (Category B) least concern REs.

There are also likely to be indirect impacts to ecological values expected during construction. Indirect impacts during construction can include but may not be limited to:

- Potential spread of invasive weed species during vegetation clearing and movement of machinery and vehicles;
- Noise and vibration as a result of increased human activity and machinery use;
- Generation of dust and degradation of air quality during vegetation clearing and construction on exposed soils;
- Generation of waste and potential contamination from storage of fuel, oil and chemicals; and
- Erosion, dust and sediment runoff from exposed soils.

5.3 IMPACT MANAGEMENT ACTIONS PROPOSED

The hierarchy of management principles has been implemented during the planning of this project to reduce environmental/ecological impacts. The management principles used include *avoidance, minimisation, mitigation and remediation strategies*. These principals are described below:

Avoidance: *Designing the development areas to avoid direct impacts to ecological values (e.g., avoid vegetation clearing where practical).*

Minimise: *Minimise direct and indirect impacts where they cannot be completely avoided.*

Mitigate: *Implement mitigation and management measures during construction and operation to reduce direct and indirect cumulative impacts.*

Remediate: *Actively rehabilitate impacted areas where possible to promote long term recovery.*

Offset: *Provide suitable offsets under the Environmental Offsets Act 2014 (Qld) for activities that result in a significant impact to ecological values after all other management principles have been implemented.*

Impact compensatory measures have been defined based on the hierarchy of management principles. These have been outlined in Table 11.

Table 11
Hierarchy of management

| Management Type | Strategy |
|-----------------|---|
| Avoidance | Full avoidance of impacts to biodiversity area attributes and regulated vegetation within the project area was not possible without abandoning the proposed development. However, avoidance was prioritised as the first step in the mitigation hierarchy, with proposed lots strategically located in areas outside the Biodiversity Areas Overlay, primarily in the northwestern portion of the site. In addition, the watercourses have been fully avoided, ensuring the retention of these natural features and their critical role in maintaining ecological connectivity with neighbouring properties, particularly to the north. While some direct impacts to vegetation are unavoidable, the protection of watercourses ensures overall habitat connectivity is preserved. |
| Minimisation | While direct impacts to MSES cannot be entirely avoided, impacts have been minimised through the concentration of development areas within least concern REs only, and the retention of 40.57% of habitat within the project area. This includes 15.48 ha of MSES regulated vegetation (Category B least concern REs), of which 1.43 ha comprises MSES wildlife habitat. The retention of these areas ensures the ongoing provision of key ecological functions, including the maintenance of habitat connectivity with neighbouring remnant vegetation, the preservation of important microhabitats (such as tree hollows, woody debris, and dense understorey), and the continued availability of resources that support both least concern fauna and the potential for use by threatened species. By securing these values within the development footprint, the project reduces the scale of ecological fragmentation and safeguards biodiversity resilience at the local landscape scale. |



| Management Type | Strategy |
|-----------------|---|
| Mitigation | <p>The following mitigation measures are recommended to be implemented during construction to reduce indirect impacts on ecological values:</p> <ul style="list-style-type: none">• Construction Environmental Management Plan (CEMP): A CEMP will be developed to outline specific mitigation measures, including but not limited to: dust suppression, noise and vibration management, erosion and sediment controls, waste management, topsoil management, chemical storage and spill containment, protection of water quality and hydrology, traffic management (including speed restrictions), weed and pest control, washdown requirements for machinery and vehicles, and designated construction hours.• Weed Management: Targeted control of restricted invasive plants under the Biosecurity Act 2014 (Qld) and Weeds of National Significance known to occur within the project area (e.g., <i>Lantana camara</i>). Weed removal will reduce edge effects and improve the habitat quality of retained vegetation, providing ecosystem benefits, particularly for threatened species that may occur.• Erosion and Sediment Control Plan (ESCP): A site-specific ESCP will be prepared and implemented to minimise impacts associated with soil disturbance and sediment loss during vegetation clearing and construction works.• Best Practice Vegetation Clearing:<ul style="list-style-type: none">○ Establishment of clearly demarcated exclusion zones prior to clearing.○ Pre-clearance surveys by a suitably qualified and permitted Fauna Spotter Catcher to identify fauna presence.○ Sequential clearing to allow fauna to self-relocate into adjacent habitat.○ Supervision of all clearing works by a Fauna Spotter Catcher to safely relocate fauna, administer first aid, or facilitate transfer to a carer or vet where required.○ Compliance with AS4970 Protection of Trees on Development Sites and AS4687 Temporary Fencing and Hoarding.• Watercourse Protection: Installation of sediment fences, diversion drains, or other temporary works to protect the integrity of watercourses from sedimentation or pollution during construction.• Fire Management: Retained vegetation areas will incorporate appropriate firebreaks consistent with the Bushfire Management Plan developed for the project area, while minimising unnecessary clearing.• Habitat Enhancement: Retained vegetation areas will be supplemented with habitat enhancement measures where feasible, including the retention and relocation of habitat logs during clearing to compensate for the loss of microhabitats and provide fauna refuge. |
| Remediation | <p>No remediation is proposed as part of the development. Where vegetation clearing is to be undertaken will be subject to development of the 40 proposed dew lots.</p> |
| Offsets | <p>Through the implementation of avoidance, minimisation, and mitigation measures in accordance with the mitigation hierarchy, no residual impacts to MSES remain, and therefore environmental offsets under the <i>Environmental Offsets Act 2014</i> (Qld) are not required.</p> |



LEGISLATION REQUIREMENTS

6.1 SOUTH BURNETT REGIONAL COUNCIL PLANNING SCHEME – BIODIVERSITY AREAS OVERLAYS

The SBRC Planning Scheme's *Biodiversity Areas Overlay Map* contained two overlay attributes within the project area. These overlay areas include MSES Category B Regulated Vegetation and Wildlife habitat (special least concern).

The *Biodiversity Areas Overlay* is currently without a Code within the planning scheme. Instead the assessment benchmarks are within the Reconfiguring a Lot Code and the Rural Residential Zone Code for this development. The relevant assessment benchmark in the Reconfiguring a Lot Code is PO18 and in the Rural Residential Zone Code are PO12, PO13, and PO14.

An assessment against these assessment benchmarks have confirmed that the development complies with either the applicable acceptable outcomes, or alternatively, with the performance outcomes (Table 12).

6.2 STATE CODE 16: NATIVE VEGETATION CLEARING

The field ecological survey confirmed regulated vegetation within the project area. Any clearing proposed with the Category B (remnant) areas do not meet an exempt clearing purpose or accepted development, and therefore triggers referral to SARA with assessment required against *State Code 16: Native Vegetation Clearing*.

The relevant provisions for the reconfiguring a lot application are provided in Table 16.2 and 16.8 of *State Code 16: Native Vegetation Clearing*. An assessment against these assessment benchmarks have confirmed that the development complies with either the applicable acceptable outcomes, or alternatively, with the performance outcomes (Table 13 and Table 14).



Table 12

South Burnett
Regional
Council

Assessment
benchmarks
for assessable
development
- Biodiversity
Overlay

Assessment
benchmarks
for assessable
development
- Biodiversity
Overlay

| Performance outcomes | Acceptable outcomes | Response |
|--|--|---|
| Reconfiguring a Lot Code | | |
| Biodiversity Overlay | | |
| <p>PO18 Development avoids, minimises or mitigates adverse impacts on environmentally significant areas and values.</p> | <p>AO18.1 Development is confined to areas not mapped as high or general ecological significance on Overlay Map 05. OR</p> <p>AO18.2 Proposed boundaries do not create additional barriers to species movement. AND</p> <p>AO18.3 Proposed allotments do not create circumstances where additional accepted development clearing of protected vegetation may occur.</p> | <p>Complies with AO18.2 and AO18.3.</p> <p>The project area contains MSES Regulated Vegetation (Category B) and Wildlife Habitat (special least concern) mapped on Overlay Map 05, which cannot be fully avoided due to the scale of the reconfiguring a lot application. Nevertheless, the design of the proposed lots prioritises avoidance by locating development areas primarily within the northwestern portion of the site, outside of the Biodiversity Overlay, and by avoiding clearing along the mapped watercourses.</p> <p>Impacts have been further minimised through the retention of 15,48 ha of MSES Regulated Vegetation (Category B remnant) and 1,43 ha of Wildlife Habitat for special least concern species, equating to 40.57% of habitat within the project area. These retained areas provide for ongoing species movement within the site and maintain connectivity to adjacent remnant vegetation to the north identified on the Biodiversity Overlay. By maintaining ecological function along the retained watercourses, the proposed development does not introduce additional barriers to species movement and is therefore consistent with AO18.2.</p> <p>Further, the inclusion of building envelopes on Lots 21, 29, 30, and 31 ensures that the watercourses and associated habitat on these lots are preserved for connectivity purposes. This approach guarantees that sufficient vegetation is retained to prevent circumstances where additional accepted development clearing of protected vegetation may occur, thereby satisfying AO18.3.</p> |
| Rural Residential Zone Code | | |
| Biodiversity Overlay | | |
| <p>PO12 Areas of environmental significance, including biodiversity values, are identified, protected and enhanced.</p> | <p>AO12.1 Uses and associated works are confined to areas not identified on Overlay Map 05. OR</p> <p>AO12.2 Development is compatible with the environmental values of the area. OR</p> <p>AO12.3 Where development within an area identified on Overlay Map 05 is unavoidable, measures recommended by a suitably qualified ecologist are incorporated to protect and retain the environmental values and underlying ecosystem processes within or adjacent to the development project area to the greatest extent practical.</p> | <p>Complies with AO12.2 and AO12.3</p> <p>The project area contains Regulated Vegetation (Category B) and Wildlife Habitat identified on Overlay Map 05. While full avoidance of these mapped values was not possible without abandoning the proposed reconfiguring a lot application, the design process has prioritised avoidance and minimisation of impacts wherever practicable. Development has been directed towards the northwestern portion of the site, outside mapped biodiversity areas, and the mapped watercourses have been fully avoided through the use of building envelopes to ensure their ecological function and connectivity are retained.</p> <p>In addition, measures recommended by a suitably qualified ecologist have been incorporated into the design to protect and maintain environmental values. This includes:</p> <ul style="list-style-type: none"> • Retention of 15,48 ha of Category B Regulated Vegetation and 1.43 ha of Wildlife Habitat, representing 40.57% of the site's MSES values. • Preservation of habitat connectivity to adjoining remnant vegetation to the north, facilitated by the protection of riparian corridors. • Establishment of building envelopes on Lots 21, 29, 30, and 31 to ensure the long-term retention of watercourse-associated vegetation within these allotments. • Recommendations provided for mitigation measures to be implemented during construction to reduce direct impacts to biodiversity values, particularly fauna within the project area. <p>Through these measures, the development is considered compatible with the environmental values of the site (AO12.2) and incorporates ecological recommendations to retain and protect biodiversity values and underlying ecosystem processes to the greatest practicable extent (AO12.3).</p> |



| | | |
|--|---|--|
| <p>PO13 Biodiversity values of identified areas of environmental significance are protected from the impacts of development</p> <p>PO14 There are no significant adverse effects on water quality, ecological and biodiversity values.</p> | <p>AO13 Development adjacent to Protected Areas identified on Overlay Map 05 is set back a minimum of 100m from the park boundaries in the absence of any current 'Management Plans' for these areas.</p> <p>AO14.1 Uses and associated works are confined to areas outside overland flow paths and natural drainage features. AND</p> <p>AO14.2 All buildings, on-project area effluent disposal, external activities, or storage areas are located 100m from the top of the bank of a river, creek, stream or wetland identified on Overlay Map 05.</p> <p><small>Note-This setback does not apply to equipment such as pumps that are necessary to access water or waterway crossings.</small></p> <p>AND</p> <p>AO14.3 The Waterway Corridors identified on Overlay Map 05 are maintained in a natural state.</p> | <p>Complies with PO13</p> <p>The proposed development is not located adjacent to a Protected Area identified on Overlay Map 05. As such, the requirement for a 100m setback from park boundaries does not apply. Accordingly, the biodiversity values of identified areas of environmental significance will be protected from development impacts, and the proposal is considered to comply with PO13 and AO13</p> <p>Complies with PO14</p> <p>While some proposed lots (Lots 21, 29, 30 and 31) occur adjacent to the mapped watercourses, building envelopes have been designed to concentrate clearing and associated construction away from these sensitive features, ensuring that no significant adverse effects on water quality, ecological values, or biodiversity values will occur to these features.</p> <p>It is acknowledged however that there is no economically viable option to satisfy the assessment outcomes with wastewater treatment systems required to be located 100m of the top of bank of the watercourses. The proposed development however is able to comply with PO14 ensuring there are no significant adverse effects on water quality, ecological and biodiversity values. This is through the implementation of appropriate wastewater management measures consistent with the <i>Queensland Plumbing and Wastewater Code (QPW Code)</i> and relevant plumbing and drainage legislation.</p> <p>The QPW Code provides setback distances for on-site wastewater disposal areas based on the level of treatment:</p> <ul style="list-style-type: none"> • 30m from the top of the bank of a watercourse for secondary treatment systems; and • 10m from the top of the bank of a watercourse for advanced secondary treatment systems. <p>Based on site layout, Lots 21, 29, 30 and 31 are the most sensitive in terms of setback requirements and will utilise advanced secondary treatment systems. These systems can be fully accommodated within the designated building envelopes, all of which are located more than 36m from the defining banks of the watercourses, ensuring compliance with the QPW Code and ensuring no significant adverse effects on water quality, ecological and biodiversity values.</p> <p>These measures will ensure that on-site wastewater disposal will not result in water pollution or degradation of ecological or biodiversity values, thereby satisfying the intent of PO14.</p> |
|--|---|--|



Table 13
 Table 16.2
 General within
 State Code 16
 Native
 Vegetation
 Clearing

| Performance outcomes | Acceptable outcomes | Response |
|---|--------------------------------------|----------|
| General | | |
| PO1 Clearing of vegetation is consistent with any notice requiring compliance on the land subject to the development application, unless a better environmental outcome can be achieved. | No acceptable outcome is prescribed. | N/A |
| PO2 Clearing of vegetation is consistent with vegetation management requirements for particular regulated areas unless a better environmental outcome can be achieved. | No acceptable outcome is prescribed. | N/A |
| PO3 Clearing of vegetation in a legally secured offset area: 1. is consistent with the offset delivery plan; or 2. is consistent with an agreement for the offset area on the land subject to the development application; or 3. only occurs if an additional offset is provided. | No acceptable outcome is prescribed. | N/A |



Table 14

Table 16.8

Material

change of use

and / or

reconfiguring a

lot for all other

purposes,

within State

Code 16 Native

Vegetation

Clearing

| Performance outcomes | Acceptable outcomes | Response |
|--|---|--|
| <p>Clearing avoids and minimises impacts</p> <p>PO80 Clearing of vegetation and adverse impacts of clearing vegetation do not occur unless the application has demonstrated that the clearing and the adverse impacts of clearing have been:</p> <ol style="list-style-type: none"> 1. reasonably avoided; or 2. reasonably minimised where it cannot be reasonably avoided. | <p>No acceptable outcome is prescribed.</p> | <p>Complies with PO80</p> <p>To avoid adverse impacts, the proposed development prioritised the use of areas eligible for clearing under 'exempt clearing works' within the Category X (non-remnant) area located in the northwestern portion of the project area (Map 2, Appendix B). However, developing solely within this area was deemed unviable due to urban planning objectives and cost constraints.</p> <p>The project area is surrounded by non-remnant land where other residential developments have already been approved, reducing habitat connectivity and constraining ecological linkages primarily to the north. This connectivity has been carefully considered through the design of larger lots along the watercourses which flow from south to north, and the use of building envelopes to focus development within these sites. This approach has ensured minimisation of clearing along the watercourses, thereby retaining connectivity of habitat to the north, where additional regulated vegetation (Category B) provides suitable fauna habitat.</p> <p>As a result of this design, 40.57% of the project area has been retained of regulated vegetation, including 15.06 ha of Category B (remnant) least concern REs. In this respect, the proposed development balances the need to provide residential lots with the protection of ecological values, ensuring that vegetation clearing has been reasonably avoided and, where unavoidable, reasonably minimised.</p> |
| <p>Clearing associated with wetlands</p> <p>P81 Clearing of vegetation within a natural wetland and/or within 100 metres of the defining bank of a natural wetland maintains the composition, structure and function of any regional ecosystem associated with any natural wetland to protect all of the following:</p> <ol style="list-style-type: none"> 1. bank stability by protecting against bank erosion; 2. water quality by filtering sediments, nutrients and other pollutants; 3. aquatic habitat; 4. terrestrial habitat. <p>PO82 Where clearing of vegetation in a regional ecosystem associated with a natural wetland does not maintain the composition, structure and function of the regional ecosystem, and cannot be avoided and has been mitigated, an offset is provided for any acceptable significant residual impact.</p> | <p>AO81.1 Clearing does not occur in a natural wetland or within 100 metres of the defining bank of any natural wetland.</p> <p>OR</p> <p>AO81.2 Clearing within 100 metres of the defining bank of any natural wetland:</p> <ol style="list-style-type: none"> 1. does not occur within 10 metres of the defining bank of any natural wetland; and 2. does not exceed widths in reference table 1 in this code. <p>No acceptable outcome is prescribed.</p> | <p>N/A no wetland occurs on the project area</p> |



| Clearing associated with watercourses and drainage features | |
|--|--|
| <p>PO83 Clearing of vegetation within a watercourse and /or drainage feature and/or within the relevant distance (listed in reference table 2) of a watercourse and/or drainage feature, maintains the composition, structure and function of the regional ecosystem associated with the watercourse and/or drainage feature to protect all of the following:</p> <ol style="list-style-type: none"> 1. bank stability by protecting against bank erosion; 2. water quality by filtering sediments, nutrients and other pollutants; 3. aquatic habitat; 4. terrestrial habitat | <p>AO83.1 Clearing does not occur in any of the following areas:</p> <ol style="list-style-type: none"> 1. inside the defining bank of a watercourse or drainage feature; and 2. within the relevant distance of the defining bank of any watercourse or drainage feature in reference table 2 of this code. <p>OR</p> <p>AO83.2 Clearing within any watercourse or drainage feature, or within the relevant distance of the defining bank of any watercourse or drainage feature in reference table 2 of this code:</p> <ol style="list-style-type: none"> 1. does not exceed the widths in table reference table 1 of this code; and 2. does not occur within 10 metres of the defining bank, unless clearing is required into or across the watercourse or drainage feature. |
| <p>PO84 Where clearing of vegetation in a regional ecosystem associated with a watercourse and/or drainage feature does not maintain the composition, structure and function of the regional ecosystem, and cannot be avoided and has been mitigated, an offset is provided for any acceptable significant residual impact.</p> | <p>No acceptable outcome is prescribed.</p> |
| <p>Connectivity</p> <p>PO85 Regional ecosystems on the subject land and any adjacent land, retain sufficient vegetation to maintain:</p> <ol style="list-style-type: none"> 1. ecological processes; and 2. ensure the regional ecosystem remains in the landscape despite threatening processes | <p>Partially complies with PO85</p> <p>The project area is located within a coastal bioregion and complies with the clearing criteria outlined in Reference Table 3, as follows:</p> <ul style="list-style-type: none"> • Clearing does not occur in areas of vegetation that are less than 10 hectares. The project area is 37.12 ha in size and contains 30.52 ha of Category B (remnant vegetation). • Clearing does not reduce the extent of vegetation to less than 10 hectares. A total of 15.06 ha of Category B (remnant vegetation) will be retained within the project area. • Clearing does not occur in areas of vegetation less than 100 metres wide. All vegetation in the project area is >100 m wide • Clearing does not reduce the width of vegetation to less than 100 metres. The largest portions of retained vegetation are located within Lots 29 and 31, where widths greater than 100 m are maintained. Vegetation retained on Lot 21 also exceeds 100 m in width and is connected to Category B (remnant) vegetation extending east beyond the property boundary. • Clearing does not occur where the extent of vegetation on the subject lot(s) is reduced to, or less than, 30 per cent of the total area of the lot(s). 40.57% of vegetation within the lot will be retained by the development. The areas of retention are on Lots 21, 29, 30 and 31. <p>Through these measures, the proposal ensures that regional ecosystems will be maintained at sufficient scale and configuration to sustain ecological processes and persist in the landscape despite threatening processes</p> |
| <p>Complies with PO83</p> <p>Clearing for the proposed lots has avoided all mapped watercourses located in the central and eastern portions of the project area. Lots within proximity to these features (Lots 21, 29, 30, and 31) have been designed as larger lots and provided with building envelopes to ensure clearing and construction are confined outside the relevant distance of the watercourses. Under Reference Table 2, the required setback for a stream order 1 watercourse is 10 m. The building envelopes for these lots are all located more than 50 m from the defining bank (Map 2, Appendix B and plans provided in Appendix A).</p> <p>One road crossing (New Road 2) is required over the central watercourse to provide access through the subdivision. The crossing has been designed at a 20 m width to accommodate a formed public road and associated services (electricity and water). The clearing required for this crossing amounts to 0.1 ha of Category B least concern RE12.5.1e/12.5.7 (Mid-dense). While the width exceeds that specified in Reference Table 2, the clearing is consistent with the allowable area of less than 0.5 ha. This small and localised clearing is not expected to compromise the composition, structure, or function of the regional ecosystem associated with the watercourse, particularly as the vegetation immediately north of the crossing is Category X (non-remnant) vegetation. Bank stability will be managed through erosion and sediment control measures during construction, ensuring protection of the watercourse and minimising impacts on water quality, aquatic habitat, and terrestrial habitat. Accordingly, the proposed development is considered to comply with PO83.</p> | <p>Complies with PO84</p> <p>Clearing within the watercourse is expected to maintain the composition, structure and function of the regional ecosystem as explained above for PO83. Hence there is no requirement for an offset.</p> |



| Soil erosion if the local government is not the assessment manager for the development application | |
|---|---|
| <p>PO86 Clearing does not result in accelerated soil erosion within or outside the land the subject of the development application.</p> | <p>AO86.1 Clearing only occurs if an erosion and sediment control plan is developed and implemented to prevent soil erosion and instability resulting from the clearing.</p> |
| <p>Salinity</p> | |
| <p>PO87 Clearing within 100 metres of a salinity expression area does not contribute to or accelerate land degradation through either of the following:</p> <ol style="list-style-type: none"> waterlogging; the salinisation of groundwater, surface water or soil. | <p>AO87.1 Clearing does not occur within 100 metres of a salinity expression area.</p> |
| <p>PO88 Clearing of vegetation maintains the composition, structure and function of endangered regional ecosystems and/or of concern regional ecosystems.</p> | <p>AO88.1 Clearing does not occur in an endangered regional ecosystem or an of concern regional ecosystem.</p> <p>OR</p> <p>AO88.2 Total clearing of endangered regional ecosystems and of concern regional ecosystems combined does not exceed the widths prescribed in reference table 1 of this code.</p> <p>OR</p> <p>AO88.3 Total clearing of endangered regional ecosystems and of concern regional ecosystems combined does not exceed areas prescribed in reference table 1 of this code.</p> |
| <p>Conserving endangered and of concern regional ecosystems</p> | |
| <p>PO86 Clearing does not result in accelerated soil erosion within or outside the land the subject of the development application.</p> | <p>Complies with AO86.1 An Erosion and Sediment Control Plan will be developed and implemented for the development, as described in <i>Table 11 Hierarchy of management</i>.</p> |
| <p>PO87 Clearing within 100 metres of a salinity expression area does not contribute to or accelerate land degradation through either of the following:</p> <ol style="list-style-type: none"> waterlogging; the salinisation of groundwater, surface water or soil. | <p>Complies with AO87.1 No salinity expression areas have been recorded on the project area. There is no evidence of the following:</p> <ul style="list-style-type: none"> No ground surfaces were waterlogged No intermittent streams were flowing unusually No areas of bare soil or presence of crystals or salts present No road deterioration or crumbling. <p>Therefore, clearing is not proposed within 100m of a salinity expression area as none have been observed within the project area. Also, the development will not result in any land degradation through waterlogging or salinisation as:</p> <ul style="list-style-type: none"> Stormwater runoff will be managed appropriately. The clearing is not adjacent to an area with a sudden change in geology (i.e., major change in landzone) and therefore is less susceptible to salinity impacts. The development proposes to retain the watercourse areas <p>Therefore, the proposed development complies with AO87.1</p> |
| <p>PO88 Clearing of vegetation maintains the composition, structure and function of endangered regional ecosystems and/or of concern regional ecosystems.</p> | <p>Complies with AO88.1 The project area does not contain endangered or of concern REs (Map 2, Appendix B) and as such there is no clearing proposed within these REs</p> |



| | | |
|---|---|--|
| <p>PO89 Where clearing of vegetation in an endangered regional ecosystem or an of concern regional ecosystems does not maintain the composition, structure and function of the regional ecosystem, and cannot be avoided and has been mitigated, the cleared area:</p> <ol style="list-style-type: none"> 1. is rehabilitated; or 2. where the cleared area cannot be rehabilitated, an offset is provided for any acceptable significant residual impact. | <p>No acceptable outcome is prescribed.</p> | <p>N/A. The project area does not contain endangered or of concern REs (Map 2, Appendix B) and as such there is no clearing proposed within these REs</p> |
| <p>Essential habitat excluding essential habitat for Phascolarctos cinereus (koalas) if development is assessable under Schedule 10, Part 10 of the Planning Regulation 2017</p> | | |
| <p>PO90 Clearing of vegetation in a regional ecosystem that is an area of essential habitat maintains the composition, structure and function of the regional ecosystem for each protected wildlife species individually.</p> | <p>AO90.1 Clearing does not occur in essential habitat. OR AO90.2 Clearing in essential habitat does not exceed the widths prescribed in reference table 1 of this code. OR AO90.3 Clearing in essential habitat does not exceed the areas prescribed in reference table 1 of this code.</p> | <p>Complies with AO90.1 The project area does not contain essential habitat (Vegetation Management Supporting Map provided in Appendix E) and as such there is no clearing proposed within essential habitat.</p> |
| <p>PO91 Where clearing of vegetation in a regional ecosystem that is an area of essential habitat does not maintain the composition, structure and function of the regional ecosystem, and cannot be avoided and has been mitigated, an offset is provided for any acceptable significant residual impact for each protected wildlife species individually</p> | <p>No acceptable outcome is prescribed.</p> | <p>N/A. The project area does not contain essential habitat (Vegetation Management Supporting Map provided in Appendix E) and as such there is no clearing proposed within essential habitat.</p> |
| <p>Acid sulfate soils if the local government is not the assessment manager for the development application</p> | | |
| <p>PO92 Clearing does not result in, or accelerate, disturbance of acid sulfate soils or changes to the hydrology of the location that will result in either of the following:</p> <ol style="list-style-type: none"> 1. aeration of horizons containing iron sulphides; 2. mobilisation of acid or metals. | <p>AO92.1 Clearing does not occur in land zone 1, land zone 2 or land zone 3. OR AO92.2 Clearing in land zone 1, land zone 2 or land zone 3 in areas below the five metre Australian Height Datum only occurs where:</p> <ol style="list-style-type: none"> 1. mechanical clearing does not disturb the soil to a depth greater than 30 centimetres; and 2. acid sulfate soils are managed consistent with the Queensland Acid Sulfate Soil Technical Manual. | <p>N/A Local government is the assessment manager for the development application.</p> |



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