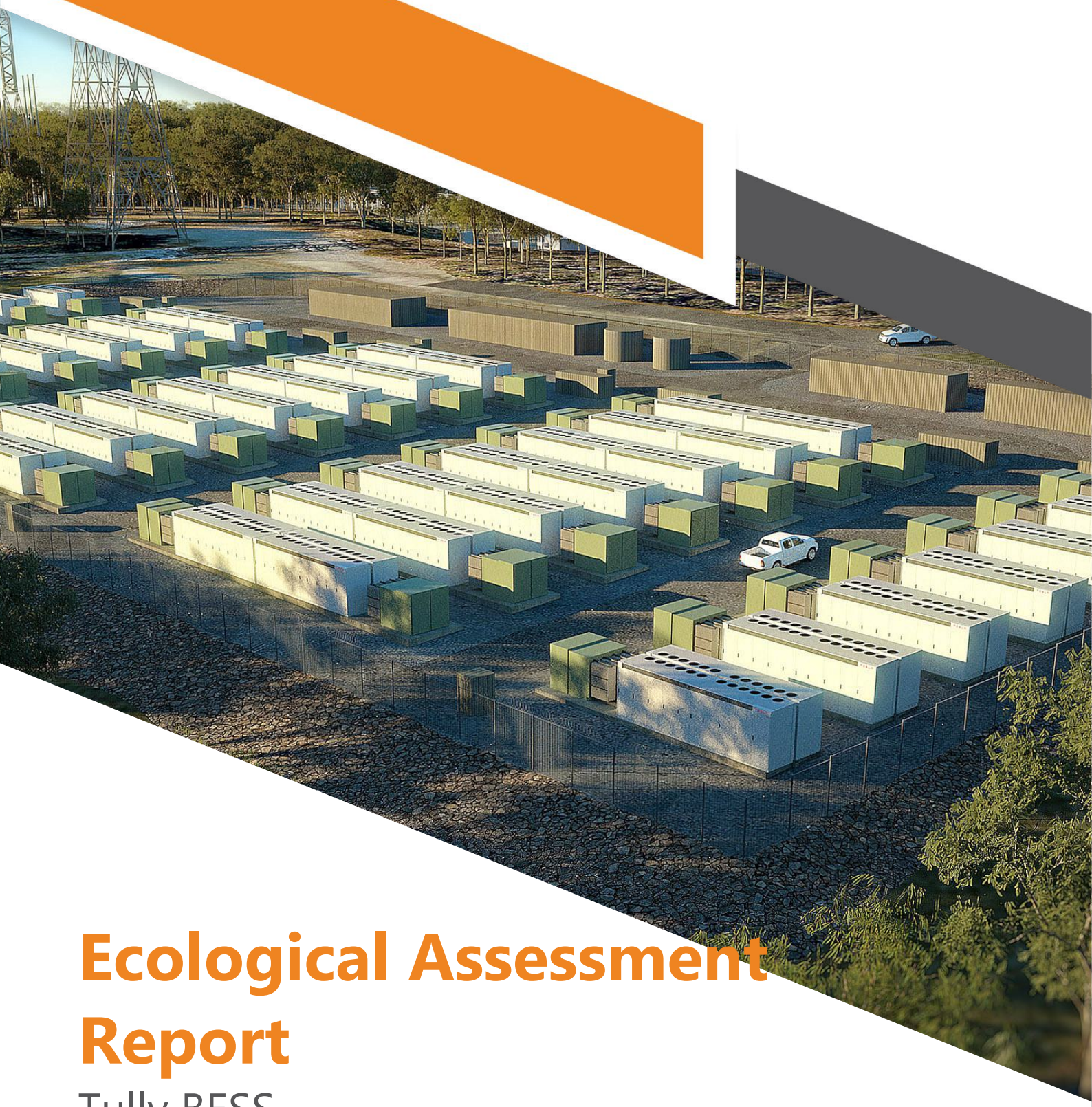

Ecological Assessment Report

Tully BESS

Prepared for: RWE Renewables Australia Pty Ltd

Date: 23/09/2025

Document information

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Reviewed by	Chris Beavon, Principal Ecologist

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1. Introduction

1.1 Project background

RWE Renewables Australia Pty Ltd (RWE) are proposing development of the Tully Battery Energy Storage System (BESS) (the Project) across a 28.7-hectare (ha) site (the Project area). The Project area for the BESS includes two freehold parcels, Lot 1 on RP852238 and Lot 1 on RP735276 and is located approximately 4 km south-west of the township of Tully in north Queensland.

The Project will have a capacity of up to 200 MW / 800 MWh. Grid connection is proposed via the neighbouring Powerlink Queensland (PQ) 132 kV substation (existing Tully substation) located to the northeast on Lot 1 on RP716718.

1.2 Purpose and scope

Attexo Group Pty Ltd (Attexo) has been engaged by RWE to determine potential impacts of the Project on the ecological values of the Project area. This Ecological Assessment Report (EAR) has been prepared to support a development application for Material Change of Use (MCU) for an *Undefined Use* consisting of a BESS within the Rural Zone under the Cassowary Coast Regional Council (CRCC) Planning Scheme 2015 (CCRC Planning Scheme).

This EAR focuses on environmental values prescribed at a State level as Matters of State Environmental Significance (MSES) and Matters of Local Environmental Significance (MLES), assessable under the *Planning Act 2016* (Planning Act) and CCRC Planning Scheme but also includes Matters of National Environmental Significance (MNES). Specifically, the objectives of this EAR are to:

- Present a summary of findings from desktop and field-based ecological assessments undertaken across the Project area.
- Describe the ecological values of the Project area, particularly those that are MNES, MSES and MLES.
- Identify and assess potential impacts that may occur to MNES, MSES and MLES within the Project area.
- Provide avoidance and mitigation measures to manage or mitigate these potential impacts.

The requirements of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) are being addressed separately to determine the Project's potential impacts on MNES values.

1.3 Survey Area

Vegetation in the Project area is limited to a small amount of regrowth vegetation along the eastern boundaries of the two lot parcels. This vegetation continues into the PQ parcel Lot 5 on SP140625 to the east of parcel Lot 1 on RP735276 and to the north of parcel Lot 1 on SP852238.

For the purposes of this report, desktop and field assessment have included the two lot parcels that comprise the Project area as well as the vegetation that continues from the Project area into PQ parcel Lot 5 on SP140625. This is referred to as the Survey Area (see **Figure 1.2**).

1.4 Defined Terms

The following terms are used to describe the Project and proposed development:

- Project area identifies the extent of the lot boundaries for Lot 1 on RP735276 and Lot 1 on RP852238. The combined area of both lots is 28.7 ha.
- Development footprint is the area that will be directly impacted by the Project. The total area of the development footprint is approximately 9 ha.

- Project infrastructure includes the components that form the construction and operation of the Project proposed within the development footprint.
- Survey area includes the two lot parcels that comprise the Project area as well as the vegetation that continues from the Project area into PQ parcel Lot 5 on SP140625 (as described in **Section 1.3** and depicted in **Figure 1.2**).

1.5 Project Description

The primary components of the Project will consist of the following:

- Battery units will cover a total area of approximately 2.5 ha. The foundations on which the proposed battery units will likely be installed are piles, piers or concrete pad formations. The BESS will be connected to the adjacent switching station via underground cables. Inverters may be incorporated as part of the battery units or there may be separate Power Conversion Units (PCU) that convert the DC energy from the battery units.
- A switching station is proposed comprising a 132/33 kV high-voltage transformer, air insulated switchgear, an auxiliary transformer, two 33 kV switch rooms and potentially harmonic filters. The switch rooms will include the switchgear and a Site office, with trenches and conduits for the cabling entering the switch rooms. The building would be manufactured off-site and delivered via truck. The switch rooms and transformers would sit on concrete footings or piles.
- A temporary construction and permanent operations and maintenance (O&M) area will be established adjacent to Sandy Creek Road. This would include an operations and maintenance building, yard, parking areas and any required office buildings, water tanks or storage sheds. Repurposing of the existing dwellings on Lot 1 on RP852238 as O&M areas for operation is being considered.
- Stormwater drainage systems will be constructed to allow for safe collection and diversion of rainwater at the BESS facility and will be established for both construction and operational phases.
- Access to the facility will be via the existing local road network with upgraded access proposed from Sandy Creek Road. Sufficient parking to meet the needs of the development is included within the Development Footprint.
- Overhead cabling would be required to connect the BESS to the neighbouring 132 kV Tully substation. The route will travel north through Lot 1 on RP735276 and connect to the neighbouring substation site on Lot 1 on RP716718.
- Temporary fencing will be erected at the Site once the main earthworks have been completed. Final perimeter fencing will be erected around the BESS area, switching station and O&M area for safety and security reasons.
- An Asset Protection Zone (APZ) will be established to maintain a 10 kW/m^2 radiant heat exposure at the boundaries of the BESS facility and associated infrastructure. This will be achieved by a 48.1 m wide APZ along the northeastern and eastern boundary (where significant vegetation is in the closest proximity) and a 10 m wide APZ along the remaining boundaries (where there is reduced risk mainly represented by grassfire) of the Development Footprint (see the Bushfire Hazard Assessment (BHA) and Bushfire Management Plan (BMP) for the Project for more detail).
- A perimeter road will be provided within the Development Footprint for operations, maintenance and emergency response.
- Earthworks, including batters and clearing required for access to undertake civil works in the Project area.
- A landscape buffer of 5 m depth is proposed along the frontage of Lot 1 on RP852238. This has been designed and will be planted in accordance with the CCRC Planning Scheme requirements.
- An acoustic wall of 6m in height has been included with the design, this is located directly on the northern perimeter of the BESS units. Subject to further design enhancements of the BESS units to reduce noise emissions, the acoustic wall may not be required.

An overview of the Project area, Development Footprint and Project configuration is shown in **Figure 1.1.**

Project Overview

Figure 1.1

DWG No: RWE-002-006[D]
DATE: 18/09/2025
DRAWN: KB
REVIEWED SW
SCALE (A4): 1:5,000

N

0 m 100

GDA2020

- Project Area
- Development Footprint
- Proposed Transmission Line Corridor
- Proposed transmission line
- 20m exclusion zone
- Main Road
- Local Road
- Lot parcels

Survey area

Figure 1.2

Survey area Lot parcels

DWG No: RWE-002-007[A]
DATE: 7/08/2025
DRAWN: KB
REVIEWED NC
SCALE (A4): 1:5,000

N

0 m 100

GDA2020

2. Regulatory framework

2.1 Commonwealth

2.1.1 Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth EPBC Act, is the Australian Government's key framework for protection of the Australian environment, including the conservation of biodiversity, and protection and management of significant natural and cultural places. If a proposed development or other action has, will have or is likely to have a significant impact on a protected matter, then it must be referred for assessment under the EPBC Act. The protected matters under the EPBC Act are:

- World Heritage properties
- National Heritage places
- wetlands of international importance (as listed under the Ramsar Convention)
- listed threatened ecological communicates (TECs) and listed threatened species
- migratory species protected under international agreements
- Commonwealth marine areas
- the Great Barrier Reef Marine Park
- the environment, where nuclear actions are involved
- a water resource, in relation to coal seam gas and large coal mining developments

An EPBC Act assessment has been prepared to assess potential impacts of the Project on MNES and determine if a referral is required for the Project. The report was prepared having regard to referral guidelines for specific species where available including guidelines for the endangered Koala and the guidelines for 14 birds listed as migratory under the EPBC Act (DoE 2015a).

Significant impact assessments were undertaken in accordance with the *Significant Impact Guidelines 1.1: Matters of National Environmental Significance* (DoE 2013) to determine whether the action has, will have or is likely to have significant impacts on MNES.

2.2 Queensland

2.2.1 Planning Act 2016

The Planning Act provides for an efficient, effective, transparent, integrated, coordinated and accountable system of land use planning, development assessment and related matters that facilitates the achievement of ecological sustainability. The system to facilitate the achievement of ecological sustainability includes:

- State planning policies setting out planning and development assessment policies about matters of State interest.
- Regional plan setting out integrated planning and development assessment policies about matters of State interest for particular regions of the State.
- Planning schemes setting out integrated State, regional and local planning and development assessment policies for all of a local government area.
- Temporary local planning instruments setting out planning and development assessment policies to protect all or part of a local government area from adverse impacts in urgent or emergent circumstances.
- Planning scheme policies.
- A development assessment system, including State Assessment and Referral Agency (SARA), for implementing planning instruments and other policies and requirements about development.

The Planning Act regulates and manages development in Queensland, providing a framework for the preparation and implementation of planning instruments. It requires the coordination and integration of State, regional and local planning outcomes.

There are three categories of development: prohibited, assessable or accepted development. A development permit is required under the Planning Act prior to commencing assessable development. Development may be prescribed as assessable development by the State in Schedule 10 of the Planning Regulation 2017 (Planning Regulation) or by local government through a planning scheme.

The Project requires a development permit for Material Change of Use (MCU) under the Planning Act. This will be through the Cassowary Coast Regional Council Planning Scheme 2015, with CCRC as the Assessment Manager of the application.

2.2.2 State code 9: Great Barrier Reef wetland protection areas

The purpose of state code 9 is to ensure that development involving high impact earthworks in a wetland protection area:

1. Is located outside of a wetland
2. Does not have an unacceptable impact on wetland environmental values
3. Is designed and located to avoid impacts or, where the MSES cannot be reasonably avoided, impacts are reasonably minimised and mitigated
4. Does not result in a significant residual impact on a MSES unless the significant residual impact is acceptable, and an offset is provided.

2.2.3 Vegetation Management Act 1999

The *Vegetation Management Act 1999* (VM Act) regulates vegetation clearing in a way that conserves remnant vegetation, ensures clearing does not cause land degradation, prevents loss of biodiversity, maintains ecological processes, reduces greenhouse gas emissions, and allows for sustainable land use. The Regional Ecosystem (RE) framework was developed as a way of classifying vegetation and provides the basis for vegetation management in Queensland (McGrath, 2011). Sattler and Williams (1999) define an RE as a vegetation community in a bioregion that is consistently associated with a particular combination of geology, landform, and soil.

Under the VM Act, RE are assigned three statuses as follows:

- Endangered
- Of Concern
- Least Concern.

Under the VM Act, mapping divides all vegetation in Queensland into one of five categories, defined as follows:

- Category A – vegetation subject to compliance notices, offsets, and voluntary declarations
- Category B – remnant vegetation
- Category C – high value regrowth vegetation
- Category R – Areas within 50m of a watercourse or drainage feature in all Great Barrier Reef catchments
- Category X – non-remnant vegetation, including cleared areas.

Clearing of regulated vegetation requires varying assessment under the Planning Act depending on the assigned category. A development permit for Operational Works (OPW) is required to clear native vegetation as defined in the VM Act unless the clearing is exempt under Schedule 21 of the Planning Regulation. Specifically, a development permit is required for clearing of Category B native vegetation. The Project has been designed to avoid the clearing of any mapped, regulated vegetation.

2.2.4 Nature Conservation Act 1992

The objective of the *Nature Conservation Act 1992* (NC Act) is the conservation of nature; the NC Act provides for the gazettal of protected areas including nature refuges, prescribes classes of wildlife and sets out restrictions on the taking or harm to native wildlife without a valid permit.

MSES are a component of the biodiversity state interest that is defined under the State Planning Policy and under the Environmental Offsets Regulation 2014 (EO Regulation). MSES are given a status under the NC Act as critically endangered, endangered, vulnerable, or near threatened (CEEVNT) species and special least concern wildlife under the Nature Conservation (Wildlife) Regulation 2006 (NC Regulation).

2.2.4.1 Protected plants in high-risk trigger mapping

In Queensland, all plants that are native to Australia are protected plants under the NC Act. The NC Act prevents whole plants or parts from being illegally removed from the wild or illegally traded. Clearing, growing, harvesting, and trading of protected plants in Queensland is regulated by the NC Regulation.

If an area proposed to be cleared contains native plants in the wild and the area is shown as 'high-risk' on the flora survey trigger map, a flora survey of the clearing impact area must be undertaken prior to any clearing. If the flora survey identifies the presence of an CEEVNT plant in the clearing impact area (or within a 100 m buffer), a clearing permit under the NC Act is required prior to any clearing. Where a significant residual impact to a protected plant is likely to occur, an offset may be required.

If the flora survey of the high-risk area does not detect any CEEVNT plants in the clearing impact area, or the impacts on CEEVNT plants can be avoided (i.e. clearing will not take place within 100 m of the CEEVNT plants), a clearing permit is not required but an exempt clearing notification must be submitted to the Department of Environment, Science, Technology and Innovation (DETSI).

2.2.4.2 Fauna breeding places

A Species Management Program (SMP) is required for a proposed impact to conservation significant native animal breeding places (e.g., hollow bearing trees) and requires the implementation of management actions that will avoid or minimise both the immediate and the long-term impact of removing or altering an animal breeding place. The SMP sets out monitoring and reporting requirements that demonstrate the management actions in the SMP are effectively implemented and produce the intended results. An SMP is recommended to be implemented if any clearing of remnant vegetation is proposed and in areas where nests, burrows, bowers, and log piles exist.

There are two types of SMPs. A high-risk SMP is implemented for:

- least concern animals that are colonial breeders (broader populations at greater risk from impacts at a single location)
- near threatened, Vulnerable, Endangered, Critically Endangered or Extinct in the Wild Animals.

A low-risk SMP is implemented for least concern animals that are not colonial breeders.

The duration of the SMP must be identified and must be relevant to the activity being undertaken and allow for a periodic review of the program. The standard term for a SMP is three years.

2.2.5 Environmental Offsets Act 2014

In Queensland there is an offsets framework governed by a range of legislation, policies and guidelines to support a determination as to when environmental offsets are required, and how they are to be delivered. A summary of the framework and guiding principles that apply is summarised below.

The Queensland Offsets Framework includes:

- *Environmental Offsets Act 2014* (EO Act)
- Environmental Offsets Regulation 2014 (EO Regulation)
- Queensland Environmental Offsets Policy (QEOP) (version 1.9)

- Significant Residual Impact Guideline – for MSES and prescribed activities assessable under the Sustainable Planning Act 2009 (DSDIP, 2014).

Under the Queensland Environmental Offsets Framework an environmental offset may be required when a significant residual impact occurs to a MSES. MSES are prescribed in Schedule 2 of the EO Regulation and include:

- critically endangered, endangered and vulnerable flora and fauna species under the NC Act and their habitats
- special least concern wildlife and their habitats
- endangered and of concern RE under the VM Act
- essential habitat (mapped by DETSI)
- RE that intersect with wetlands and watercourses
- connectivity values
- wetlands of high ecological significance
- protected areas (including nature refuges)
- declared fish habitat areas and waterways providing for fish passage
- legally secured offset areas.

2.2.6 Biosecurity Act 2014

The *Biosecurity Act 2014* (Biosecurity Act) provides a legislative framework to manage pest flora and fauna, diseases, and environmental contaminants, to address the impacts they have on the economy, environment, agriculture, tourism, and society. The Biosecurity Act prohibits or restricts the introduction and spread of declared plant and animal pests within Queensland, and outlines obligations surrounding the management of biosecurity risks.

The listed Restricted Matter items fall under the following categories under the Biosecurity Act, wherein a person who has, or has a thing infested with, the Restricted Matter in the person's possession or under the person's control must:

- **Category 3** – not distribute or dispose of the restricted matter unless the distribution or disposal is carried out via the methods set out in the Biosecurity Act
- **Category 4** – not move the Restricted Matter, or cause or allow it to be moved
- **Category 5** – not keep in the person's possession or under the person's control
- **Category 6** – not give food to the Restricted Matter
- **Category 7** – kill the restricted matter and dispose of the carcass by burying the whole carcass in the ground above the high tide water mark or place it in a waste disposal receptacle.

The *Cassowary Coast Biosecurity Plan 2025-2029* identifies four levels of management of invasive species as per the following categories:

- **Prevention** – species absent in the region; aims to prevent species arrival and establishment;
- **Eradication** – species are present in a small number of localised populations; aims to completely remove the species from the area;
- **Containment** – species have undergone a rapid increase in distribution and abundance and includes many populations; aims to prevent ongoing spread in the area; and
- **Asset based protection** – invasive species widespread and abundant throughout its potential range; aims to reduce overall impacts.

2.2.7 Fisheries Act 1994

The *Fisheries Act 1994* (Fisheries Act) establishes a framework for the management and protection of fisheries resources, including regulating development that might impact declared fish habitat areas and fish passage. Waterway barrier works are regulated under the Planning Act. The Fisheries Act establishes a risk hierarchy for waterway barrier works across Queensland and guides the design and assessment process for the implementation of new waterway crossings.

2.2.8 Water Act 2000

The purpose of the *Water Act 2000* (Water Act) is to protect rivers, creeks or other streams in which water flows permanently or intermittently. A person must not take or interfere with the flow of water in a watercourse, lake or spring without an authorisation or entitlement under the Water Act.

The Water Act identifies and categorises water features such as watercourses, drainage feature, unmapped, lakes and springs.

2.3 Local Government

2.3.1 Cassowary Coast Regional Council Planning Scheme 2015

In accordance with Schedule 8, Table 2 of the Planning Regulation, CCRC is the Assessment Manager for the the Project. The Project is an assessable development under the requirements of the CCRC Planning Scheme as the relevant local categorising instrument.

The Project area is zoned as Rural under the CCRC Planning Scheme.

The use definition of the BESS has been confirmed with CCRC Planning Manager to be considered an '*undefined use*'. As such the BESS will be subject to impact assessment.

As a MCU for an *undefined use* assessable development, two CCRC Planning Scheme overlays affect the proposed BESS project relevant to this report. They comprise of the following:

- Environmental significance (Mahogany Glider corridor & area of environmental significance)
- Waterway corridor and wetlands (wetlands area of high environmental significance & waterway envelope).

2.3.1.1 Environmental Significance Overlay

As per Section 8.2.5 of the CCRC Planning Scheme, the purpose of the environmental significance code is to ensure that the Cassowary Coast region's significant ecological values and associated ecosystem services are protected, managed, expanded and enhanced. This is to be achieved through the following overall outcomes:

- The region's environmentally significant areas and wildlife and habitat corridors are protected
- Areas identified as strategic rehabilitation areas on the environmental significance overlay maps are protected, rehabilitated and revegetated so that ecological connectivity is improved, habitat extent is increased, and the biological integrity of degraded areas is restored.

To comply with the overall outcomes of this code, development must comply with the applicable performance and/or acceptable outcomes as specified by the relevant tables of assessment in the CCRC Planning Scheme.

2.3.1.2 Waterway Corridors and Wetlands Overlay

As per section 8.2.11 of the CCRC Planning Scheme, the purpose of the waterway corridors and wetlands code is to ensure that:

- The impacts of development on the natural physical processes of waterways are eliminated, minimised or mitigated
- The water quality and ecological functions of waterways and their riparian zones are protected
- Wetlands and their environmental values are protected or enhanced.

This will be achieved through the following overall outcomes:

- The hydrological capacity of waterways including flood conveyance and storage is maintained
- Development is located outside a waterway envelope:
  - To allow the waterway envelope (or other appropriately designated buffer) to accommodate natural and accelerated waterway widening, bank erosion and meander migration; and

  - So that adjacent development is not adversely affected by erosion.
- Water quality and ecological functions of waterways and wetlands are maintained or enhanced
- Development is planned, designed, constructed and operated to protect the environmental values of waterways and wetlands.

To comply with the purpose and overall outcomes of this code, development must comply with the applicable performance and/or acceptable outcomes as specified by the relevant tables of assessment in the CCRC Planning Scheme.

3. Methods

3.1 Desktop Assessment

Prior to undertaking the ecological field assessment, a comprehensive desktop assessment was completed to identify vegetation communities, threatened flora and fauna, and other ecological values with the potential to occur.

Where a buffer area was available for the search process, at least a 10 km buffer area was applied.

The following resources were reviewed as part of this assessment:

- Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) EPBC Act Protected Matter Search Tool (PMST).
- DCCEEW Species Profile and Threats Database entries for listed species and TEC.
- DETSI WildNet database search to identify previously recorded flora and fauna species, including non-native species within the search extent.
- Queensland Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development's (DNRMMRRD) Regulated Vegetation Management map and the Vegetation Management Supporting map which identifies remnant, high-value regrowth and non-remnant vegetation.
- Queensland State Planning Policy mapping and report for information on MSES.
- DETSI Protected Plants Flora Survey Trigger Mapping to assess high risk areas for threatened plants.
- eBird records of threatened and/or migratory birds.
- Atlas of Living Australia (ALA) database.
- Published ecological information on threatened flora and fauna species where available.
- Review of the CCRC Online Planning Scheme mapping service to identify MLES.

A copy of the desktop searches are provided in **Appendix A**.

3.2 Likelihood of occurrence assessment

A Likelihood of Occurrence assessment is an assessment of the likelihood that an MNES or MSES identified in the desktop assessment will occur within the Survey area and is done because the EPBC Act PMST uses bioclimatic modelling to predict suitable habitat for MNES and where MNES may be present, while the WildNet Species List and ALA search provides records of presence within a broad search extent. The desktop searches do not necessarily indicate the actual presence of an MNES within the Project area.

The Likelihood of Occurrence assessment for the Project has been undertaken and is included in **Appendix B** for all threatened flora and fauna species identified in the EPBC Act Protected Matters Report (PMR) and on the WildNet Species List.

The Likelihood of Occurrence assessment is done in two stages, with the first stage being a "desktop only" stage to inform the survey effort and assess which MSES and MNES should be targeted during the surveys (refer to **Section 4.2**). The Likelihood of Occurrence assessment is then refined/updated based on the results of the field surveys (including the habitat assessments) (refer to **Section 4.4**).

The categories assigned to each matter's Likelihood of Occurrence is provided in **Table 3.1**.

Table 3.1 Likelihood of occurrence categorisation

Likelihood of Occurrence	Matter	
	Species	Threatened Ecological Community
Known to Occur	This species has been recorded within the Project area	The TEC has been recorded within the Project area.
Likely to Occur	Whilst the species has not been observed within the Project area, historical records exist within 5 km and suitable habitat for this species has been identified within the Project area.	Constituent RE for the TEC are mapped within the Project area.
Potential to Occur	Suitable habitat for this species has been identified within the Project area and historical records occur between >5 km and 50 km of the Project area.	Constituent RE are mapped adjacent to the Project area.
Unlikely to Occur	No suitable habitat for the species has been identified within the Project area. Alternatively, whilst suitable habitat is present for this species within the Project area, nearby records are greater than 50 km away.	Constituent RE are not mapped within or adjacent to the Project area.

3.3 Field Survey

3.3.1 Survey approach

The ecological field survey comprised the following surveys:

- Verification of the State RE vegetation mapping
- Identification of TEC
- Identification and assessment of potential MNES and MSES flora and fauna habitat throughout the Project area
- Opportunistic searches for MNES and MSES flora and fauna species.

These surveys are further described in the following sections, whilst the survey effort and results are included in **Section 4.3**.

3.3.1.1 Vegetation mapping

Quaternary assessments were used to determine vegetation communities at representative sites within the Project area, with the data used to assess the type, extent, and condition of vegetation according to the Queensland Regional Ecosystem framework. A total of five sites were assessed in accordance with the Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Neldner, et al., 2023). The following data were collected at each quaternary assessment site:

- vegetative structure, including median heights and estimated cover for each stratum
- floristic composition, including native species dominance and sub-dominance within each identified stratum
- landform and basic soil attributes.

3.3.1.2 Threatened ecological communities

Surveys to assess the vegetation against the key diagnostic characteristics of all TEC identified in the desktop assessment were undertaken. Where vegetation met the key diagnostic characteristics of a TEC, condition surveys were undertaken in accordance with the Conservation Advice for the relevant TEC using 20 m x 20 m quadrats to assess potential TEC.

3.3.1.3 Fauna habitat assessment

Fauna habitat assessments were undertaken at representative habitats across the Project area. A total of five sites were identified, which included assessment of general habitat attributes including those that are indicative of potentially occurring MNES and MSES species. Attributes collected include:

- vegetation cover and structure (canopy, shrub and ground)
- tree bark habitat
- low vegetation density
- coarse woody debris
- rocky habitat features
- wetland and water quality features
- fire presence/recency
- tree hollow and large/very large tree presence/abundance
- landform and soil type
- locally important koala trees
- disturbance type and severity
- Casuarinaceae species presence.

3.3.1.4 Targeted fauna surveys

Spotlighting

- A total of two nights of spotlighting surveys were undertaken within suitable habitat to confirm the presence/absence of greater glider, yellow-bellied glider, koala, mahogany glider and other nocturnal fauna species.
- Transects in potentially suitable habitat were completed by two team members.

Assessment of suitability for wetland birds

- The project area was assessed for suitability to Australian Painted Snipe, Latham's Snipe and other wetland species.
- No suitable wetland locations were recorded within the survey area. There were a some small, steep-sided dams, but these were unsuitable for the identified wetland species.

Diurnal meander surveys

- Undertaken through patches of suitable MSES and MNES fauna habitat to search for primary evidence (e.g. physical animal) or secondary evidence (e.g. scats, scratches, nest or hair) of fauna species being present.
- Meander surveys and active searches were undertaken sporadically throughout the available fauna habitat by two team members.
- Meanders particularly focussed on searches for glider scats and scratches.
- Active searches were also used to detect reptile, amphibian and small ground dwelling mammal species that shelter in or under microhabitats such as rocks, fallen timber, leaf litter, bark, debris, decorticating bark or dense vegetation. Searches involved turning over rocks, timber and leaf litter at bases of trees.
- Searches for secondary signs of habitat use were also undertaken, specifically for chewed she-oak seed cones (termed 'orts') beneath Allocasuarina trees that are discarded by glossy black-cockatoo during feeding (Glossy Black Conservancy, 2010).

3.3.1.5 Opportunistic observations

During all surveys and while traversing around the Project area, flora and fauna observations were made by visual and aural means. Any observations of fauna or evidence of fauna (e.g. audible calls, scats, tracks, burrowing or scratching) were recorded and, where possible, photographed to confirm.

3.4 Limitations

The content of this report, including the assessment of the Project's impacts, is based on information available at the time the report was prepared. Some information has been obtained from third party sources and, while every care has been taken to ensure the accuracy of this data, Attexo makes no statements regarding the reliability or completeness of this data, or any assumptions made based on third party data.

There is inherent variability in vegetation communities and species distributions and inherent limitations in all field surveys. The inherent limitations in undertaking field surveys have been mitigated by applying a field survey program consistent with State and Commonwealth survey guidelines to target the presence of individual threatened species and habitats (including breeding, foraging, and dispersal) that may be suitable for threatened flora and fauna species). However, there remains a risk that threatened species may not have been identified, particularly small and/or cryptic species and/or migratory species. Regardless of these limitations, the field surveys have been progressed consistent with State and Commonwealth survey guidelines by suitably qualified professionals with relevant experience and are therefore considered sufficient to identify environmental and ecological attributes.

3.4.1 Survey team, timing and conditions

The ecology field survey was conducted from 11 November to 13 November 2024 by Justin Armstrong (Senior Field Ecologist) and Nicholas Callahan (Ecologist).

3.4.1.1 Climatic conditions

As part of the Far North Queensland region, the climate in Tully is generally hot and humid with a distinct wet season (December-March) and dry season (April-November). Tully is particularly wet, even for the wet tropics, having an average annual rainfall of over 4000 mm with the wet season running from late December to April/May (BOM, 2024b). Monthly mean maximum temperatures range from 25 - 32ºC, while monthly mean minimum temperatures range from 14 - 23ºC (BOM, 2024a).

Table 3.2 provides the long-term climate averages (between 1942 to 2024), as recorded at the Cairns Aero weather station (station number: 031011) (BOM, 2024c) and **Table 3.3** provides the monthly climate statistics for the Cairns Aero weather station in the 12 months prior to the ecology field survey (BOM, 2024c). While Cairns Aero is not the nearest weather station to the Project area, it is the nearest weather station with complete statistics for the 12 months prior to the ecology field survey and provides the best opportunity to for comparison with long term averages.

Table 3.2: Long term climate averages as recorded at the Cairns Aero weather station

	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Annual
Mean max temp (°C)	31.5	31.5	31.3	30.7	29.4	27.7	26.1	25.8	26.7	28.2	29.7	30.8	29.1
Highest temp (°C)	40.5	40.4	40	37.7	36.8	31.3	30.8	30.1	31.4	33.9	36	42.6	42.6
Mean rainfall (mm)	192.5	402.1	435.1	420.5	203.4	91.7	45.9	33.5	26.7	32.7	47.2	88.3	2015.7
Highest rainfall (mm)	919.4	1417.4	1287	1127.5	845.2	322.3	177.6	145	140.2	103.2	394.4	372	3148.8
Mean 3pm relative humidity (%)	62	66	69	67	65	64	61	58	56	55	57	60	62
Mean 3pm wind speed (km/h)	17	15.6	14.6	17.3	19	17.9	18.1	18.7	19.6	20.5	19.1	18	18

Table 3.3: Climate records for 12 months prior to the field survey as recorded at the Cairns Aero weather station

	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Annual
Mean max temp (°C)	32.2	32.6	31.9	30.7	30.4	28	27.4	26.5	27.5	29.2	31	32.3	30.0
Highest temp (°C)	35.8	36.8	33.8	33.2	32.9	29.8	29.1	29.1	30.3	33.1	32.9	34.1	36.8
Total rainfall (mm)	617	390.2	275	890.6	336.8	89.2	14.8	58.8	62.6	24.8	31.4	58.2	2849.4
Mean 3pm relative humidity (%)	30.2	75	74	76	68	70	60	59	64	57	57	58	62.4
Mean 3pm wind speed (km/h)	20	17	75	20	25	26	18	22	NA	27	23	22	26.8

Figure 3.1 compares the monthly rainfall totals and the monthly mean maximum temperatures in the 11 months leading up to the survey with the long-term average statistics for the Cairns Aero weather station (BOM, 2024c).

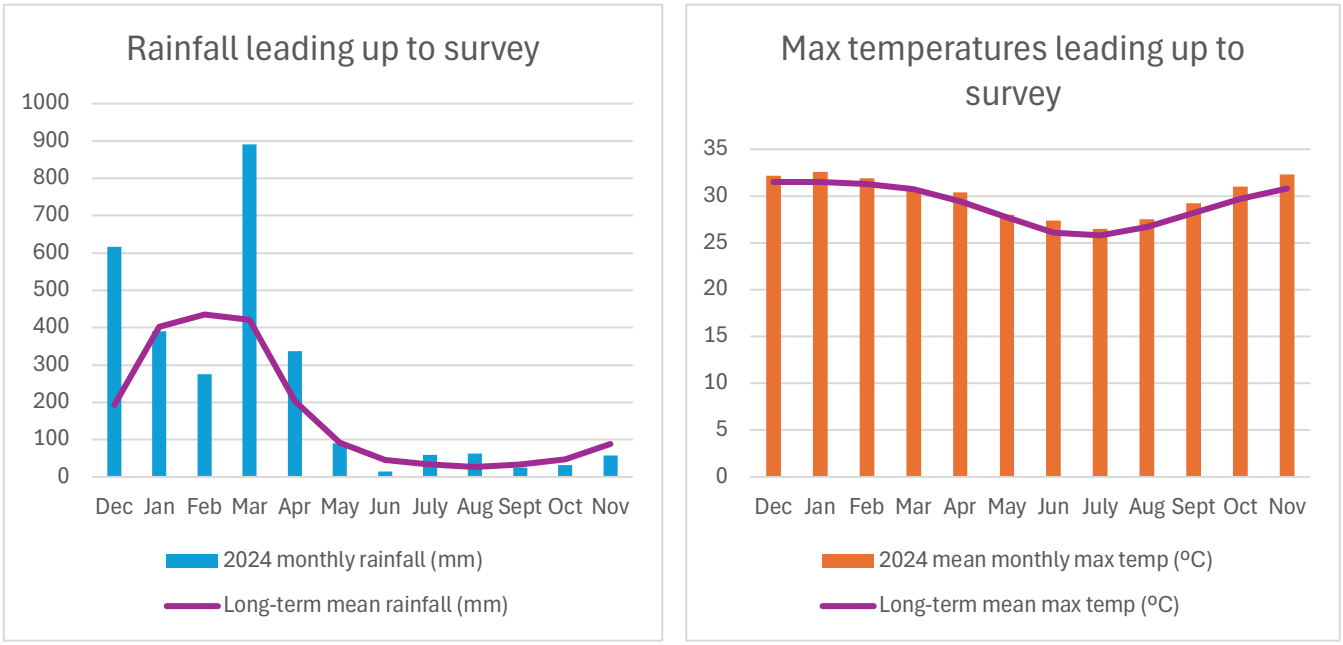


Figure 3.1: Rainfall and mean maximum temperatures leading up to survey

3.4.1.2 Targeted MNES and MSES species

The Cairns Aero data confirms that the 6 months leading up to the survey was approximately 9% drier and 4% hotter than long term averages. The seasonal timing (late dry season) and the climatic conditions for the survey did not present any restrictions to the detectability of the target MSES or MNES.

4. Results

4.1 Desktop assessment

4.1.1 Matters of National Environmental Significance

The PMR (Error! Reference source not found.) identified the following MNES values that may be applicable to the Project area:

- The Project area is entirely outside of any World Heritage Properties; however, the Wet Tropics World Heritage Area is located approximately 2 km to the north and approximately 5 km to the east. The Great Barrier Reef World Heritage Property reaches up the Tully River to approximately 12.5 km downstream of the Project area via watercourses.
- The Project area is entirely outside of any National Heritage Places; however, the Wet Tropics of Queensland National Heritage Place and Wet Tropics World Heritage Area (Indigenous Values) are located approximately 2 km to the north and approximately 5 km to the east. The Great Barrier Reef National Heritage Place reaches up the Tully River to approximately 12.5 km downstream of the Project Area via watercourses.
- No Wetlands of International Importance (Ramsar Wetlands) are within the Project area or 50 km buffer.
- Four TECs were identified with the potential to occur in the Project area.
- A total of 136 species were identified in the desktop assessments including 41 threatened flora species and 95 threatened and/or migratory fauna species. Due to the Project area's proximity to the coastline, there are several marine only fish, reptile, and mammal species included in these desktop assessment results.
- The Project area is not within any Commonwealth Marine Area. The nearest being offshore, approximately 35 km to the east.
- The Project area is entirely outside of the Great Barrier Reef Marine Park, which is located approximately 17 km to the east at the coastline.

4.1.2 Matters of State Environmental Significance

In addition to the MNES values identified in **Section 4.1.1**, the MSES report, the Vegetation Management Property Report and WildNet species list identified the MSES as outlined in the following sections.

4.1.2.1 Regulated Vegetation

Regulated vegetation in the Project area and surrounds is described below, with MSES Regulated Vegetation depicted in **Figure 4.3**:

- Category B, C, R and X Regulated Vegetation mapped within the Project Area and surrounds
- 10 REs mapped within the Project Area and surrounds, including:
  - 5 Endangered RE
  - 1 Of Concern RE; and
  - 4 Least Concern RE.
- A total of 6.62 ha of Category R (GBR Riverine regrowth) is mapped within the Project area
- A total of 0.7 km of Regulated Vegetation – intersecting a watercourse is mapped within the Project area
- A total of 3.79 ha of Regulated Vegetation - within 100 m of a Vegetation Management Wetland is mapped within the Project area.

4.1.2.2 Threatened species

WildNet species list identified records of 7 additional NC Act species with the potential to occur within the Project area and buffer area.

4.1.2.3 Protected area estate

There are no protected areas overlapping or bordering the Project area.

4.1.2.4 Essential habitat

No mapped essential habitat occurs within the Project area.

4.1.2.5 High-risk trigger mapping

No areas of high-risk trigger mapping occur in the Project area.

4.1.2.6 Queensland wetland environmental values

There is MSES high ecological significance wetland mapped along the northeastern and southeastern boundary of the Project area (totalling 2.3 ha within the Project area), continuing into the neighbouring PQ property.

There are also MSES wetland values associated with the stream order 1 drainage feature (under the MSES regulated vegetation watercourse mapping) mapped within the Project area, running west-east across the northern section of the Project area, into the neighbouring existing Tully substation property and then re-entering the Project area in the southwest. This water feature is listed as "unmapped" under the Water Act.

By design all parts of the Development Footprint avoid these mapped wetland values, however the prescribed 200 m buffer surrounding wetland areas overlaps part of the Development footprint and the transmission corridor.

MSES wetland values and the 200 m buffer are depicted in **Figure 4.2**.

4.1.3 Matters of Local Environmental Significance

The CCRC Planning Scheme defines areas of General Environmental Significance and areas of High Environmental Significance based on those shown in the Environmental Significance Overlay, and the Waterway Corridors and Wetlands Overlay maps.

Review of the CCRC Online Planning Scheme Mapping identified the following areas of Environmental Significance:

- Mahogany glider habitat corridor
- Wetlands of high environmental significance.

Figure 4.1 provides the Environmental Significance Overlay mapping showing the Mahogany glider habitat corridor and Areas of Environmental Significance. **Figure 4.2** provides the Waterway Corridors and Wetlands Overlay mapping showing wetlands of high environmental significance and the prescribed 200 m buffer.

4.1.3.1 Mahogany glider habitat corridor

Mahogany glider habitat corridor is mapped within the Project area on the CCRC Planning Scheme Environmental Significance Overlay (see **Figure 4.1**). The area mapped coincides with the area mapped as MSES high ecological significance as described in **Section 4.1.2.6** and as wetland of high environmental significance as described in **Section 4.1.3.2** .

By design, the Development Footprint avoids areas mapped as Mahogany glider habitat corridor on the CCRC Online Planning Scheme Mapping. The transmission line corridor crosses a narrow section at the northernmost extent of the Mahogany glider corridor. In this area the overhead transmission line will be above the vegetation with no vegetation clearing required, however, minimal vegetation trimming may be required to meet powerline requirements.

4.1.3.2 Wetlands of high environmental significance

A wetland of high environmental significance is mapped within the Project area on both the CCRC Planning Scheme Environmental Significance Overlay and the Waterway Corridors and Wetlands Overlay. The area mapped matches the area mapped as MSES high ecological significance as described in **Section 4.1.2.6** and the area mapped as Mahogany glider habitat corridor described in **Section 4.1.3.1** .

By design, the Development Footprint avoids areas mapped as high ecological significance on the CCRC Online Planning Scheme Mapping. In this area the overhead transmission line will be above the vegetation with no vegetation clearing required, however, minimal vegetation trimming may be required to meet powerline requirements.;.

CCRC Environmental Significance

Figure 4.1

DWG No: RWE-002-008[D]
DATE: 18/09/2025
DRAWN: KB
REVIEWED SW
SCALE (A4): 1:5,000

N

0 m 100

GDA2020

- Project Area
- Development Footprint
- Proposed Transmission Line Corridor
- Proposed transmission line
- 20m exclusion zone
- Area of High Environmental Significance
- Mahogany Glider Corridor
- VM Watercourse
- Main Road
- Local Road

Waterways and Wetlands

Figure 4.2

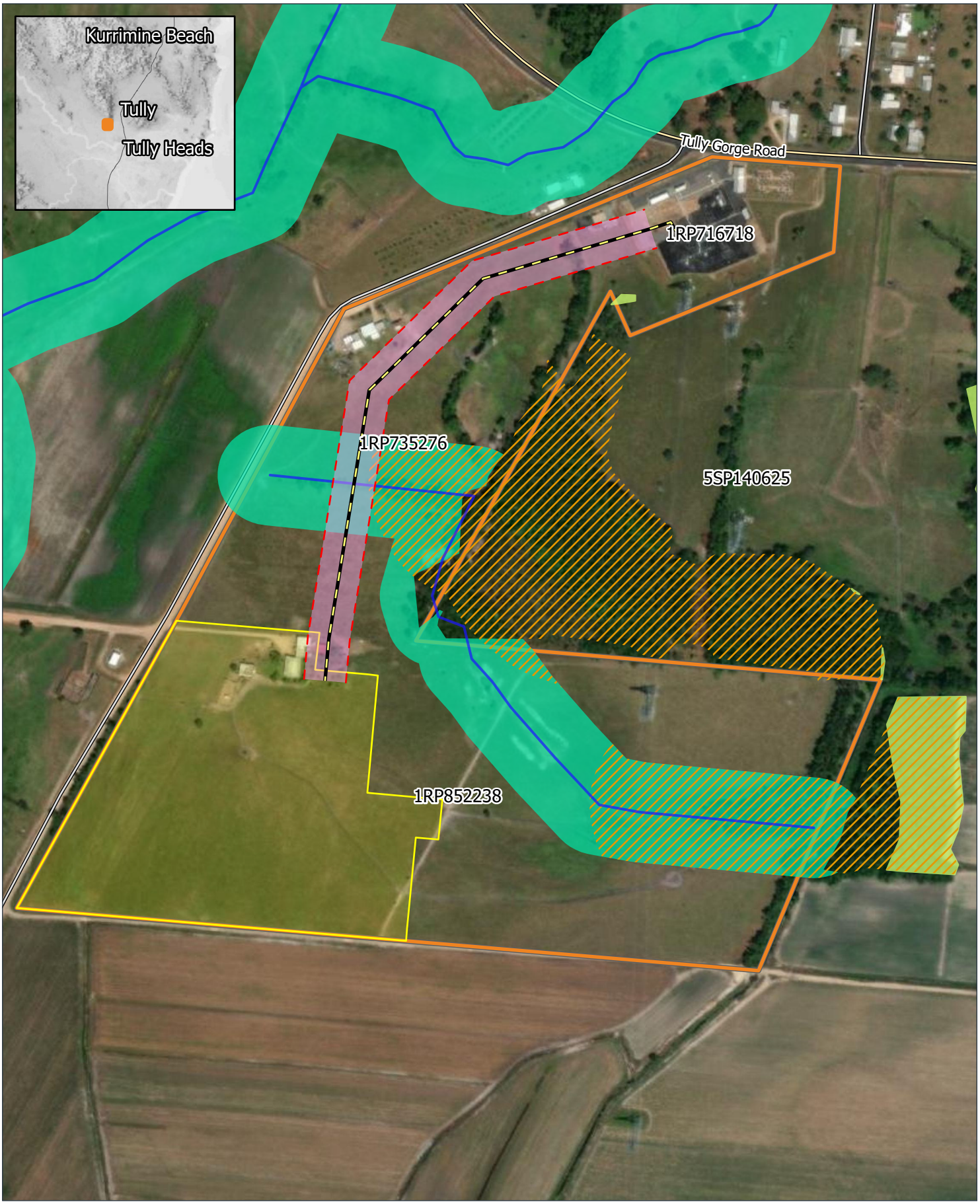
DWG No: RWE-002-009[D]
DATE: 18/09/2025
DRAWN: KB
REVIEWED SW
SCALE (A4): 1:5,000

N

0 m 100

GDA2020

- Project Area
- Development Footprint
- Proposed Transmission Line Corridor
- Proposed transmission line
- 20m exclusion zone
- CCRC Wetland of High Environmental Significance
- MSES high ecological significance wetlands
- 200m wetland buffer
- VM Watercourse
- Main Road
- Local Road



MSES Regulated Vegetation

Figure 4.3

DWG No: RWE-002-010[D]
DATE: 18/09/2025
DRAWN: KB
REVIEWED SW
SCALE (A4): 1:5,000

N

0 m 100

GDA2020

- Project Area
- Development Footprint
- Proposed Transmission Line Corridor
- Proposed transmission line
- 20m exclusion zone
- MSES regulated vegetation [category R-GBR riverine]
- MSES regulated vegetation [category C-endangered or of concern]
- MSES regulated vegetation [100m from wetland]
- VM Watercourse
- Main Road
- Local Road

4.1.4 Vegetation communities

4.1.4.1 Regional ecosystems

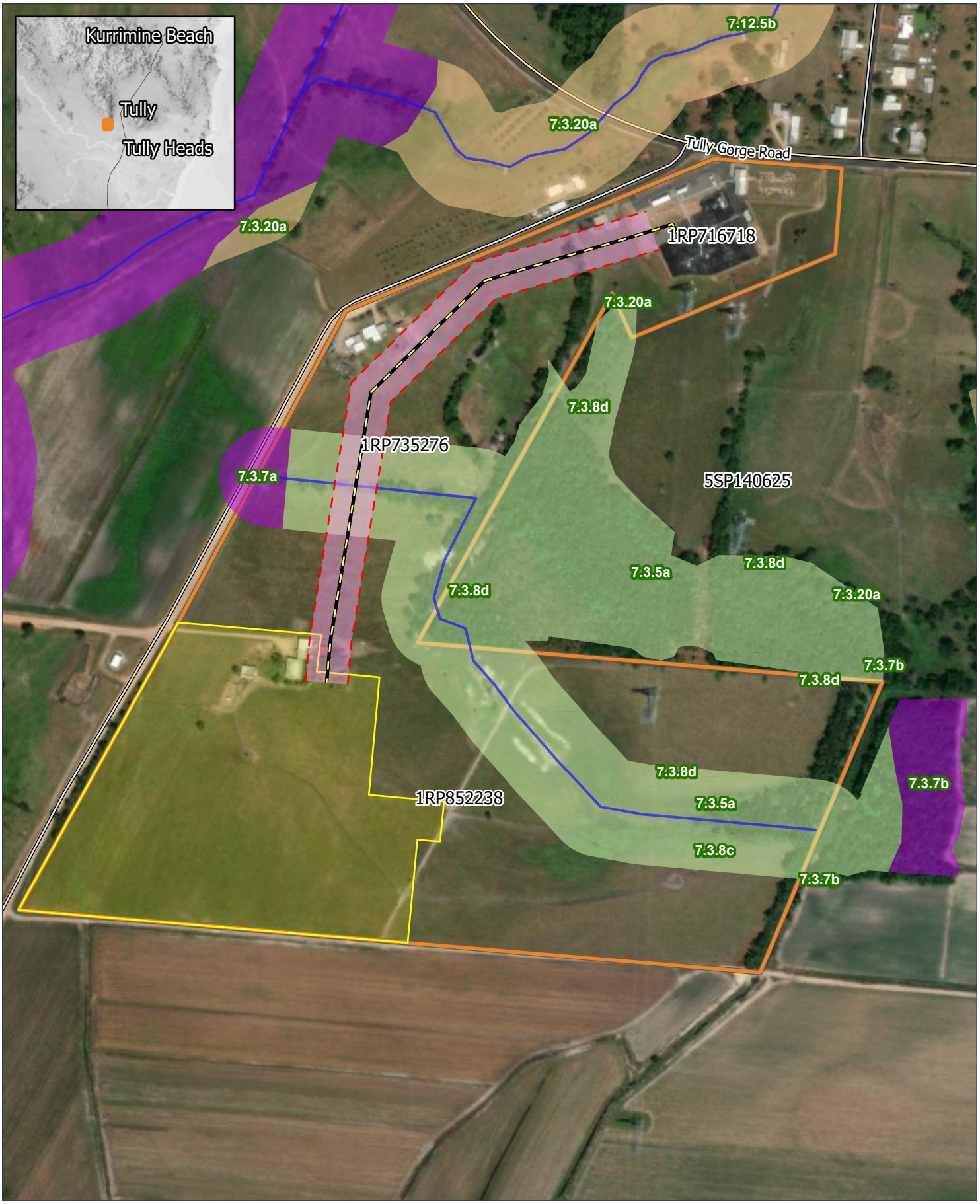
There are three unique REs mapped within the Project area and an additional three REs in the adjacent PQ properties. **Table 4.1** provides a description of each RE, the VM Act status, the RE category mapped within the Project area and the PQ lots, and the allotments on which the RE is mapped. The State mapped REs within the Project area and PQ lots are shown in **Figure 4.4**.

Table 4.1: State mapped REs in the Project area and PQ lots

Regional Ecosystem	VM Act Status*	Cat#	Lots	Description
7.3.5a	LC	C, R	1RP852238	*Melaleuca quinquenervia* open forest, woodland and shrubland. Lowlands of the very wet and wet rainfall zone, on poorly drained peaty humic grey soils where the water table is near or above the ground for most of the year. Palustrine. (BVG1M: 22a).
7.3.7a	E	R	1RP735276	*Eucalyptus pellita* and *Corymbia intermedia* open forest and woodland. Poorly drained alluvium, including seasonal swamps. Contains Palustrine. (BVG1M: 9e).
7.3.7b	E	C, R	5SP140625 (PQ)	*Eucalyptus pellita* and *Corymbia intermedia* open forest and woodland, with a very well-developed vine forest understorey. Poorly drained alluvium, including seasonal swamps. Contains Palustrine. (BVG1M: 9e).
7.3.8c	E	R	1RP735276	*Melaleuca viridiflora*, and *Lophostemon suaveolens* open forest to woodland. Poorly drained soils of coastal lowlands. Contains Palustrine. (BVG1M: 21a).
7.3.8d	E	C, R	5SP140625 (PQ)	*Melaleuca viridiflora*, *Lophostemon suaveolens* and *Allocasuarina littoralis* open shrubland. Poorly drained soils of coastal lowlands. Contains Palustrine. (BVG1M: 21a).
7.3.20a	OC	C, R	1RP716718 (PQ) 5SP140625 (PQ)	*Eucalyptus pellita*, *Corymbia intermedia*, *C. tessellaris*, open forest often with *Acacia celsa*, *A. cincinnata*, *A. mangium* and *A. flavescens*. Includes small areas dominated by *A. crassicarpa*. Alluvial fans of the very wet and wet rainfall zones, of the lowlands and foothills. Not a Wetland. (BVG1M: 9d).
Non-remnant	None	X	1RP852238 1RP735276 1RP716718 (PQ) 5SP140625 (PQ)	Non-remnant

* - LC: least concern, OC: of concern, E: endangered

- B: remnant, C: regrowth, R: reef watercourse vegetation



State Mapped Regional Ecosystems

Figure 4.4

DWG No: RWE-002-012[C]
DATE: 18/09/2025
DRAWN: KB
REVIEWED SW
SCALE (A4): 1:5,000

N

0 m 100

GDA2020

- Project Area
- Development Footprint
- Proposed Transmission Line Corridor
- Proposed transmission line
- 20m exclusion zone

Vegetation management regional ecosystem

- Category C or R area containing endangered
- Category C or R area containing of concern
- Category C or R area that is of least concern

- VM Watercourse
- Main Road
- Local Road

4.1.4.2 Threatened ecological communities

The EPBC Act PMR lists the following four TECs as having the potential to occur in the Project area. **Table 4.2** below lists those four TECs and their associated RE.

Table 4.2: TECs with the potential to occur in the Project area

Threatened Ecological Community	EPBC Status	Associated REs (applicable to the region)
Broad leaf tea-tree (Melaleuca viridiflora) woodlands in high rainfall coastal north Queensland	Endangered	7.3.8a, 7.3.8b, 7.3.8c, 7.3.8d, and 7.5.4g
Littoral Rainforest and Coastal Vine Thickets of Eastern Australia	Critically Endangered	7.2.1a-i; 7.2.2a-h, 7.2.5a, 7.2.6b, 7.11.3b and 7.12.11d
Lowland tropical rainforest of the Wet Tropics	Endangered	7.3.3, 7.3.4, 7.3.10, 7.3.17, 7.3.20, 7.3.23, 7.3.25, 7.3.38, 7.3.49, 7.3.50, 7.8.1, 7.8.2, 7.8.11, 7.8.12, 7.8.14, 7.11.1, 7.11.2, 7.11.3, 7.11.7, 7.11.23, 7.11.24, 7.11.25, 7.11.30, 7.12.1, 7.12.2, 7.12.7, 7.12.11, 7.12.39, and 7.12.40
Mabi Forest (Complex Notophyll Vine Forest 5b)	Critically Endangered	7.8.3 and 7.3.37

4.1.4.3 Essential habitat

No mapped essential habitat occurs within the Project area.

4.1.5 Conservation significant species

4.1.5.1 Threatened flora species

The desktop assessment identified that threatened flora species have been recorded (or their habitat modelled) within the Project area and buffer as follows:

- EPBC Act PMR – 41 threatened flora species
- WildNet Species List – 8 threatened flora species

Protected plant high-risk trigger mapping

No areas of high-risk trigger mapping occur in the Project area.

4.1.5.2 Threatened fauna species

A total of 95 threatened fauna species were identified on the EPBC Act PMR as having the potential to occur within a 50 km buffer from the Project area (refer to Error! Reference source not found.), comprised of the following:

- 3 threatened or migratory frog species
- 46 threatened or migratory bird species
- 23 threatened or migratory mammal species
- 9 threatened or migratory terrestrial reptile species
- 3 threatened or migratory fish species
- 11 threatened or migratory shark species

The WildNet Species List identified nine threatened terrestrial fauna species within the Project area and buffer (refer to Error! Reference source not found.), comprised of the following:

- 4 threatened frog species
- 3 threatened bird species
- 1 threatened mammal species
- 1 threatened reptile species.

4.2 Likelihood of Occurrence assessment – desktop

4.2.1 Threatened ecological communities

Of the total four TECs identified in the desktop assessment, none are known to occur and two were assessed as likely to occur. The remaining two were assessed as unlikely to occur due to a lack of constituent RE mapped in the Project area. **Table 4.3** lists the TEC identified as Likely to Occur in the desktop likelihood of occurrence assessment.

Table 4.3 Threatened Ecological Communities - desktop likelihood of occurrence

Threatened Ecological Community	EPBC Status	Likelihood
Broad Leaf tea-tree (*Melaleuca viridiflora*) woodlands in high rainfall coastal north Queensland	Endangered	Likely to Occur
Lowland tropical rainforest of the Wet Tropics	Endangered	Likely to Occur

4.2.2 Listed flora and fauna species

Of the 119 total flora and fauna species identified in the desktop searches, two (2) species were considered as likely to occur within the project area and 30 species are considered as having the potential to occur. **Table 4.4** lists the species with the potential to occur and those considered likely to occur. See Error! Reference source not found. for the full likelihood of occurrence assessment.

Table 4.4: Listed flora and fauna species – desktop likelihood of occurrence

Common Name	Scientific Name	EPBC Status[1]	NC Act Status[2]	Likelihood
Amphibians				
Australian Lace-lid, Lace-eyed Tree Frog, Day's Big-eyed Treefrog	*Litoria dayi*	V	V	Potential to Occur
Bird				
Southern Cassowary (southern population)	*Casuarius casuarius*	E	E	Likely to Occur
Common Sandpiper	*Actitis hypoleucos*	Mi, Ma	-	Potential to Occur
Oriental Cuckoo	*Cuculus optatus*	Mi	-	Potential to Occur
White-throated Needletail	*Hirundapus caudacutus*	V, Mi, Ma	V	Potential to Occur
Osprey	*Pandion haliaetus*	Mi, Ma	-	Potential to Occur

[1] EPBC Act Status: E = Endangered, V = Vulnerable, Mi = Migratory and Ma = Marine
[2] NC Act Status: E = Endangered, V = Vulnerable, NT = Near Threatened

Common Name	Scientific Name	EPBC Status[1]	NC Act Status[2]	Likelihood
Grey Plover	*Pluvialis squatarola*	V, Mi, Ma	V	Potential to Occur
Fish				
Cairns Rainbowfish, Northern Soft-spined Sunfish	*Cairnsichthys rhombosomoides*	E	E	Potential to Occur
Lake Eacham Rainbowfish	*Melanotaenia eachamensis*	E	-	Potential to Occur
Mammal				
Greater Glider (northern), Greater Glider (north-eastern Queensland)	*Petauroides minor*	V	V	Potential to Occur
Mahogany Glider	*Petaurus gracilis*	E	E	Potential to Occur
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	*Phascolarctos cinereus*	E	E	Potential to Occur
Spectacled Flying-fox	*Pteropus conspicillatus*	E	E	Potential to Occur
Reptile				
Salt-water Crocodile, Estuarine Crocodile	*Crocodylus porosus*	Mi, Ma	V	Potential to Occur
Atherton Delma, Legless Lizard	*Delma mitella*	V	NT	Potential to Occur
Plant				
-	*Cheilocostus potierae*	-	E	Likely to Occur
Red Silky Oak, Queensland Waratah, Tree Waratah	*Alloxylon flammeum*	V	V	Potential to Occur
-	*Aponogeton bullosus*	E	E	Potential to Occur
an aquatic herb	*Aponogeton prolifer*	E	E	Potential to Occur
-	*Asplenium pellucidum*	V	V	Potential to Occur
-	*Canarium acutifolium*	V	V	Potential to Occur
-	*Carronia pedicellata*	E	E	Potential to Occur
-	*Dioclea hexandra*	-	E	Potential to Occur
-	*Diplazium cordifolium*	V	V	Potential to Occur

Common Name	Scientific Name	EPBC Status[1]	NC Act Status[2]	Likelihood
a sedge	*Eleocharis retroflexa*	V	V	Potential to Occur
Ant Plant	*Myrmecodia beccarii*	V	V	Potential to Occur
Lesser Swamp-orchid	*Phaius australis*	E	E	Potential to Occur
Square Tassel Fern	*Phlegmariurus tetrastichoides*	V	V	Potential to Occur
Middle Filmy Fern	*Polyphlebium endlicherianum*	E	V	Potential to Occur
-	*Rhodamnia sessiliflora*	-	E	Potential to Occur
-	*Steganthera australiana*	-	NT	Potential to Occur
Velvet Jewel Orchid	*Zeuxine polygonoides*	V	-	Potential to Occur

4.3 Field survey

4.3.1 Vegetation communities

4.3.1.1 Regional ecosystems

The field surveys assessed the vegetation within the Project area (including the mapped RE and HVR) via Quaternary surveys as per Neldner et al. (2023) to produce a ground-truthed RE (GTRE) map to validate the mapped vegetation and to provide context for the identification of TEC and habitat for flora and fauna MNES.

The field survey identified a total of two REs within the Survey Area, which are detailed in **Table 4.5**. The surveys identified that the vegetation was generally inconsistent with the RE mapping, with large areas mapped with incorrect RE and areas mapped as containing regrowth RE which were validated as a non-remnant vegetation.

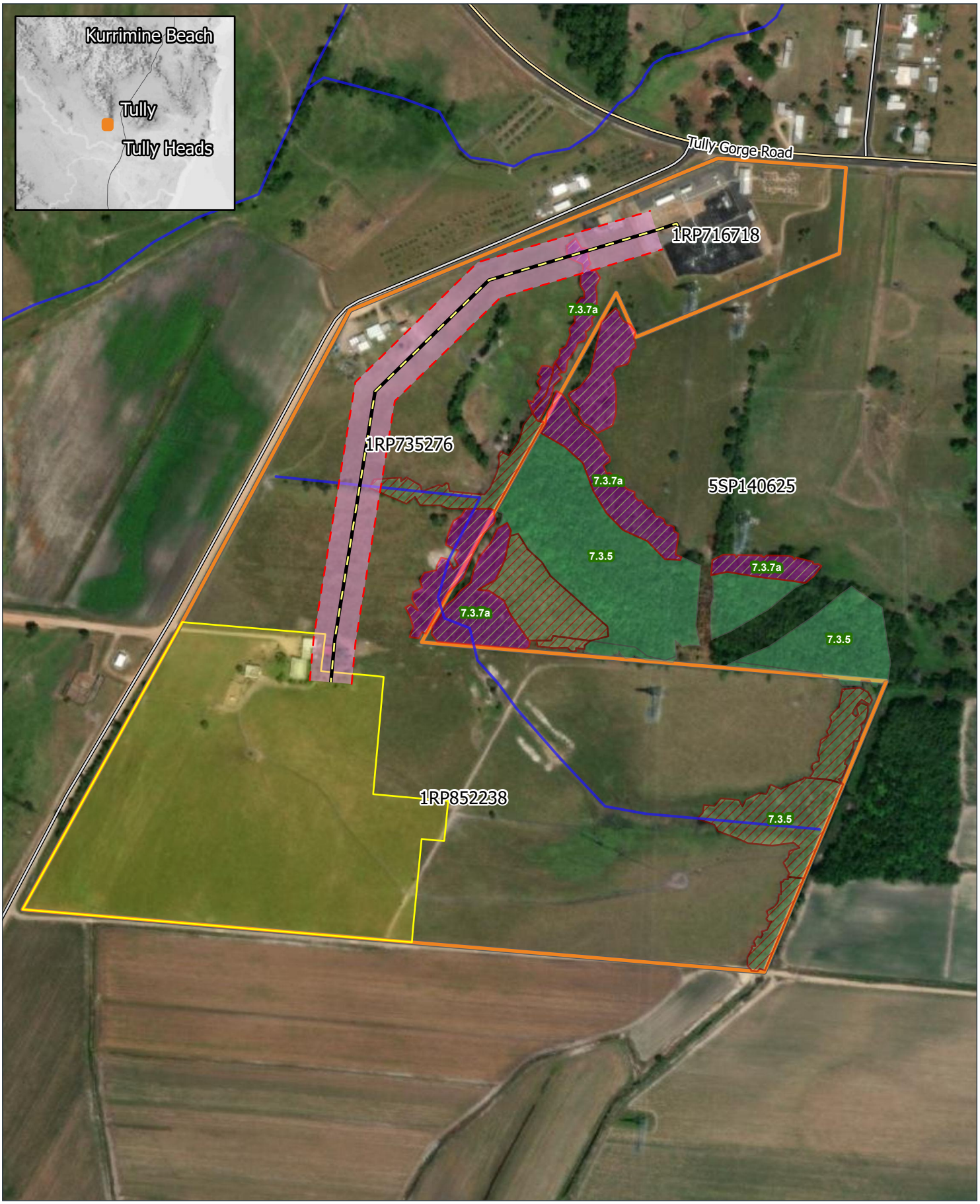
The distribution and extent of the GTRE is shown in **Figure 4.5**.

Table 4.5: Ground-truthed RE in the Project area and PQ lots

Regional Ecosystem	VM Act Status[3]	Cat[4]	Lots	Description
7.3.5	LC	B, C	1RP735276 1RP852238	*Melaleuca quinquenervia* and/or *Melaleuca cajuputi* subsp. *platyphylla* closed forest to shrubland on poorly drained alluvial plains
7.3.7a	E	C	1RP735276 1RP852238	*Eucalyptus pellita* and *Corymbia intermedia* open forest and woodland. Poorly drained alluvium, including seasonal swamps. Contains Palustrine. (BVG1M: 9e).

[3] VM Act Status: E = Endangered, LC = Least Concern
[4] VM Category: B = Category B Remnant Vegetation, C = Category C Regrowth Vegetation

Regional Ecosystem	VM Act Status[3]	Cat[4]	Lots	Description
Non-remnant	None	X	1RP852238 1RP735276	Non-remnant



Ground-truthed RE in the Survey Area

Figure 4.5

DWG No: RWE-002-011[D]
DATE: 18/09/2025
DRAWN: KB
REVIEWED SW
SCALE (A4): 1:5,000

N

0 m 100

GDA2020

- Project Area
- Development Footprint
- Proposed Transmission Line Corridor
- Proposed transmission line
- 20m exclusion zone

GTRE

- Endangered (regrowth)
- Least Concern (regrowth)
- Least Concern

- VM Watercourse
- Main Road
- Local Road

4.3.1.2 Threatened ecological communities

The vegetation within the Survey Area did not align with the key diagnostic characteristics of any of the TEC identified in the EPBC Act PMR, or any other known TEC.

4.3.2 Flora

A total of 53 unique flora species were recorded during survey of the Survey area.

4.3.2.1 Threatened flora

No threatened flora was recorded in the Survey area during field survey.

4.3.3 Fauna

A total of 31 unique vertebrate fauna species were observed during active searches, spotlighting and opportunistic observations, comprised of the following:

- 20 bird species
- 2 frog species
- 5 invertebrate species
- 3 mammal species
- 1 reptile species.

4.3.3.1 Threatened fauna

No threatened fauna species were observed during field survey.

4.3.4 Habitats

Field survey confirmed that the vast majority of the Project area is represented by non-remnant, cleared pasture, dominated by exotic grasses. With some small areas of regrowth vegetation along the eastern boundaries of each of the lots within the Project area.

The vegetation within the study area has been categorised into broad habitat types based on the dominant canopy species, vegetation structure, and associated habitat attributes. The broad habitat types with their corresponding RE and their extent within the Project area are listed in **Table 4.6**. Examples of the broad habitat types are provided in **Figure 4.6**, **Figure 4.7** and **Figure 4.8**.

Table 4.6 Broad habitat types and their corresponding RE within the Project area

Broad Habitat Type	Corresponding RE	Area within the Project area	Area within the Development Footprint
Regrowth *Melaleuca quinquenervia* open forest	7.3.5	1.47 ha	0.01 ha[5]
Regrowth *Lophostemon suaveolens/ Corymbia intermedia* open forest	7.3.7a	0.62 ha	0.04 ha[5]
Cleared areas/pasture, dominated by exotic grasses	Non-remnant areas without wetland values.	24.1 ha	9 ha

[5] Area within Development Footprint for vegetated Broad Habitat Types is represented by two narrow crossings by the transmission corridor which will be overhead crossings. These areas may include some "trimming" of vegetation to maintain a safe clearance from the high-voltage transmission line but not clearing of the vegetation.

Figure 4.6: Regrowth Melaleuca quinquenervia open forest

Near eastern boundary of Lot 1 on RP852238

Near eastern boundary of Lot 1 on RP852238

Centre east of Lot 1 on RP735276

Denser example from neighbouring PQ parcel Lot 5 on SP140625

Figure 4.7: Regrowth *Lophostemon suaveolens*/ *Corymbia intermedia* open forest

North eastern boundary of Lot 1 on RP735276

South eastern boundary of Lot 1 on RP735276

South eastern boundary of Lot 1 on RP735276

Example from neighbouring PQ parcel Lot 5 on SP140625

Figure 4.8: Cleared areas/pasture, dominated by exotic grasses

Northern part of Lot 1 on RP735276

Eastern part of Lot 1 on RP852238

Eastern part of Lot 1 on RP852238

Looking SW towards N end of Development Footprint on Lot 1 on RP735276

4.3.5 Pest flora and fauna

4.3.5.1 Weeds

One Category 3 restricted invasive plant under Biosecurity Act and Weed of National Significance (WoNS) was recorded:

- Hymenachne (*Hymenachne amplexicaulis*)

Additionally, several common, exotic flora species were observed during field survey of the Survey area. These species include:

- narrow-leaved carpet grass (*Axonopus fissifolius*)
- creeping false paspalum (*Urochloa dictyoneura*)
- common passionfruit (*Passiflora edulis*)
- sensitive weed (*Mimosa pudica*)
- blue billygoat weed (*Ageratum houstonianum*)
- false buttonweed (*Spermacoce remota*)
- sourgrass (*Paspalum conjugatum*)
- nutgrass (*Cyperus rotundus*)
- aromatic kylinga (*Cyperus aromaticus*) –listed as a local pest in the CCRC Planning Scheme SC6.4.4.

4.3.5.2 Pest fauna

No pest fauna species were recorded during survey.

4.4 Likelihood of Occurrence assessment – refined

4.4.1 Threatened ecological communities

Following field survey, no TEC are known to occur or have been assessed as likely to occur in the Project area. Ground-truthing of REs in the Project area did not record any constituent REs for the four TEC identified in the desktop assessment and no observations of those TECs were recorded during field survey of the Project area.

4.4.2 Listed flora and fauna species

Following field survey, no species are considered likely to occur due to a lack of suitable habitat within the Project area. There are remaining four species considered as having the potential to occur in the Project area. These species are listed in **Table 4.7**.

Table 4.7: Listed flora and fauna species – refined likelihood of occurrence

Common Name	Scientific Name	EPBC Status	NC Act Status	Likelihood
Bird				
White-throated needletail	*Hirundapus caudacutus*	V, Mi, Ma	V	**Potential to Occur**
Mammal				
Spectacled flying-fox	*Pteropus conspicillatus*	E	E	**Potential to Occur**
Plant				
Ant plant	*Myrmecodia beccarii*	V	V	**Potential to Occur**
Lesser swamp-orchid	*Phaius australis*	E	E	**Potential to Occur**

5. Project impacts and mitigation

5.1 Vegetation clearing

The Development Footprint represents the direct disturbance for the siting of BESS infrastructure, transmission and access to the Project area. The Development Footprint is not within any mapped regulated vegetation in the Queensland Regulated Vegetation mapping nor was there any native vegetation ground-truthed within the Development Footprint. Clearing for the Project have been avoided through:

- selection of compact BESS components to minimise footprint size
- siting of infrastructure to minimise distance for the transmission to the nearby Tully substation
- siting of infrastructure to avoid clearing of mapped regulated vegetation
- siting of infrastructure to avoid clearing vegetation associated with any nearby wetlands or water features
- siting of infrastructure to avoid disruption of connectivity to the adjacent patch of mapped regulated vegetation.

The Development Footprint covers an area of 9 ha, which is almost entirely within Category X cleared pasture. 0.05 ha of the proposed OHTL corridor spans overhead two narrow patches of regrowth vegetation. These overhead crossings of vegetation will not require clearing, however, may require minimal trimming to meet powerline requirements.

The Project will provide a landscape buffer to Sandy Creek Road and to the southern property boundary of Lot 1 on RP852238. This area of added vegetation will equate to approximately 3,400 sqm. The species of vegetation to be planted will be all native and has been derived from Planning Scheme Policy C6.4 Landscaping and the Bushfire Resilient Building Guidance for Queensland Homes (2020). Once established, this new vegetation planting will provide additional areas of tree and shrub habitat for fauna in the Project Area. The added vegetation may also provide some increased protection from existing sources of disturbance to the Project Area caused by traffic on Sandy Creek Road to the West and the sugar cane farm and access track to the south.

5.2 Changes to surface water hydrology and quality

Stormwater runoff and changes to drainage flow paths have the potential to impact on vegetation health and wildlife. Elevation in the Project area ranges from approximately 9 m above mean sea level (AMSL) in the centre of the mapped wetland area at the southeasternmost boundary and in the neighbouring PQ property to approximately 18 m AMSL at the northeastern most boundary of the Project area. The proposed BESS infrastructure is sited in an area mid-elevation, at approximately 12-13 m AMSL and remains approximately 78 m from the mapped wetland areas and approximately 95 m from the single mapped water feature in the Project area. The proposed transmission corridor has also been sited to avoid the mapped water feature and wetland areas.

Civil works will be required to prepare the Development footprint for the constructions of the BESS. If relevant, topsoil will be removed and stockpiled in the Development footprint for use in landscaping and rehabilitation once construction is completed or else disposed of. Where the quality of material is acceptable, excavated material would be used as backfill and compacted during the civil works program.

A Stormwater Management Plan has been prepared for the Project which notes that during the construction phase, the key water quality risks to be managed will be related to erosion and sediment control, as well as the storage and handling of hazardous materials. The Stormwater Management Plan recommends that relevant guidelines and standards be followed to reduce the risk of hazardous materials and site waste contaminating surface water and the broader Project area. Additionally, the final Stormwater Management Plan, the Construction Environmental Management Plan (CEMP) and an Emergency Response Plan will outline measures and controls to minimise potential impacts from chemical spills/leaks and from discharge of treated or untreated wastewater from on-site wastewater treatment facilities.

Gravel sheeting will be applied to internal access tracks, buildings and battery areas. Although there might be a slight increase in impervious areas due to control buildings and batteries, this is estimated to constitute less than 21 percent of the total Project area and approximately 64 percent of the Development footprint.

As detailed in the Stormwater Management Plan, modelling to quantify potential changes to runoff quality from the BESS indicate that proposed stormwater quality measures (in the form of vegetated swales to convey stormwater runoff and end-of-line bioretention basins as well as a vegetated swale to divert clean water runoff along the western Development footprint boundary) will achieve the water quality objectives for all pollutants and provide an overall net improvement of pollutant flow in the Tully Drainage Basin compared to baseline (current, undeveloped) conditions.

Hydraulic flow modelling for the flood assessment also indicated that overland flow flooding does not currently impact the proposed Development Footprint. However, the modelling indicated shallow sheet flow with low velocities and localised ponding near the southern boundary of the Development Footprint. This is expected to be mitigated through construction earthworks and grading, and therefore the Project will not cause any material impacts on flood behaviour in the Project area. The modelling also indicates that the Development footprint is only minimally affected in the 1% Annual Exceedance Probability (AEP) event, with minor flood fringe inundation along the southern boundary.

The results of the Stormwater Management Plan and flood assessment indicate no change of existing conditions with respect to flooding as well as providing improvement in stormwater runoff quality into the Tully Drainage Basin.

5.2.1 Erosion and Sediment Control

The Preliminary Erosion and Sediment Control Plan (P-ESCP) identifies potential threats to the following if the Project were to lead to increased erosion and sediment in the Project area:

- local surface waters and nearby wetlands and watercourses
- the Great Barrier Reef
- surrounding agricultural land-use.

To ensure these threats are avoided the P-ESCP suggests several Erosion, Drainage and Sediment Control Practices be implemented during construction and operation of the Project.

The Erosion Control strategy includes the following measures:

- staging of works to minimise exposed soils, stockpiling, ground disturbance during high rainfall periods
- no-go zones in high-risk areas
- limiting vehicles to formed tracks
- timely remediation of temporary disturbance areas
- use of temporary ground covers
- preparing soils prior to excavation to increase stability
- use of suitable ground cover over site office, parking and laydown areas.

The Drainage control strategy includes the following measures:

- prevent the mixing of clean and dirty water
- divert clean water away from work areas
- divide unstable slopes to control slope length and steepness
- ensure installed drainage features are suitable
- allow water to shed from unsealed access tracks
- use appropriate outlet structure to discharge water from the Project area
- avoid structures that allow water to pond at locations prone to tunnel erosion
- Avoid concentration of flow, favouring sheet flow conditions.

The Sediment Control strategy includes the following measures:

- sediment control devices to be designed and positioned by a qualified person
- sediment control devices will be used for all runoff from construction areas

- sediment trapping should occur as close to its source as practicable
- stabilised exits from the Project area to be established and used to minimise tracking of soils by vehicles
- sediment control measures to be in accordance with IECA 2008
- material removed from sediment traps to be disposed of in a manner that does not cause ongoing erosion or environmental harm.

5.3 Disturbance to wildlife

Activities associated with construction, maintenance, and operation of the Project may impact resident fauna. In general, dust, air, noise, and light pollution are considered to cause disturbance to wildlife.

Increased dust from earthworks and vehicle movements during construction has the potential to temporarily and locally impact flora and fauna values in the vicinity of the Development Footprint. Dust is expected to only be a potential issue during construction and will be mitigated by routine environmental management measures.

Noise may adversely affect fauna by interfering with communication (e.g. territorial bird song), masking the sound of predators and prey, causing avoidance reactions and displacement from habitat. Construction noise will be generated by the Project through the use of machinery, plant and vehicles, and will vary from short intermittent noise from plant and equipment to more persistent noise from generators. Individuals that occur within the Project area may leave the area of impact. Project construction works and therefore potential noise impacts will be temporary.

Vibration from vehicles and equipment may cause temporary disturbance to fauna.

Artificial lighting from infrastructure and machinery may impact fauna within the Project area during construction. Artificial lighting can have a range of impacts which vary between species. Artificial light can disrupt patterns of both nocturnal and diurnal species by eliciting responses. Some species may avoid brightly lit areas, potentially due to the perception of being increased risk of predation. Conversely, some species such as nocturnal reptiles, frogs and bats may congregate at artificial light sources to feed on insects attracted to light. Other potential adverse impacts include disruption of breeding and migratory patterns, disorientation, potential collision with structures and increased access to the Project area for pests and weeds.

The Project's CEMP will consider mitigation and management measures to minimise impacts from dust, air, noise, and light pollution, as well as weed and pest management, and will include monitoring to ensure expected outcomes. It is expected that the conditions of approval will require consideration of these matters.

5.4 Fauna injury and mortality

Fauna is at risk of injury or mortality from construction activities. Vehicle strikes are also a threat to wildlife, both during construction and ongoing operations of the Project, although traffic volumes associated with a BESS project are not likely to be significant and night-time traffic is unlikely. To minimise the potential direct mortality of fauna, a management plan should be developed as a component of the CEMP which will describe practical measures to be implemented prior to and during construction, including:

- Delineation of earthworks boundaries and no-go zones,
- Imposition of vehicular speed limits within work areas, and
- Daily inspection of any open excavations to remove trapped fauna.

The Project's CEMP will include monitoring requirements to ensure expected outcomes.

5.5 Barriers to movement

The introduction of fencing around proposed infrastructure may limit fauna entry into those areas, subject to fence design. To date, most empirical research on wildlife-fence interactions and fence systems has been limited in scope, often focused on single species at local spatial scales. Existing studies have largely addressed fence impacts on ungulates or at-risk species, often motivated by mortalities and barriers to known movements.

Fence impacts on wildlife are usually observed at the individual or local group level, such as individual mortalities or barriers to herd movements. Some of these impacts may be dismissed as inconsequential, especially since rates (i.e., mortality) are usually unknown.

Negative consequences of wildlife-fence interactions can be classified as direct or indirect. Direct effects involve physical contact between the individual and the fence. These include direct mortality, injuries, and hair loss, which can result in reduced individual or population level fitness. The most observable impact is direct mortality, which can happen immediately when an animal collides with fencing or slowly when animals are caught in fences and die from exposure, starvation, or predation. Direct mortality of a wide range of birds and mammals from fence collisions and entanglements has been documented worldwide.

Indirect effects of fences on wildlife manifest themselves as changes in behaviour and biology. These include heightened stress of negotiating fences, separation of young from mothers (Harrington & Conover, 2006), obstructed movements/concentration of species along fence lines (Moseby, McGregor, Hill, & Read, 2019), habitat loss, and fragmentation. Stress occurs when animals are temporarily entangled, search frantically for a place to cross by pacing up and down the fence (Jakes, Jones, Paige, Seidler, & Huijser, 2018), or must negotiate multiple fences in a landscape. These impacts can accumulate over time and contribute to increased energy expenditure, higher mortality rates, and decreased overall fitness of individuals. Young that cannot negotiate a fence and are separated from adults can die of dehydration, exposure, or predation (Harrington & Conover, 2006), and the loss of neonates reduces recruitment and potentially population size.

The relatively small area and extent of fencing as part of the construction and operation of the Project is unlikely to represent significant barriers to movement or impact to fauna species in the area. The total linear fenced extent is expected to be approximately 1,650 m, representing a total north-south barrier expected to be approximately 250 m from the southernmost to the northernmost point of the fenced area. With a permeable corridor of approximately 500 m remaining in the Project area to the north of the Development Footprint. The existing Project area is fully fenced with multistrand barbed wire; this connectivity restriction will remain unchanged.

The Project's CEMP will include monitoring requirements to ensure expected outcomes.

5.6 Impact assessment

5.6.1 MNES values

An assessment of the nine listed MNES values was undertaken in the separate Tully BESS MNES Assessment Report.

A summary of the assessment for each MNES value is included in **Table 5.1**.

Table 5.1: Assessment of MNES Values

MNES Value	Potential Impact
1. World Heritage Properties	The Project area is entirely outside of any World Heritage Properties, and direct and indirect impacts will be restricted to the Project Area. The Wet Tropics World Heritage Area is located approximately 2 km to the north and approximately 5 km to the east. The Great Barrier Reef World Heritage Property is approximately 12.5 km downstream via watercourses from the Project area. A significant impact assessment (SIA) for the GBRWHA has been completed in the MNES Assessment Report for the Project (Attexo, 2025). The assessment determined that a significant impact to World Heritage Properties is **unlikely**.
2. National Heritage Places	The Project area is entirely outside of any National Heritage Places, and direct and indirect impacts will be restricted to the Project area. The Great Barrier Reef National Heritage Place (GBRNHP) covers the same area as the GBRWHA and the Wet Tropics National Heritage Place covers the same area as Wet Tropics World Heritage area. A significant impact assessment (SIA) for the GBRNHP and for the Wet Tropics National Heritage Place has been completed in the MNES Assessment Report for the Project (Attexo, 2025). The assessment determined that a significant impact to National Heritage Places is **unlikely**.
3. Wetlands of International Importance (Ramsar wetlands)	There are no wetlands of international importance within or downstream of the Project area as per the results of the PMR.
4. Listed threatened species and ecological communities	No threatened species have been observed within the Project area. SIAs for the five species considered to have the potential to occur have been provided in the MNES Assessment Report (Attexo, 2025). The assessment determined that significant impact to Southern Cassowary (*Casuarius casuarius* (southern population)), white-throated needletail (*Hirundapus caudacutus*), Spectacled flying-fox (*Pteropus conspicillatus*), ant plant (*Myrmecodia beccarii*) and lesser swamp orchid (*Phaius australis*) is **unlikely**. No threatened ecological communities have been identified or are likely to occur within the Project area.
5. Migratory species	One migratory species is considered as having the potential to occur within the Project area. SIA for the White-throated needletail (*Hirundapus caudacutus*) as a Vulnerable species has been provided in the MNES Assessment Report (Attexo, 2025). The assessment determined that significant impact to White-throated needletail (*Hirundapus caudacutus*)) is **unlikely**.
6. Commonwealth Marine areas	The Project area is not within a Commonwealth Marine Area, the nearest being offshore, approximately 35 km to the east. For this reason, significant impact to Commonwealth Marine areas is **unlikely**.
7. Great Barrier Reef Marine Park	The nearest section of the Great Barrier Reef Marine Park (GBRMP) is approximately 17 km to the east of the Project, at the coastline. For this reason, significant impact to GBRMP is **unlikely**.
8. Nuclear actions (including uranium mining)	The Project does not involve any nuclear actions. This MNES value has not been considered as part of this assessment report.
9. A water resource, in relation to coal seam gas development and large coal mining development.	The Project is not related to coal seam gas development or large coal mining development. This MNES value has not been considered as part of this assessment report.

5.6.2 MSES values

5.6.2.1 Regulated vegetation

a. Clearing of more than 5 ha of endangered or of concern RE vegetation

   – No RE vegetation will be cleared as part of the Project.

f. Clearing that results in an overall area (not confined to property boundaries) of endangered or of concern RE vegetation of less than 5 ha

   – No RE vegetation will be cleared as part of the Project.

g. Clearing that results in the physical separation of endangered and of concern RE communities within and on adjoining sites.

   – No RE vegetation will be cleared as part of the Project.

The Project is **unlikely** to have a significant residual impact on Regulated Vegetation.

Essential habitat

No essential habitat is mapped within the Development Footprint nor the wider Project area.

On this basis, and considering the Development footprint is outside of regrowth and remnant RE, the Project is unlikely to have a significant residual impact on Essential Habitat.

5.6.2.2 Connectivity

As per the Significant Residual Impact Guidelines criteria for Connectivity values, a development impact on connectivity areas is determined to be significant if either of the following tests are true:

- The change in the core RE extent at the local scale (post impact) is greater than a threshold determined by the level of fragmentation at the regional scale (see table below); or
- Any core area that is greater than or equal to 1 ha is lost or reduced to patch fragments (core to non-core).

The Project does not include any clearing of remnant or regrowth RE and is therefore **unlikely** to result in a significant residual impact on connectivity.

5.6.2.3 Wetlands and watercourses

There is a single watercourse mapped as "MSES regulated (defined watercourse)" in the Project area (see VM watercourse depicted in **Figure 4.2**).

There is an area of MSES high ecological significance wetland and High Ecological Significance Wetland (under the CCRC Planning Scheme) in along the northeast and southeast boundaries of the Project area that continues into the neighbouring PQ lot 5 on SP140625. The Disturbance Footprint avoids the wetland and watercourse areas. Although the transmission line will cross the watercourse on lot 1 on RP735276 and a narrow section of the wetland area at the northernmost extent, these crossings will be via a full span overhead line and will require no ground disturbance or vegetation clearing, however, may require minimal vegetation trimming to meet powerline requirements.

Assessment of development in the wetland area includes development within a 200 m prescribed buffer area. The majority of this buffer area within the Project area is represented by fully cleared pasture and includes both of the houses and associated buildings in the Project area. Part of the Development Footprint falls within the 200 m buffer area (see **Figure 4.2**). However, as detailed in **Section 5.1** and **Section 5.2** the project is not expected result in any vegetation clearing in the buffer area, nor to increase erosion or sedimentation or to result in any reduction to stormwater quality from the Project area.

No disturbance to wetlands or watercourses is expected as part of the Project, thus significant residual impact to these values is **unlikely**.

Great Barrier Reef wetland protection areas

The Project area contains a Great Barrier Reef wetland protection area. This requires an assessment against State code 9.

State code 9 includes a number of Performance Outcomes (PO) to ensure compliance with the code. Where a project has an acceptable outcome (AO) to PO1 under AO1.1 (appropriate buffer maintained from a wetland) the project complies with the code. Where a project has no acceptable outcome under AO1.1, PO2-PO10 must be met in for the project to comply with the code.

While the Project avoids direct disturbance in the mapped wetland areas, the development footprint occurs partially within the 200 m buffer surrounding a wetland and the transmission corridor crosses a narrow section of the mapped wetland area via full span overhead line.

As detailed in **Section 5.2**, the Project is likely to improve or maintain the surface water and groundwater hydrology and improve the water quality across the Project area including the mapped wetland areas.

Section 5.2.1 and the PESCP describe how the Project will implement strategies and controls to manage and maintain erosion, drainage and sediment throughout construction and operation of the Project. **Section 5.2** and the SMP include the results of modelling to demonstrate that the Project will manage overland flow through the use of bioswales and bio retention basins and has been positioned and designed to avoid flood risk during a 1% AEP event. Management of these methods will allow the Project to avoid land degradation in the wetland areas.

Sections 5.3, **5.4** and **5.5** describe potential Project impacts to fauna including light, noise, dust and vibration, fauna injury and mortality, proliferation of weeds and pests and the introduction of barriers to movement. The CEMP will provide management measures to mitigate these impacts.

Section 5.6.2 details how impacts to MSES are avoided by the Project.

The performance outcomes and the project's response to each are detailed in the Project's Planning Report.

5.6.2.4 Protected wildlife habitat

No protected wildlife habitat is mapped within the Project area; therefore, the Project is **unlikely to result in a significant residual impact** to protected wildlife habitat.

5.6.2.5 Protected areas

No protected areas are present in the Development Footprint or are expected to be disturbed by the Project; therefore, the project is **unlikely to result in a significant residual impact** to protected areas.

5.6.2.6 Fish habitat areas and highly protected zones of state marine parks

No fish habitat areas or highly protected zones of state marine parks are present in the Development Footprint; therefore, the project is **unlikely to result in a significant residual impact** to Fish habitat or highly protected zones of state marine park.

5.6.2.7 Waterway providing for fish passage

While a single water way (fish passage attribute 1) occurs within the Project area, this waterway is not expected to be disturbed by the Project. Therefore, the Project is **unlikely to result in a significant residual impact** to waterways providing for fish passage.

5.6.2.8 Marine plants

No marine plants are present in the Development Footprint or are expected to be disturbed by the Project. Therefore, the Project is **unlikely to result in a significant residual impact** to Marine plants.

5.6.2.9 Legally secured offset areas

No legally secured offset areas are present in the Development Footprint or are expected to be disturbed by the Project. Therefore, the Project is **unlikely to result in a significant residual impact** to Legally secured offset areas.

5.6.3 MLES values

5.6.3.1 Mahogany Glider Corridor

Direct impacts to the mapped Mahogany glider corridor are anticipated to be avoided by design and positioning of the Project outside of those areas. The transmission line design includes a crossing of a narrow section of the corridor at the very north of the Project area, however, this will be via a full span overhead line and will require no ground disturbance or vegetation clearing, however, may require minimal vegetation trimming to meet powerline requirements. See assessment against the CCRC Environmental significance code in the Project's Planning report.

Additionally, surveys within the mapped Mahogany Glider Corridor indicated that the vegetation is unlikely to be suitable as preferred habitat. The vegetation throughout the mapped corridor represents closed regrowth vegetation consisting of dense young tree canopy with a dense small tree and shrub layer, indicating it may not be ideal for Mahogany glider movement i.e. gliding and not match the Mahogany gliders preference for open forests with minimal understory (DAWE, 2021). Additionally, *Corymbia intermedia* and *Acacia mangium* is often a contra-indicator for Mahogany glider (DAWE, 2021), and these two tree species are abundant throughout the area.

There were very few large trees of a suitable size to support den hollows. However, there are some suitable feed trees (DAWE, 2021) present including *Melaleuca* species throughout (though not the preferred *M. dealbata*), some *Lophostemon suaveolens* and a *Melicope* sp. was also recorded in the Survey area.

5.6.3.2 Wetlands of High Environmental Significance

Direct impacts to the mapped wetlands of high environmental significance are anticipated to be avoided by design and positioning of the Project outside of those areas. The transmission line design includes a crossing of a narrow section of the corridor at the very north of the Project area, however, this will be via a full span overhead line and will require no ground disturbance or vegetation clearing, however, may require minimal vegetation trimming to meet powerline requirements. See assessment against the CCRC Environmental significance code and the CCRC Waterway corridors and wetlands code in the Project's Planning report.

6. Summary and Conclusion

This Ecological Assessment Report has been prepared to accompany a development application for the proposed Tully Battery Energy Storage System project. The report documents the extent and nature of ecological values within the Project area and demonstrates how these values have been avoided by the proposed development.

This Ecological Assessment Report identifies the relevant State and local environmental values and provides an assessment of impact on these values as a result of the Project under the *Planning Act 2016* (Planning Act) and CCRC Planning Scheme but also includes Matters of National Environmental Significance (MNES).

A comprehensive desktop review was completed prior to conducting field surveys in the Survey area. Field surveys were completed in November 2024 to confirm the findings of the desktop review. Key findings of the desktop and field surveys are:

- There are no TECs listed under the EPBC Act within the Development Footprint;
- Two Regional Ecosystems were recorded in the Project area, all of which have been avoided by the Disturbance Footprint;
- No threatened flora species were recorded within the Project area;
- No threatened fauna species were recorded within the Project area;
- Two threated flora and two threatened fauna species are considered potential occurrences, although impacts on habitats have been minimised by avoiding remnant and high value regrowth vegetation;
- The Project area does not support an important population of any migratory fauna species.

The Project has adopted GTRE data to inform project design, rather than relying on the State's regulated vegetation management map. The Project and subsequent disturbance footprint have been designed to ensure that impacts to environmental values are avoided, and connectivity has been maintained.

An MNES Assessment Report has been prepared to assess potential impacts of the Project on MNES. The report was prepared having regard to referral guidelines for specific species where available including guidelines for the endangered Koala and the guidelines for 14 birds listed as migratory under the EPBC Act (DoE 2015a).

Significant impact assessments were undertaken in accordance with the *Significant Impact Guidelines 1.1: Matters of National Environmental Significance* (DoE 2013) to determine whether significant residual impacts on MNES are likely as a result of the action.

MSES values have been assessed as follows:

- Significant Impacts to Regulated Vegetation, Essential Habitat and connectivity are considered unlikely as vegetation clearing has been avoided and indirect impacts will be mitigated during construction and operation.
- Significant Impacts to Wetlands and watercourses (including the GBR wetland protection areas)) are considered unlikely due to no direct impacts to these areas and an anticipated improvement to stormwater runoff water quality.

MLES values have been assessed as follows:

- The CCRC Mahogany Glider Corridor: disturbance to this corridor has been avoided by design, with the transmission line running overhead and spanning the narrow section of Mahogany Glider Corridor that is required to be crossed.

The proposed Project meets the purpose of the *Planning Act 2016* (Planning Act) and CCRC Planning Scheme by protecting MSES and MLES, maintaining or enhancing ecological connectivity, and protecting waterways and riparian areas.

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Attexo

Appendix A

Desktop searches

resources.QLD.GOV.AU

Vegetation management report

For Lot: 1 Plan: RP735276
9/5/2024

Queensland Government

This publication has been compiled by Operations Support, Department of Resources.

Recent changes

Updated mapping

Updated vegetation mapping was released on 22 November 2023 and includes the most recent Queensland Herbarium scientific updates to the Regulated Vegetation Management Map, regional ecosystems, essential habitat, wetland and high-value regrowth mapping.

The Department of Environment, Science and Innovation have also updated their koala protection mapping to align with the Queensland Herbarium scientific updates.

The latest version (v10) of the Protected Plants Flora Survey Trigger Map (trigger map) was released on 6 September 2023.

Overview

Based on the lot on plan details you have supplied, this report provides the following detailed information:
Property details - information about the specified Lot on Plan, lot size, local government area, bioregion(s), subregion(s) and catchment(s);

Vegetation management framework - an explanation of the application of the framework and contact details for the Department of Resources who administer the framework;

Vegetation management framework details for the specified Lot on Plan including:

- the vegetation management categories on the property;
- the vegetation management regional ecosystems on the property;
- vegetation management watercourses or drainage features on the property;
- vegetation management wetlands on the property;
- vegetation management essential habitat on the property;
- whether any area management plans are associated with the property;
- whether the property is coastal or non-coastal; and
- whether the property is mapped as Agricultural Land Class A or B;

Protected plant framework - an explanation of the application of the framework and contact details for the Department of Environment, Science and Innovation who administer the framework, including:

- high risk areas on the protected plant flora survey trigger map for the property;

Koala protection framework - an explanation of the application of the framework and contact details for the Department of Environment, Science and Innovation who administer the framework; and

Koala protection framework details for the specified Lot on Plan including:

- the koala district the property is located in;
- koala priority areas on the property;
- core and locally refined koala habitat areas on the property;
- whether the lot is located in an identified koala broad-hectare area; and
- koala habitat regional ecosystems on the property for core koala habitat areas.

This information will assist you to determine your options for managing vegetation under:
- the vegetation management framework, which may include:

- exempt clearing work;
- accepted development vegetation clearing code;
- an area management plan;
- a development approval;

- the protected plant framework, which may include:

- the need to undertake a flora survey;
- exempt clearing;
- a protected plant clearing permit;

- the koala protection framework, which may include:

- exempted development;
- a development approval;
- the need to undertake clearing sequentially and in the presence of a koala spotter.

Other laws

The clearing of native vegetation is regulated by both Queensland and Australian legislation, and some local governments also regulate native vegetation clearing. You may need to obtain an approval or permit under another Act, such as the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Section 8 of this guide provides contact details of other agencies you should confirm requirements with, before commencing vegetation clearing.

Table of Contents

1. Property details

1.1 Tenure and title area

All of the lot, plan, tenure and title area information associated with property Lot: 1 Plan: RP735276 are listed in Table 1.

Table 1: Lot, plan, tenure and title area information for the property

Lot	Plan	Tenure	Property title area (sq metres)
1	RP735276	Freehold	80,940

The tenure of the land may affect whether clearing is considered exempt clearing work or may be carried out under an accepted development vegetation clearing code.

Does the property Lot: 1 Plan: RP735276 have a freehold tenure and is in the Wet Tropics of Queensland World Heritage Area?

No, this property is not located in the Wet Tropics of Queensland World Heritage Area.

1.2 Property location

Table 2 provides a summary of the locations for property Lot: 1 Plan: RP735276, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)	Catchment(s)	Bioregion(s)	Subregion(s)
Cassowary Coast Regional	Tully	Wet Tropics	Tully

2. Vegetation management framework (administered by the Department of Resources)

The *Vegetation Management Act 1999* (VMA), the Vegetation Management Regulation 2012, the *Planning Act 2016* and the Planning Regulation 2017, in conjunction with associated policies and codes, form the Vegetation Management Framework.

The VMA does not apply to all land tenures or vegetation types. State forests, national parks, forest reserves and some tenures under the *Forestry Act 1959* and *Nature Conservation Act 1992* are not regulated by the VMA. Managing or clearing vegetation on these tenures may require approvals under these laws.

The following native vegetation is not regulated under the VMA but may require permit(s) under other laws:

- grass or non-woody herbage;
- a plant within a grassland regional ecosystem identified in the Vegetation Management Regional Ecosystem Description Database (VM REDD) as having a grassland structure; and
- a mangrove.

2.1 Exempt clearing work

Exempt clearing work is an activity for which you do not need to notify the Department of Resources or obtain an approval under the vegetation management framework. Exempt clearing work was previously known as exemptions.

In areas that are mapped as Category X (white in colour) on the regulated vegetation management map (see section 4.1), and where the land tenure is freehold, indigenous land and leasehold land for agriculture and grazing purposes, the clearing of vegetation is considered exempt clearing work and does not require notification or development approval under the vegetation management framework. For all other land tenures, contact the Department of Resources before commencing clearing to ensure that the proposed activity is exempt clearing work.

A range of routine property management activities are considered exempt clearing work. A list of exempt clearing work is available at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/exemptions/.

Exempt clearing work may be affected if the proposed clearing area is subject to development approval conditions, a covenant, an environmental offset, an exchange area, a restoration notice, or an area mapped as Category A. Exempt clearing work may require approval under other Commonwealth, State or Local Government laws, or local government planning schemes. Contact the Department of Resources prior to clearing in any of these areas.

2.2 Accepted development vegetation clearing codes

Some clearing activities can be undertaken under an accepted development vegetation clearing code. The codes can be downloaded at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/codes/

If you intend to clear vegetation under an accepted development vegetation clearing code, you must notify the Department of Resources before commencing. The information in this report will assist you to complete the online notification form.

You can complete the online form at
https://vegetation-apps.dnrm.qld.gov.au

2.3 Area management plans

Area Management Plans (AMP) provide an alternative approval system for vegetation clearing under the vegetation management framework. They list the purposes and clearing conditions that have been approved for the areas covered by the plan. It is not necessary to use an AMP, even when an AMP applies to your property.

On 8 March 2020, AMPs ended for fodder harvesting, managing thickened vegetation and managing encroachment. New notifications cannot be made for these AMPs. You will need to consider options for fodder harvesting, managing thickened vegetation or encroachment under a relevant accepted development vegetation clearing code or apply for a development approval.

New notifications can be made for all other AMPs. These will continue to apply until their nominated end date.

If an Area Management Plan applies to your property for which you can make a new notification, it will be listed in Section 3.6 of this report. Before clearing under one of these AMPs, you must first notify the Department of Resources and then follow the conditions and requirements listed in the AMP.

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/area-management-plans

2.4 Development approvals

If under the vegetation management framework your proposed clearing is not exempt clearing work, or is not permitted under an accepted development vegetation clearing code, or an AMP, you may be able to apply for a development approval. Information on how to apply for a development approval is available at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/development

2.5. Contact information for the Department of Resources

For further information on the vegetation management framework:

Phone 135VEG (135 834)

Email vegetation@resources.qld.gov.au

Visit https://www.resources.qld.gov.au/?contact=vegetation to submit an online enquiry.

3. Vegetation management framework for Lot: 1 Plan: RP735276

3.1 Vegetation categories

The vegetation categories on your property are shown on the regulated vegetation management map in section 4.1 of this report. A summary of vegetation categories on the subject lot are listed in Table 3. Descriptions for these categories are shown in Table 4.

Table 3: Vegetation categories for subject property

Vegetation category	Area (ha)
Category C	0.47
Category R	2.47
Category X	6.02

Table 4: Description of vegetation categories

Category	Colour on Map	Description	Requirements / options under the vegetation management framework
A	red	Compliance areas, environmental offset areas and voluntary declaration areas	Special conditions apply to Category A areas. Before clearing, contact the Department of Resources to confirm any requirements in a Category A area.
B	dark blue	Remnant vegetation areas	Exempt clearing work, or notification and compliance with accepted development vegetation clearing codes, area management plans or development approval.
C	light blue	High-value regrowth areas	Exempt clearing work, or notification and compliance with managing Category C regrowth vegetation accepted development vegetation clearing code.
R	yellow	Regrowth within 50m of a watercourse or drainage feature in the Great Barrier Reef catchment areas	Exempt clearing work, or notification and compliance with managing Category R regrowth accepted development vegetation clearing code or area management plans.
X	white	Clearing on freehold land, indigenous land and leasehold land for agriculture and grazing purposes is considered exempt clearing work under the vegetation management framework. Contact the Department of Resources to clarify whether a development approval is required for other State land tenures.	No permit or notification required on freehold land, indigenous land and leasehold land for agriculture and grazing. A development approval may be required for some State land tenures.

Property Map of Assessable Vegetation (PMAV)

There is no Property Map of Assessable Vegetation (PMAV) present on this property.

3.2 Regional ecosystems

The endangered, of concern and least concern regional ecosystems on your property are shown on the vegetation management supporting map in section 4.2 and are listed in Table 5.

A description of regional ecosystems can be accessed online at
https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/descriptions/

Table 5: Regional ecosystems present on subject property

Regional Ecosystem	VMA Status	Category	Area (Ha)	Short Description	Structure Category
7.3.5	Least concern	C	0.14	Melaleuca quinquenervia and/or Melaleuca cajuputi subsp. platyphylla closed forest to shrubland on poorly drained alluvial plains	Dense
7.3.5	Least concern	R	0.07	Melaleuca quinquenervia and/or Melaleuca cajuputi subsp. platyphylla closed forest to shrubland on poorly drained alluvial plains	Dense
7.3.7	Endangered	R	0.27	Eucalyptus pellita and Corymbia intermedia open forest to woodland (or vine forest with emergent E. pellita and C. intermedia) on poorly drained alluvial plains	Mid-dense
7.3.8	Least concern	C	0.33	Melaleuca viridiflora +/- Eucalyptus spp. +/- Lophostemon suaveolens open forest to open woodland on poorly drained alluvial plains	Mid-dense
7.3.8	Least concern	R	2.13	Melaleuca viridiflora +/- Eucalyptus spp. +/- Lophostemon suaveolens open forest to open woodland on poorly drained alluvial plains	Mid-dense
non-rem	None	X	6.02	None	None

Please note:
1. All area and area derived figures included in this table have been calculated via reprojecting relevant spatial features to Albers equal-area conic projection (central meridian = 146, datum Geocentric Datum of Australia 1994). As a result, area figures may differ slightly if calculated for the same features using a different co-ordinate system.
2. If Table 5 contains a Category 'plant', please be aware that this refers to 'plantations' such as forestry, and these areas are considered non-remnant under the VMA.

The VMA status of the regional ecosystem (whether it is endangered, of concern or least concern) also determines if any of the following are applicable:

- exempt clearing work;
- accepted development vegetation clearing codes;
- performance outcomes in State Code 16 of the State Development Assessment Provisions (SDAP).

3.3 Watercourses

Vegetation management watercourses and drainage features for this property are shown on the vegetation management supporting map in section 4.2.

3.4 Wetlands

Vegetation management wetlands are present on this property and are shown on the vegetation management supporting map in section 4.2 of this report.

3.5 Essential habitat

Under the VMA, essential habitat for protected wildlife is native wildlife prescribed under the *Nature Conservation Act 1992* (NCA) as critically endangered, endangered, vulnerable or near-threatened wildlife.

Essential habitat for protected wildlife includes suitable habitat on the lot, or where a species has been known to occur up to 1.1 kilometres from a lot on which there is assessable vegetation. These important habitat areas are protected under the VMA.

Any essential habitat on this property will be shown as blue hatching on the vegetation supporting map in section 4.2.

If essential habitat is identified on the lot, information about the protected wildlife species is provided in Table 6 below. The numeric labels on the vegetation management supporting map can be cross referenced with Table 6 to outline the essential habitat factors for that particular species. There may be essential habitat for more than one species on each lot, and areas of Category A, Category B and Category C can be mapped as Essential Habitat.

Essential habitat is compiled from a combination of species habitat models and buffered species records. Regional ecosystem is a mandatory essential habitat factor, unless otherwise stated. Essential habitat, for protected wildlife, means an area of vegetation shown on the Regulated Vegetation Management Map -

1) that has at least 3 essential habitat factors for the protected wildlife that must include any essential habitat factors that are stated as mandatory for the protected wildlife in the essential habitat database. Essential habitat factors are comprised of - regional ecosystem (mandatory for most species), vegetation community, altitude, soils, position in landscape; or
2) in which the protected wildlife, at any stage of its life cycle, is located.

If there is no essential habitat mapping shown on the vegetation management supporting map for this lot, and there is no table in the sections below, it confirms that there is no essential habitat on the lot.

Category A and/or Category B and/or Category C

Table 6: Essential habitat in Category A and/or Category B and/or Category C

No records

3.6 Area Management Plan(s)

Nil

3.7 Coastal or non-coastal

For the purposes of the accepted development vegetation clearing codes and State Code 16 of the State Development Assessment Provisions (SDAP), this property is regarded as*

Coastal

*See also Map 4.3

3.8 Agricultural Land Class A or B

The following can be used to identify Agricultural Land Class A or B areas under the "Managing regulated regrowth vegetation" accepted development vegetation clearing code:

Does this lot contain land that is mapped as Agricultural Land Class A or B in the State Planning Interactive Mapping System?

Class A (with urban areas masked as per SPP): 8.96 ha

No Class B

Note - This confirms Agricultural Land Classes as per the State Planning Interactive Mapping System only. This response does not include Agricultural Land Classes identified under local government planning schemes. For further information, check the Planning Scheme for your local government area.

See Map 4.4 to identify the location and extent of Class A and/or Class B Agricultural land on Lot: 1 Plan: RP735276.

4. Vegetation management framework maps

Vegetation management maps included in this report may also be requested individually at:
https://www.resources.qld.gov.au/qld/environment/land/vegetation/vegetation-map-request-form

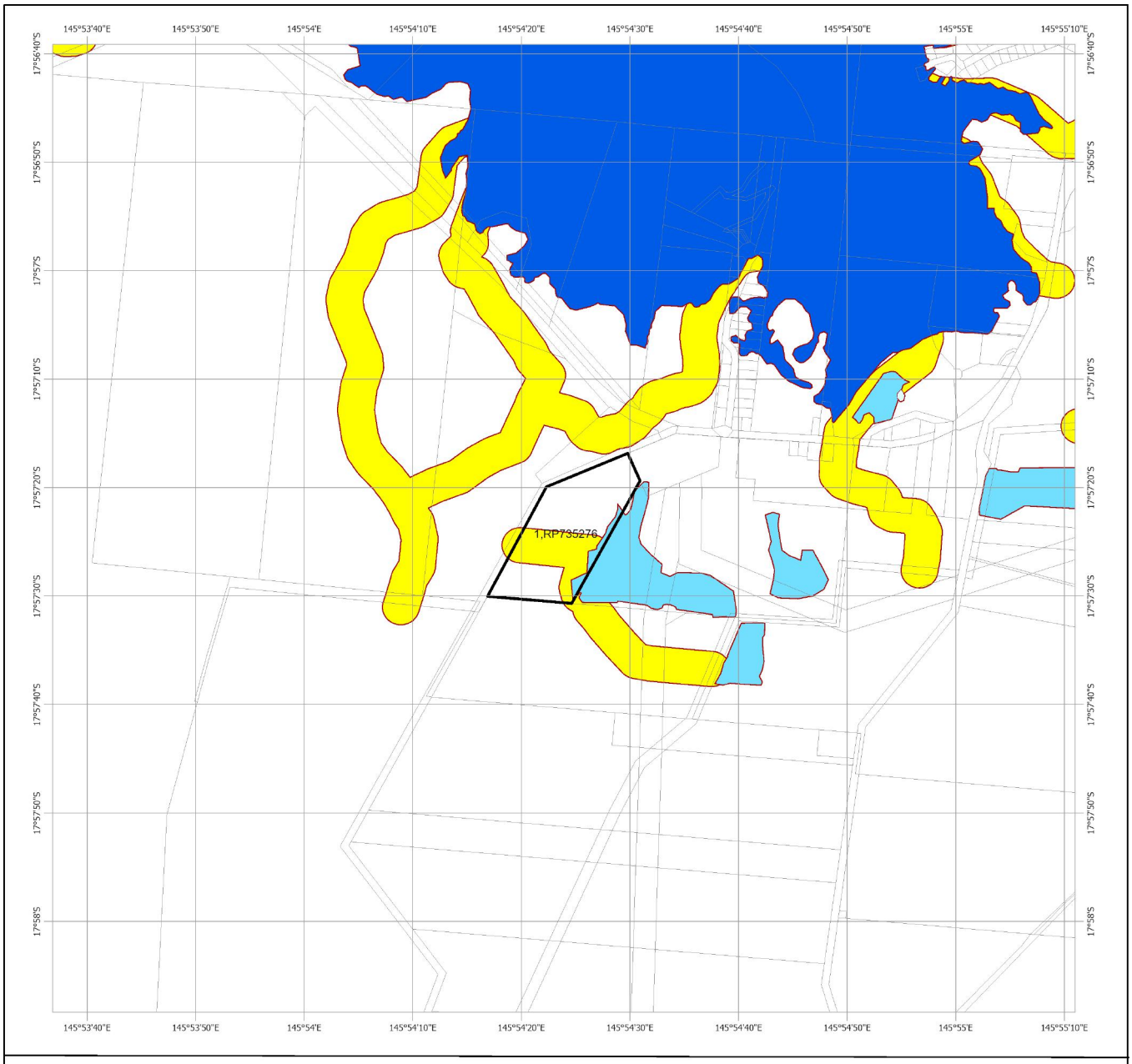
Regulated vegetation management map
The regulated vegetation management map shows vegetation categories needed to determine clearing requirements. These maps are updated monthly to show new property maps of assessable vegetation (PMAV).

Vegetation management supporting map
The vegetation management supporting map provides information on regional ecosystems, wetlands, watercourses and essential habitat.

Coastal/non-coastal map
The coastal/non-coastal map confirms whether the lot, or which parts of the lot, are considered coastal or non-coastal for the purposes of the accepted development vegetation clearing codes and State Code 16 of the State Development Assessment Provisions (SDAP).

Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture
The Agricultural Land Class map confirms the location and extent of land mapped as Agricultural Land Classes A or B as identified on the State Planning Interactive Mapping System. Please note that this map does not include areas identified as Agricultural Land Class A or B in local government planning schemes. This map can be used to identify Agricultural Land Class A or B areas under the "Managing regulated regrowth vegetation" accepted development vegetation clearing code.

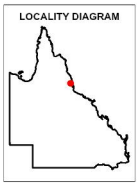
4.1 Regulated vegetation management map



Regulated Vegetation Management Map

- Category A area (Vegetation offsets/compliance notices/VDecs)
- Category B area (Remnant vegetation)
- Category C area (High-value regrowth vegetation)
- Category R area (Reef regrowth watercourse vegetation)
- Category X area (Exempt clearing work on Freehold, Indigenous and Leasehold land)
- Water
- Other land parcel boundaries
- Selected Lot and Plan

LOCALITY DIAGRAM



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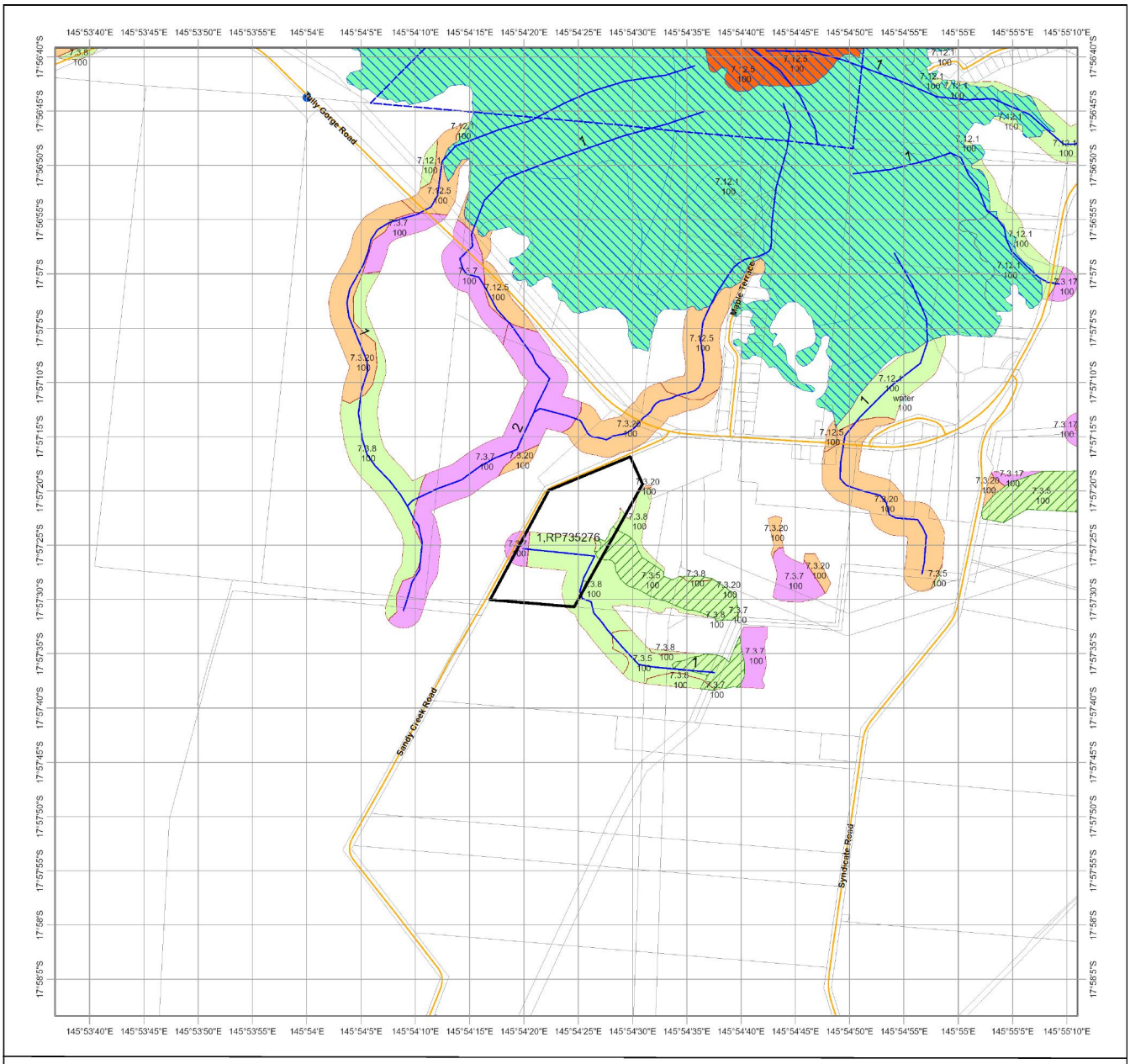
Additional information required for the assessment of vegetation values is provided in the accompanying "Vegetation Management Supporting map". For further information go to the web site: www.resources.qld.gov.au or contact the Department of Resources.

Digital data for the regulated vegetation management map is available from the Queensland Spatial Portal at http://www.information.qld.gov.au/

Land parcel boundaries are provided as locational aid only.

This map is updated on a monthly basis to ensure new PMAVs are included as they are approved.

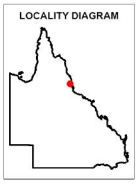
4.2 Vegetation management supporting map



Vegetation Management Supporting Map

- Category A or B area containing endangered regional ecosystems
- Category A or B area containing of concern regional ecosystems
- Category A or B area that is a least concern regional ecosystem
- Category C or R area containing endangered regional ecosystems
- Category C or R area containing of concern regional ecosystems
- Category C or R area that is a least concern regional ecosystem
- Category X area
- Water
- Wetland on the vegetation management wetlands map
- Essential habitat on the essential habitat map
- Essential habitat species record
- Watercourses and drainage features on the vegetation management watercourse and drainage features map (Stream order shown as black number against stream where available)
- Highway
- Connector
- Street/Local Road
- National Parks, State Forest and other reserves
- Other land parcel boundaries
- Selected Lot and Plan

LOCALITY DIAGRAM



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Labels for Essential Habitat are centred on the area of enquiry.

Regional ecosystem linework has been compiled at a scale of 1:100 000, except in designated areas where a compilation scale of 1:50 000 is available. Linework should be used as a guide only. The positional accuracy of RE data mapped at a scale of 1:100 000 is +/- 100 metres.

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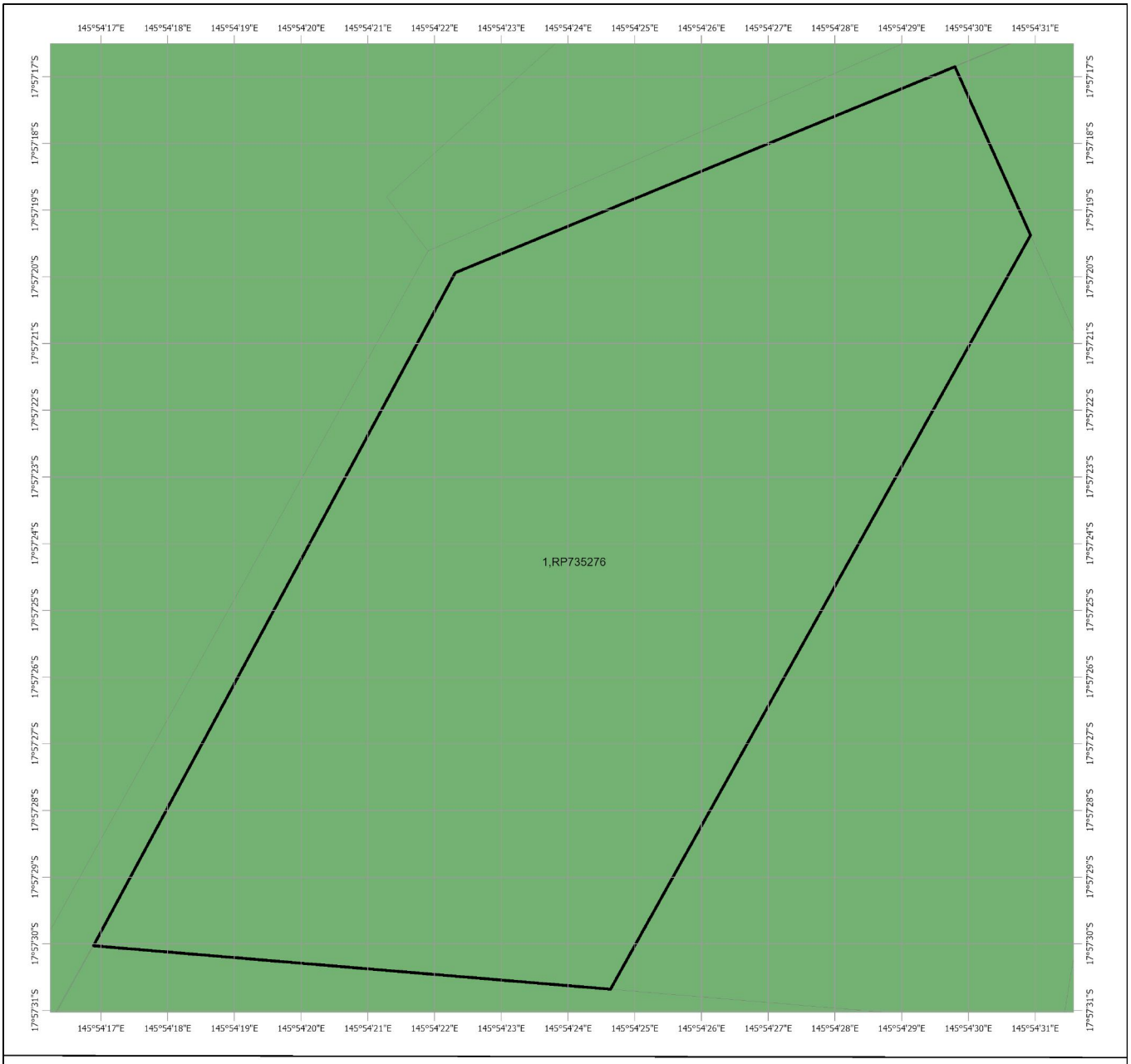
Additional information may be required for the purposes of land clearing or assessment of a regional ecosystem map or PMAV applications. For further information go to the web site: www.resources.qld.gov.au or contact the Department of Resources.

Digital data for the vegetation management watercourse and drainage feature map, vegetation management wetlands map, essential habitat map and the vegetation management remnant and regional ecosystem map are available from the Queensland Spatial Portal at http://www.information.qld.gov.au/

Land parcel boundaries are provided as locational aid only.

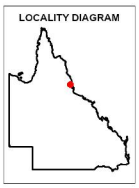
4.3 Coastal/non-coastal map



Coastal/Non Coastal Map

Coastal
Non Coastal
Other land parcel boundaries
Selected Lot and Plan

LOCALITY DIAGRAM



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Land parcel boundaries shown are provided as a locational aid only.

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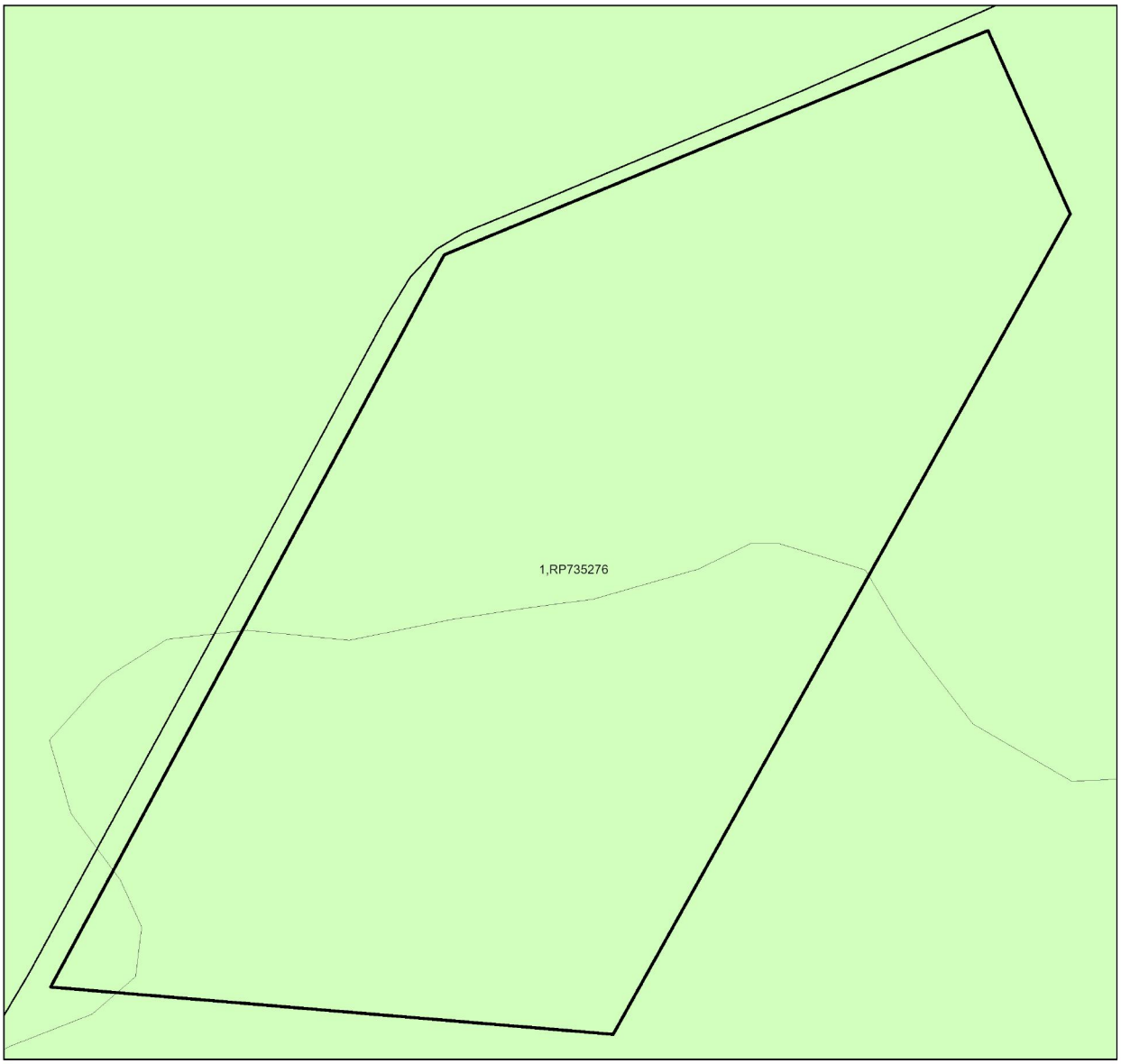
4.4 Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture



Agricultural Land Class A or B
as per State Planning Policy: State Interest for Agriculture

- Towns
- Rivers and creeks
- Freeways / motorways; Highways
- Secondary roads; Streets

Agricultural land class A or B

- A
- B
- Not class A or B
- Selected Lot and Plan

LOCALITY DIAGRAM

N

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5. Protected plants framework (administered by the Department of Environment, Science and Innovation (DESI))

In Queensland, all plants that are native to Australia are protected plants under the *Nature Conservation Act 1992* (NCA). The NCA regulates the clearing of protected plants 'in the wild' (see Operational policy: When a protected plant in Queensland is considered to be 'in the wild') that are listed as critically endangered, endangered, vulnerable or near threatened under the Act.

Please note that the protected plant clearing framework applies irrespective of the classification of the vegetation under the *Vegetation Management Act 1999* and any approval or exemptions given under another Act, for example, the *Vegetation Management Act 1999* or *Planning Regulation 2017*.

5.1 Clearing in high risk areas on the flora survey trigger map

The flora survey trigger map identifies high-risk areas for threatened and near threatened plants. These are areas where threatened or near threatened plants are known to exist or are likely to exist based on the habitat present. The flora survey trigger map for this property is provided in section 5.5.

If you are proposing to clear an area shown as high risk on the flora survey trigger map, a flora survey of the clearing impact area must be undertaken by a suitably qualified person in accordance with the Flora survey guidelines. The main objective of a flora survey is to locate any threatened or near threatened plants that may be present in the clearing impact area.

If the flora survey identifies that threatened or near threatened plants are not present within the clearing impact area or clearing within 100m of EVNT plants can be avoided, the clearing activity is exempt from a permit. An exempt clearing notification form must be submitted to the Department of Environment, Science and Innovation, with a copy of the flora survey report, at least one week prior to clearing.

If the flora survey identifies that threatened or near threatened plants are present in, or within 100m of, the area to be cleared, a clearing permit is required before any clearing is undertaken. The flora survey report, as well as an impact management report, must be submitted with the clearing permit application form.

5.2 Clearing outside high risk areas on the flora survey trigger map

In an area other than a high risk area, a clearing permit is only required where a person is, or becomes aware that threatened or near threatened plantsare present in, or within 100m of, the area to be cleared. You must keep a copy of the flora survey trigger map for the area subject to clearing for five years from the day the clearing starts. If you do not clear within the 12 month period that the flora survey trigger map was printed, you need to print and check a new flora survey trigger map.

5.3 Exemptions

Many activities are 'exempt' under the protected plant clearing framework, which means that clearing of native plants that are in the wild can be undertaken for these activities with no need for a flora survey or a protected plant clearing permit. The Information sheet - General exemptions for the take of protected plants provides some of these exemptions.

Some exemptions under the NCA are the same as exempt clearing work (formerly known as exemptions) under the *Vegetation Management Act 1999* (i.e. listed in Schedule 21 of the Planning Regulations 2017) while some are different.

5.4 Contact information for DESI

For further information on the protected plants framework:
Phone 1300 130 372 (and select option four)
Email palm@des.qld.gov.au
Visit https://www.qld.gov.au/environment/plants-animals/plants/protected-plants

5.5 Protected plants flora survey trigger map

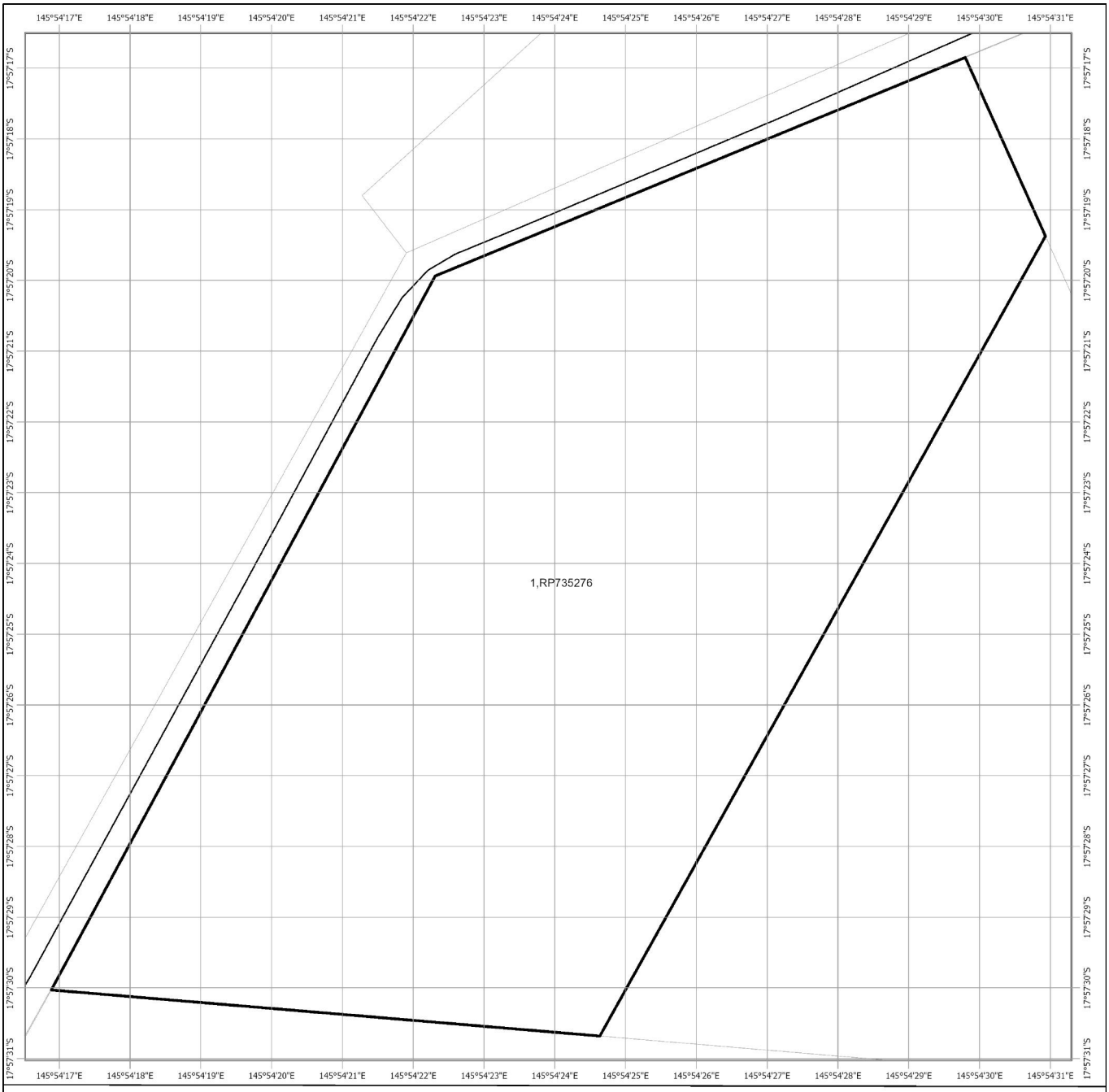
This map included may also be requested individually at: https://apps.des.qld.gov.au/map-request/flora-survey-trigger/.

Updates to the data informing the flora survey trigger map

The flora survey trigger map will be reviewed, and updated if necessary, at least every 12 months to ensure the map reflects the most up-to-date and accurate data available.

Species information

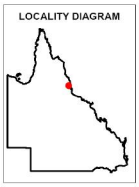
Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the Queensland Spatial Catalogue, the Department of Environment, Science and Innovation does not provide species information on request. Regardless of whether species information is available for a particular high risk area, clearing plants in a high risk area may require a flora survey and/or clearing permit. Please see the Department of Environment, Science and Innovation webpage on the clearing of protected plants for more information.



Protected Plants Flora Survey Trigger Map

High risk area
Other land parcel boundaries
Freeways / motorways / highways
Secondary roads / streets
Selected Lot and Plan

LOCALITY DIAGRAM



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This product is displayed in:
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This map shows areas where particular provisions of the Nature Conservation Act 1992 apply to the clearing of protected plants.

Land parcel boundaries are provided as locational aid only.

This map is produced at a scale relevant to the size of the area selected and should be printed as A4 size in portrait orientation.

For further information or assistance with interpretation of this product, please contact the Department of Environment, Science and Innovation at palm@des.qld.gov.au

Disclaimer: While every care is taken to ensure the accuracy of the data used to generate this product, the Queensland Government makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaim all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damages) and costs which might be incurred as a consequence of reliance on the data, or as a result of the data being inaccurate or incomplete in any way and for any reason.

6. Koala protection framework (administered by the Department of Environment, Science and Innovation (DESI))

The koala (*Phascolarctos cinereus*) is listed in Queensland as endangered by the Queensland Government under *Nature Conservation Act 1992* and by the Australian Government under the *Environment Protection and Biodiversity Conservation Act 1999*.

The Queensland Government's koala protection framework is comprised of the *Nature Conservation Act 1992*, the Nature Conservation (Animals) Regulation 2020, the Nature Conservation (Koala) Conservation Plan 2017, the *Planning Act 2016* and the Planning Regulation 2017.

6.1 Koala mapping

6.1.1 Koala districts

The parts of Queensland where koalas are known to occur has been divided into three koala districts - koala district A, koala district B and koala district C. Each koala district is made up of areas with comparable koala populations (e.g. density, extent and significance of threatening processes affecting the population) which require similar management regimes.

Section 7.1 identifies which koala district your property is located in.

6.1.2 Koala habitat areas

Koala habitat areas are areas of vegetation that have been determined to contain koala habitat that is essential for the conservation of a viable koala population in the wild based on the combination of habitat suitability and biophysical variables with known relationships to koala habitat (e.g. landcover, soil, terrain, climate and ground water). In order to protect this important koala habitat, clearing controls have been introduced into the Planning Regulation 2017 for development in koala habitat areas.

Please note that koala habitat areas only exist in koala district A which is the South East Queensland "Shaping SEQ" Regional Plan area. These areas include the local government areas of Brisbane, Gold Coast, Logan, Lockyer Valley, Ipswich, Moreton Bay, Noosa, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba (urban extent).

There are two different categories of koala habitat area (core koala habitat area and locally refined koala habitat), which have been determined using two different methodologies. These methodologies are described in the document Spatial modelling in South East Queensland.

Section 7.2 shows any koala habitat area that exists on your property.

Under the Nature Conservation (Koala) Conservation Plan 2017, an owner of land (or a person acting on the owner's behalf with written consent) can request to make, amend or revoke a koala habitat area determination if they believe, on reasonable grounds, that the existing determination for all or part of their property is incorrect.

More information on requests to make, amend or revoke a koala habitat area determination can be found in the document Guideline - Requests to make, amend or revoke a koala habitat area determination.

The koala habitat area map will be updated at least annually to include any koala habitat areas that have been made, amended or revoked.

Changes to the koala habitat area map which occur between annual updates because of a request to make, amend or revoke a koala habitat area determination can be viewed on the register of approved requests to make, amend or revoke a koala habitat area available at: https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/koalamaps. The register includes the lot on plan for the change, the date the decision was made and the map issued to the landholder that shows areas determined to be koala habitat areas.

6.1.3 Koala priority areas

Koala priority areas are large, connected areas that have been determined to have the highest likelihood of achieving conservation outcomes for koalas based on the combination of habitat suitability, biophysical variables with known relationships to koala habitat (e.g. landcover, soil, terrain, climate and ground water) and a koala conservation cost benefit analysis.

Conservation efforts will be prioritised in these areas to ensure the conservation of viable koala populations in the wild including a focus on management (e.g. habitat protection, habitat restoration and threat mitigation) and monitoring. This includes a prohibition on clearing in koala habitat areas that are in koala priority areas under the Planning Regulation 2017 (subject to some exemptions).

Please note that koala priority areas only exist in koala district A which is the South East Queensland "Shaping SEQ" Regional Plan area. These areas include the local government areas of Brisbane, Gold Coast, Logan, Lockyer Valley, Ipswich, Moreton Bay, Noosa, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba (urban extent).

Section 7.2 identifies if your property is in a koala priority area.

6.1.4 Identified koala broad-hectare areas

There are seven identified koala broad-hectare areas in SEQ. These are areas of koala habitat that are located in areas committed to meet development targets in the SEQ Regional Plan to accommodate SEQ's growing population including bring-forward Greenfield sites under the Queensland Housing Affordability Strategy and declared master planned areas under the repealed *Sustainable Planning Act 2009* and the repealed *Integrated Planning Act 1997*.

Specific assessment benchmarks apply to development applications for development proposed in identified koala broad-hectare areas to ensure koala conservation measures are incorporated into the proposed development.

Section 7.2 identifies if your property is in an identified koala broad-hectare area.

6.2 Koala habitat planning controls

On 7 February 2020, the Queensland Government introduced new planning controls to the Planning Regulation 2017 to strengthen the protection of koala habitat in South East Queensland (i.e. koala district A).

More information on these planning controls can be found here:
https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy.

As a high-level summary, the koala habitat planning controls make:

- development that involves interfering with koala habitat (defined below) in an area that is both a koala priority area and a koala habitat area, prohibited development (i.e. development for which a development application cannot be made);
- development that involves interfering with koala habitat (defined below) in an area that is a koala habitat area but is not a koala priority area, assessable development (i.e. development for which development approval is required); and
- development that is for extractive industries where the development involves interfering with koala habitat (defined below) in an area that is both a koala habitat area and a key resource area, assessable development (i.e. development for which development approval is required).

Interfering with koala habitat means:

1. Removing, cutting down, ringbarking, pushing over, poisoning or destroying in anyway, including by burning, flooding or draining native vegetation in a koala habitat area; but
2. Does not include destroying standing vegetation stock or lopping a tree.

However, these planning controls do not apply if the development is exempted development as defined in Schedule 24 of the Planning Regulation 2017. More information on exempted development can be found here:
https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy.

There are also assessment benchmarks that apply to development applications for:

- building works, operational works, material change of use or reconfiguration of a lot where:

  - the local government planning scheme makes the development assessable;
  - the premises includes an area that is both a koala priority area and a koala habitat area; and
  - the development does not involve interfering with koala habitat (defined above); and

- development in identified koala broad-hectare areas.

The Guideline - Assessment Benchmarks in relation to Koala Habitat in South East Queensland assessment benchmarks outlines these assessment benchmarks, the intent of these assessment benchmarks and advice on how proposed development may meet these assessment benchmarks.

6.3 Koala Conservation Plan clearing requirements

Section 10 and 11 of the Nature Conservation (Koala) Conservation Plan 2017 prescribes requirements that must be met when clearing koala habitat in koala district A and koala district B.

These clearing requirements are independent to the koala habitat planning controls introduced into the Planning Regulation 2017, which means they must be complied with irrespective of any approvals or exemptions offered under other legislation.

Unlike the clearing controls prescribed in the Planning Regulation 2017 that are to protect koala habitat, the clearing requirements prescribed in the Nature Conservation (Koala) Conservation Plan 2017 are in place to prevent the injury or death of koalas when koala habitat is being cleared.

6.4 Contact information for DESI

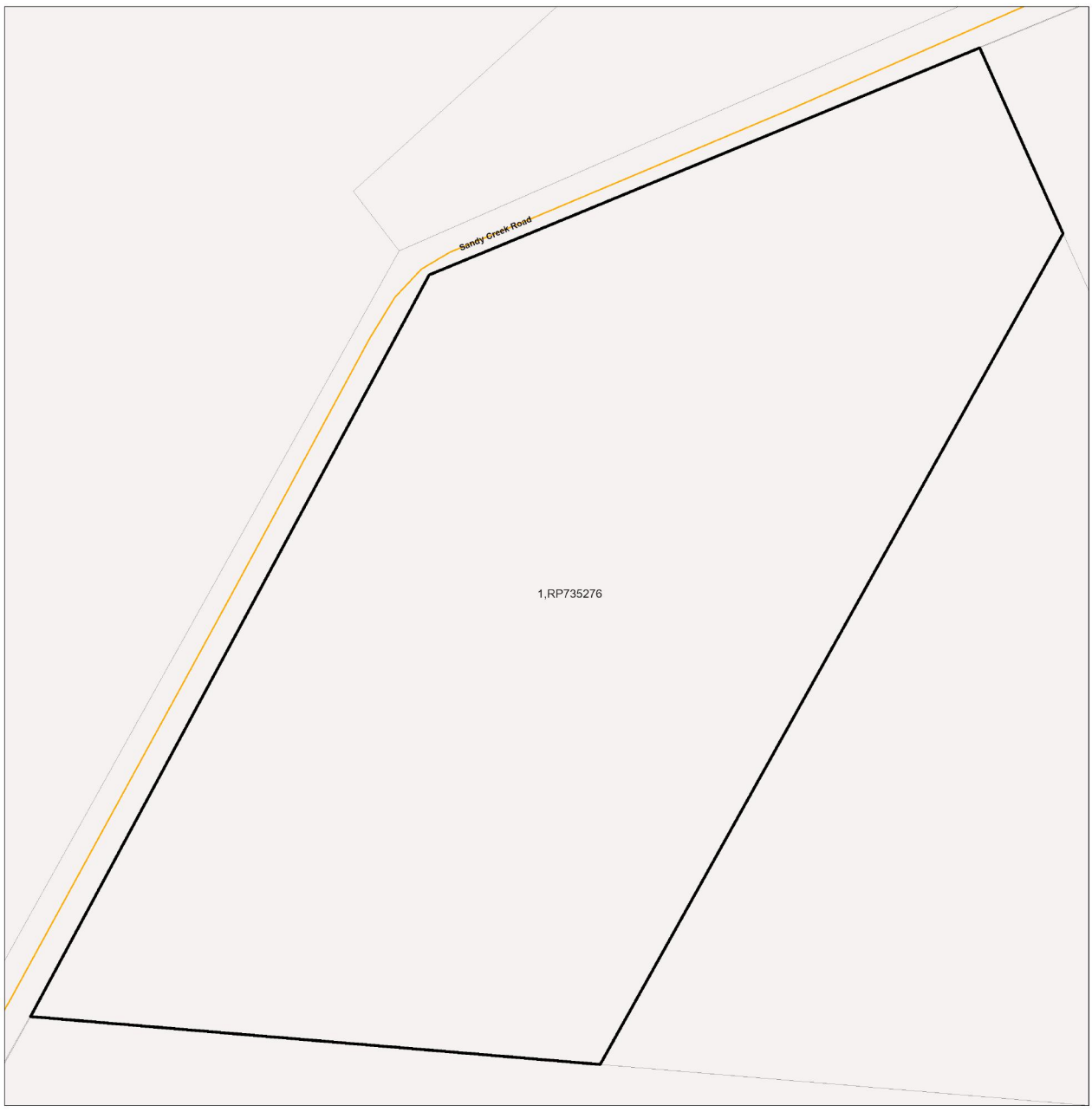
For further information on the koala protection framework:
Phone 13 QGOV (13 74 68)
Email koala.assessment@des.qld.gov.au
Visit https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping

7. Koala protection framework details for Lot: 1 Plan: RP735276

7.1 Koala districts

Koala District C

7.2 Koala priority area, koala habitat area and identified koala broad-hectare map

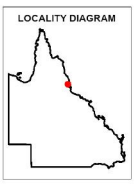


Koala priority area, koala habitat area and identified koala broad-hectare area map

- Koala habitat area (core)
- Koala habitat area (locally refined)
- Koala priority area
- Identified koala broad-hectare area
- Cadastral Boundaries
- Towns
- Major rivers/creeks
- Highway
- Connector
- Street/Local Road
- Queensland
- Selected Lot and Plan

The koala habitat mapping within South East Queensland uses regional ecosystem linework compiled at a scale varying from 1:25,000 to 1:100,000. Linework should be used as a guide only. The positional accuracy of regional ecosystem data mapped at a scale of 1:100,000 is +/- 100 metres.

LOCALITY DIAGRAM



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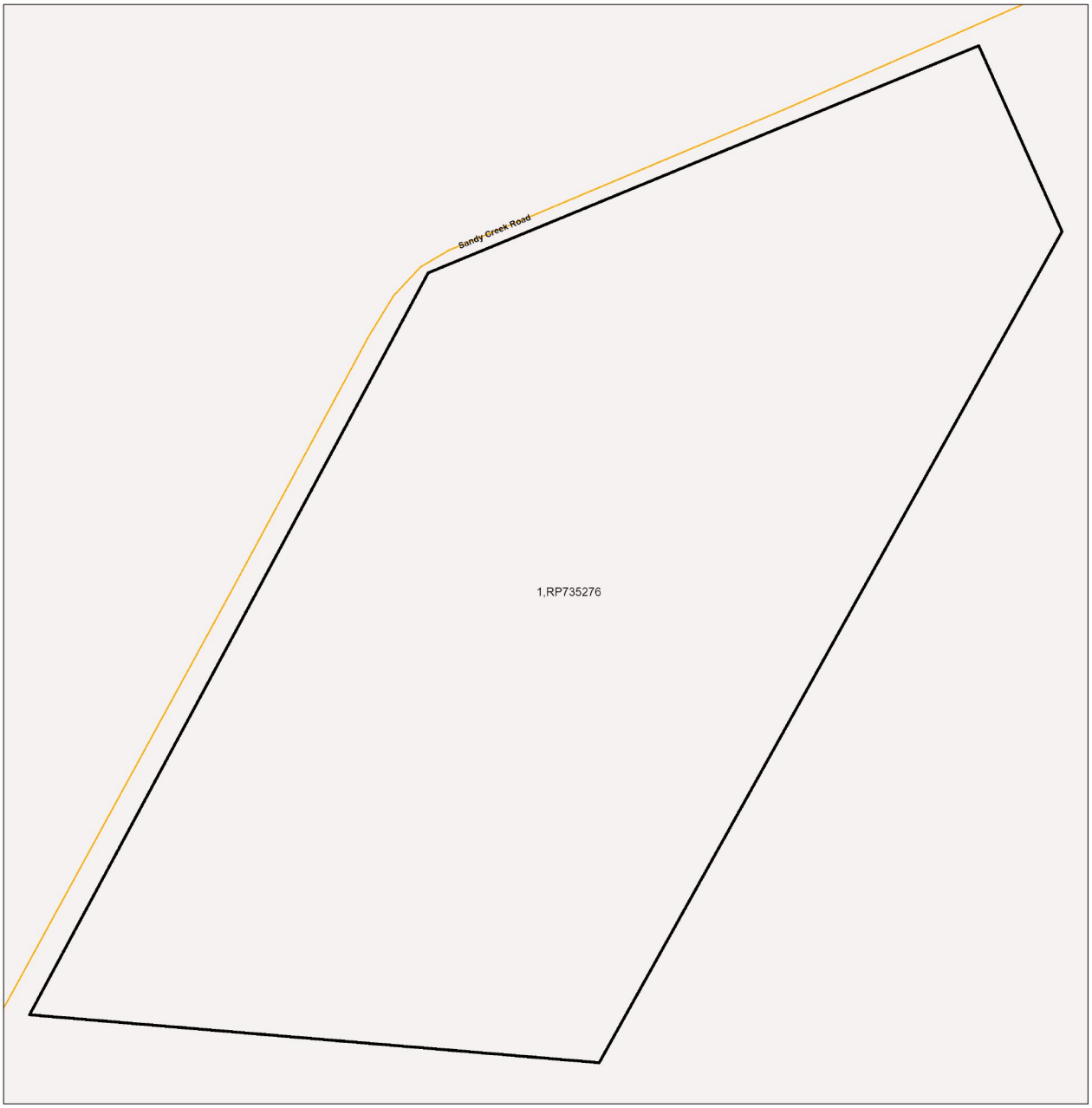
The koala conservation plan maps will be updated at least annually to include any koala habitat areas that have been made, amended or revoked.

In order to ensure that the most recent map for an area of interest can be accessed, prior to the annual update, a register of changes made to koala habitat areas as a result of the map amendment process will be available at: https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/. The register will include lot on plan for the change, the date the decision was made and the map issued to the landholder which shows areas determined to be koala habitat areas.

7.3 Koala habitat regional ecosystems for core koala habitat areas



Koala habitat regional ecosystems for core koala habitat areas

Koala habitat area (core)
Towns
Highway
Connector
Street/Local Road
Major rivers/creeks
Queensland
Selected Lot and Plan

LOCALITY DIAGRAM

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The koala habitat mapping within South East Queensland uses regional ecosystem linework compiled at a scale varying from 1:25,000 to 1:100,000. Linework should be used as a guide only. The positional accuracy of regional ecosystem data mapped at a scale of 1:100,000 is +/- 100 metres.

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8. Other relevant legislation contacts list

Activity	Legislation	Agency	Contact details
• Interference with overland flow • Earthworks, significant disturbance	*Water Act 2000* *Soil Conservation Act 1986*	Department of Regional Development, Manufacturing and Water (Queensland Government) Department of Resources (Queensland Government)	Ph: 13 QGOV (13 74 68) www.rdmw.qld.gov.au/ www.resources.qld.gov.au
• Indigenous Cultural Heritage	*Aboriginal Cultural Heritage Act 2003* *Torres Strait Islander Cultural Heritage Act 2003*	Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships	Ph: 13 QGOV (13 74 68) www.datsip.qld.gov.au
• Mining and environmentally relevant activities • Infrastructure development (coastal) • Heritage issues	*Environmental Protection Act 1994* *Coastal Protection and Management Act 1995* *Queensland Heritage Act 1992*	Department of Environment, Science and Innovation (Queensland Government)	Ph: 13 QGOV (13 74 68) www.des.qld.gov.au
• Protected plants and protected areas	*Nature Conservation Act 1992*	Department of Environment, Science and Innovation (Queensland Government)	Ph: 1300 130 372 (option 4) palm@des.qld.gov.au www.des.qld.gov.au
• Koala mapping and regulations	*Nature Conservation Act 1992*	Department of Environment, Science and Innovation (Queensland Government)	Ph: 13 QGOV (13 74 68) Koala.assessment@des.qld.gov.au
• Interference with fish passage in a watercourse, mangroves • Forestry activities on State land tenures	*Fisheries Act 1994* *Forestry Act 1959*	Department of Agriculture and Fisheries (Queensland Government)	Ph: 13 QGOV (13 74 68) www.daf.qld.gov.au
• Matters of National Environmental Significance including listed threatened species and ecological communities	*Environment Protection and Biodiversity Conservation Act 1999*	Department of Agriculture, Water and the Environment (Australian Government)	Ph: 1800 803 772 www.environment.gov.au
• Development and planning processes	*Planning Act 2016* *State Development and Public Works Organisation Act 1971*	Department of State Development, Infrastructure, Local Government and Planning (Queensland Government)	Ph: 13 QGOV (13 74 68) www.dsdmip.qld.gov.au
• Local government requirements	*Local Government Act 2009* *Planning Act 2016*	Department of State Development, Infrastructure, Local Government and Planning (Queensland Government)	Ph: 13 QGOV (13 74 68) Your relevant local government office
• Harvesting timber in the Wet Tropics of Qld World Heritage area	*Wet Tropics World Heritage Protection and Management Act 1993*	Wet Tropics Management Authority	Ph: (07) 4241 0500 https://www.wettropics.gov.au/

resources.QLD.GOV.AU

Vegetation management report

For Lot: 1 Plan: RP852238
9/5/2024

Queensland Government

This publication has been compiled by Operations Support, Department of Resources.

Recent changes

Updated mapping

Updated vegetation mapping was released on 22 November 2023 and includes the most recent Queensland Herbarium scientific updates to the Regulated Vegetation Management Map, regional ecosystems, essential habitat, wetland and high-value regrowth mapping.

The Department of Environment, Science and Innovation have also updated their koala protection mapping to align with the Queensland Herbarium scientific updates.

The latest version (v10) of the Protected Plants Flora Survey Trigger Map (trigger map) was released on 6 September 2023.

Overview

Based on the lot on plan details you have supplied, this report provides the following detailed information:
Property details - information about the specified Lot on Plan, lot size, local government area, bioregion(s), subregion(s) and catchment(s);

Vegetation management framework - an explanation of the application of the framework and contact details for the Department of Resources who administer the framework;

Vegetation management framework details for the specified Lot on Plan including:

- the vegetation management categories on the property;
- the vegetation management regional ecosystems on the property;
- vegetation management watercourses or drainage features on the property;
- vegetation management wetlands on the property;
- vegetation management essential habitat on the property;
- whether any area management plans are associated with the property;
- whether the property is coastal or non-coastal; and
- whether the property is mapped as Agricultural Land Class A or B;

Protected plant framework - an explanation of the application of the framework and contact details for the Department of Environment, Science and Innovation who administer the framework, including:

- high risk areas on the protected plant flora survey trigger map for the property;

Koala protection framework - an explanation of the application of the framework and contact details for the Department of Environment, Science and Innovation who administer the framework; and

Koala protection framework details for the specified Lot on Plan including:

- the koala district the property is located in;
- koala priority areas on the property;
- core and locally refined koala habitat areas on the property;
- whether the lot is located in an identified koala broad-hectare area; and
- koala habitat regional ecosystems on the property for core koala habitat areas.

This information will assist you to determine your options for managing vegetation under:
- the vegetation management framework, which may include:

- exempt clearing work;
- accepted development vegetation clearing code;
- an area management plan;
- a development approval;

- the protected plant framework, which may include:

- the need to undertake a flora survey;
- exempt clearing;
- a protected plant clearing permit;

- the koala protection framework, which may include:

- exempted development;
- a development approval;
- the need to undertake clearing sequentially and in the presence of a koala spotter.

Other laws

The clearing of native vegetation is regulated by both Queensland and Australian legislation, and some local governments also regulate native vegetation clearing. You may need to obtain an approval or permit under another Act, such as the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Section 8 of this guide provides contact details of other agencies you should confirm requirements with, before commencing vegetation clearing.

Table of Contents

1. Property details

1.1 Tenure and title area

All of the lot, plan, tenure and title area information associated with property Lot: 1 Plan: RP852238 are listed in Table 1.

Table 1: Lot, plan, tenure and title area information for the property

Lot	Plan	Tenure	Property title area (sq metres)
1	RP852238	Freehold	206,000
N	RP730844	Easement	19,910
D	SP233167	Easement	17,920
E	SP338637	Easement	999

The tenure of the land may affect whether clearing is considered exempt clearing work or may be carried out under an accepted development vegetation clearing code.

Does the property Lot: 1 Plan: RP852238 have a freehold tenure and is in the Wet Tropics of Queensland World Heritage Area?

No, this property is not located in the Wet Tropics of Queensland World Heritage Area.

1.2 Property location

Table 2 provides a summary of the locations for property Lot: 1 Plan: RP852238, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)	Catchment(s)	Bioregion(s)	Subregion(s)
Cassowary Coast Regional	Tully	Wet Tropics	Tully

2. Vegetation management framework (administered by the Department of Resources)

The *Vegetation Management Act 1999* (VMA), the Vegetation Management Regulation 2012, the *Planning Act 2016* and the Planning Regulation 2017, in conjunction with associated policies and codes, form the Vegetation Management Framework.

The VMA does not apply to all land tenures or vegetation types. State forests, national parks, forest reserves and some tenures under the *Forestry Act 1959* and *Nature Conservation Act 1992* are not regulated by the VMA. Managing or clearing vegetation on these tenures may require approvals under these laws.

The following native vegetation is not regulated under the VMA but may require permit(s) under other laws:

- grass or non-woody herbage;
- a plant within a grassland regional ecosystem identified in the Vegetation Management Regional Ecosystem Description Database (VM REDD) as having a grassland structure; and
- a mangrove.

2.1 Exempt clearing work

Exempt clearing work is an activity for which you do not need to notify the Department of Resources or obtain an approval under the vegetation management framework. Exempt clearing work was previously known as exemptions.

In areas that are mapped as Category X (white in colour) on the regulated vegetation management map (see section 4.1), and where the land tenure is freehold, indigenous land and leasehold land for agriculture and grazing purposes, the clearing of vegetation is considered exempt clearing work and does not require notification or development approval under the vegetation management framework. For all other land tenures, contact the Department of Resources before commencing clearing to ensure that the proposed activity is exempt clearing work.

A range of routine property management activities are considered exempt clearing work. A list of exempt clearing work is available at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/exemptions/.

Exempt clearing work may be affected if the proposed clearing area is subject to development approval conditions, a covenant, an environmental offset, an exchange area, a restoration notice, or an area mapped as Category A. Exempt clearing work may require approval under other Commonwealth, State or Local Government laws, or local government planning schemes. Contact the Department of Resources prior to clearing in any of these areas.

2.2 Accepted development vegetation clearing codes

Some clearing activities can be undertaken under an accepted development vegetation clearing code. The codes can be downloaded at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/codes/

If you intend to clear vegetation under an accepted development vegetation clearing code, you must notify the Department of Resources before commencing. The information in this report will assist you to complete the online notification form.

You can complete the online form at
https://vegetation-apps.dnrm.qld.gov.au

2.3 Area management plans

Area Management Plans (AMP) provide an alternative approval system for vegetation clearing under the vegetation management framework. They list the purposes and clearing conditions that have been approved for the areas covered by the plan. It is not necessary to use an AMP, even when an AMP applies to your property.

On 8 March 2020, AMPs ended for fodder harvesting, managing thickened vegetation and managing encroachment. New notifications cannot be made for these AMPs. You will need to consider options for fodder harvesting, managing thickened vegetation or encroachment under a relevant accepted development vegetation clearing code or apply for a development approval.

New notifications can be made for all other AMPs. These will continue to apply until their nominated end date.

If an Area Management Plan applies to your property for which you can make a new notification, it will be listed in Section 3.6 of this report. Before clearing under one of these AMPs, you must first notify the Department of Resources and then follow the conditions and requirements listed in the AMP.

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/area-management-plans

2.4 Development approvals

If under the vegetation management framework your proposed clearing is not exempt clearing work, or is not permitted under an accepted development vegetation clearing code, or an AMP, you may be able to apply for a development approval. Information on how to apply for a development approval is available at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/development

2.5. Contact information for the Department of Resources

For further information on the vegetation management framework:

Phone 135VEG (135 834)

Email vegetation@resources.qld.gov.au

Visit https://www.resources.qld.gov.au/?contact=vegetation to submit an online enquiry.

3. Vegetation management framework for Lot: 1 Plan: RP852238

3.1 Vegetation categories

The vegetation categories on your property are shown on the regulated vegetation management map in section 4.1 of this report. A summary of vegetation categories on the subject lot are listed in Table 3. Descriptions for these categories are shown in Table 4.

Table 3: Vegetation categories for subject property

Vegetation category	Area (ha)
Category C	0.01
Category R	4.15
Category X	16.44

Table 4: Description of vegetation categories

Category	Colour on Map	Description	Requirements / options under the vegetation management framework
A	red	Compliance areas, environmental offset areas and voluntary declaration areas	Special conditions apply to Category A areas. Before clearing, contact the Department of Resources to confirm any requirements in a Category A area.
B	dark blue	Remnant vegetation areas	Exempt clearing work, or notification and compliance with accepted development vegetation clearing codes, area management plans or development approval.
C	light blue	High-value regrowth areas	Exempt clearing work, or notification and compliance with managing Category C regrowth vegetation accepted development vegetation clearing code.
R	yellow	Regrowth within 50m of a watercourse or drainage feature in the Great Barrier Reef catchment areas	Exempt clearing work, or notification and compliance with managing Category R regrowth accepted development vegetation clearing code or area management plans.
X	white	Clearing on freehold land, indigenous land and leasehold land for agriculture and grazing purposes is considered exempt clearing work under the vegetation management framework. Contact the Department of Resources to clarify whether a development approval is required for other State land tenures.	No permit or notification required on freehold land, indigenous land and leasehold land for agriculture and grazing. A development approval may be required for some State land tenures.

Property Map of Assessable Vegetation (PMAV)

There is no Property Map of Assessable Vegetation (PMAV) present on this property.

3.2 Regional ecosystems

The endangered, of concern and least concern regional ecosystems on your property are shown on the vegetation management supporting map in section 4.2 and are listed in Table 5.

A description of regional ecosystems can be accessed online at
https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/descriptions/

Table 5: Regional ecosystems present on subject property

Regional Ecosystem	VMA Status	Category	Area (Ha)	Short Description	Structure Category
7.3.5	Least concern	C	0.01	Melaleuca quinquenervia and/or Melaleuca cajuputi subsp. platyphylla closed forest to shrubland on poorly drained alluvial plains	Dense
7.3.5	Least concern	R	2.20	Melaleuca quinquenervia and/or Melaleuca cajuputi subsp. platyphylla closed forest to shrubland on poorly drained alluvial plains	Dense
7.3.8	Least concern	C	less than 0.01	Melaleuca viridiflora +/- Eucalyptus spp. +/- Lophostemon suaveolens open forest to open woodland on poorly drained alluvial plains	Mid-dense
7.3.8	Least concern	R	1.95	Melaleuca viridiflora +/- Eucalyptus spp. +/- Lophostemon suaveolens open forest to open woodland on poorly drained alluvial plains	Mid-dense
non-rem	None	X	16.44	None	None

Please note:
1. All area and area derived figures included in this table have been calculated via reprojecting relevant spatial features to Albers equal-area conic projection (central meridian = 146, datum Geocentric Datum of Australia 1994). As a result, area figures may differ slightly if calculated for the same features using a different co-ordinate system.
2. If Table 5 contains a Category 'plant', please be aware that this refers to 'plantations' such as forestry, and these areas are considered non-remnant under the VMA.

The VMA status of the regional ecosystem (whether it is endangered, of concern or least concern) also determines if any of the following are applicable:

- exempt clearing work;
- accepted development vegetation clearing codes;
- performance outcomes in State Code 16 of the State Development Assessment Provisions (SDAP).

3.3 Watercourses

Vegetation management watercourses and drainage features for this property are shown on the vegetation management supporting map in section 4.2.

3.4 Wetlands

Vegetation management wetlands are present on this property and are shown on the vegetation management supporting map in section 4.2 of this report.

3.5 Essential habitat

Under the VMA, essential habitat for protected wildlife is native wildlife prescribed under the *Nature Conservation Act 1992* (NCA) as critically endangered, endangered, vulnerable or near-threatened wildlife.

Essential habitat for protected wildlife includes suitable habitat on the lot, or where a species has been known to occur up to 1.1 kilometres from a lot on which there is assessable vegetation. These important habitat areas are protected

under the VMA.

Any essential habitat on this property will be shown as blue hatching on the vegetation supporting map in section 4.2.

If essential habitat is identified on the lot, information about the protected wildlife species is provided in Table 6 below. The numeric labels on the vegetation management supporting map can be cross referenced with Table 6 to outline the essential habitat factors for that particular species. There may be essential habitat for more than one species on each lot, and areas of Category A, Category B and Category C can be mapped as Essential Habitat.

Essential habitat is compiled from a combination of species habitat models and buffered species records. Regional ecosystem is a mandatory essential habitat factor, unless otherwise stated. Essential habitat, for protected wildlife, means an area of vegetation shown on the Regulated Vegetation Management Map -

1) that has at least 3 essential habitat factors for the protected wildlife that must include any essential habitat factors that are stated as mandatory for the protected wildlife in the essential habitat database. Essential habitat factors are comprised of - regional ecosystem (mandatory for most species), vegetation community, altitude, soils, position in landscape; or
2) in which the protected wildlife, at any stage of its life cycle, is located.

If there is no essential habitat mapping shown on the vegetation management supporting map for this lot, and there is no table in the sections below, it confirms that there is no essential habitat on the lot.

Category A and/or Category B and/or Category C

Table 6: Essential habitat in Category A and/or Category B and/or Category C
No records

3.6 Area Management Plan(s)

Nil

3.7 Coastal or non-coastal

For the purposes of the accepted development vegetation clearing codes and State Code 16 of the State Development Assessment Provisions (SDAP), this property is regarded as*

Coastal

*See also Map 4.3

3.8 Agricultural Land Class A or B

The following can be used to identify Agricultural Land Class A or B areas under the "Managing regulated regrowth vegetation" accepted development vegetation clearing code:

Does this lot contain land that is mapped as Agricultural Land Class A or B in the State Planning Interactive Mapping System?
Class A (with urban areas masked as per SPP): 20.61 ha

No Class B

Note - This confirms Agricultural Land Classes as per the State Planning Interactive Mapping System only. This response does not include Agricultural Land Classes identified under local government planning schemes. For further information, check the Planning Scheme for your local government area.

See Map 4.4 to identify the location and extent of Class A and/or Class B Agricultural land on Lot: 1 Plan: RP852238.

4. Vegetation management framework maps

Vegetation management maps included in this report may also be requested individually at:
https://www.resources.qld.gov.au/qld/environment/land/vegetation/vegetation-map-request-form

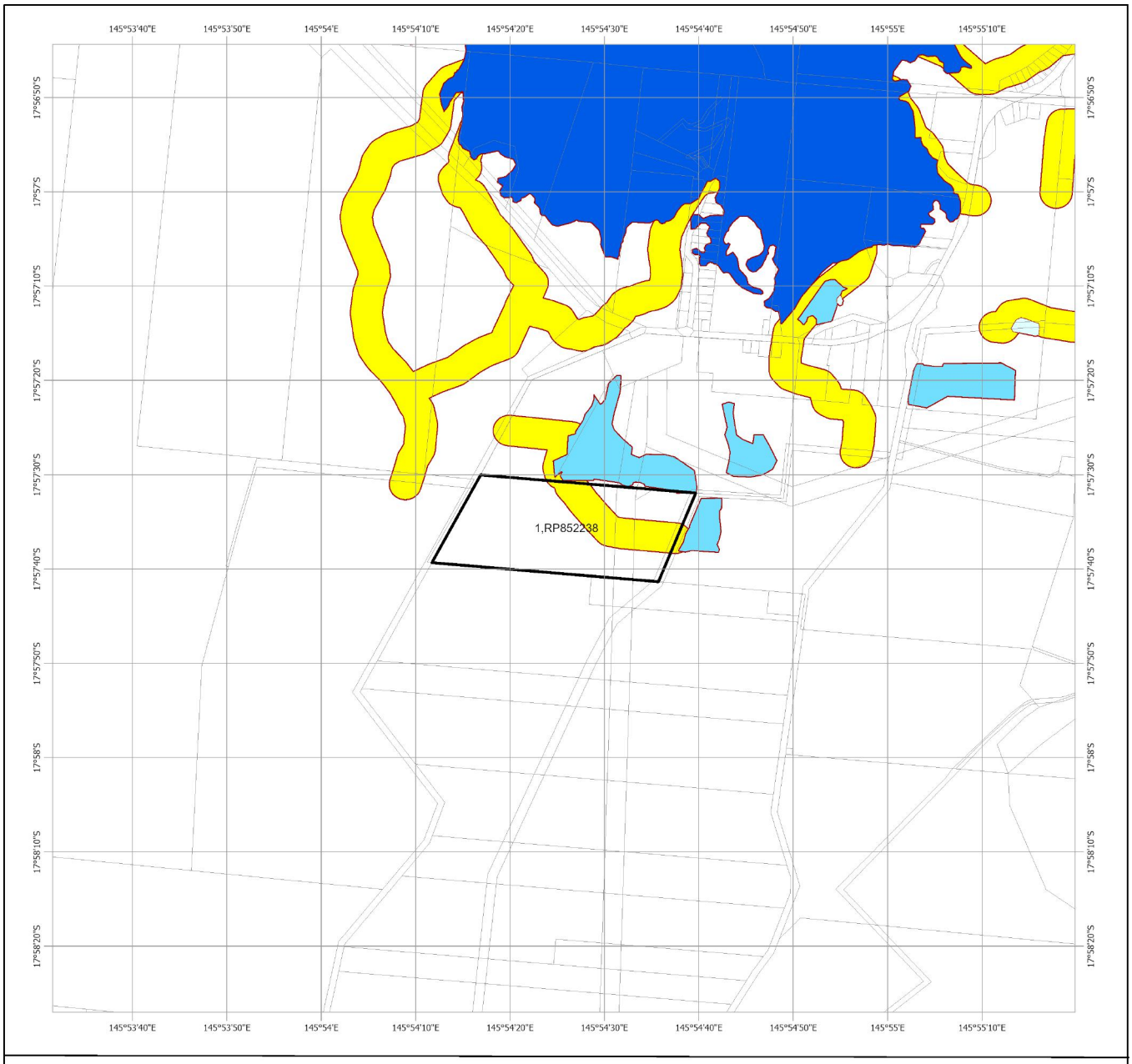
Regulated vegetation management map
The regulated vegetation management map shows vegetation categories needed to determine clearing requirements. These maps are updated monthly to show new property maps of assessable vegetation (PMAV).

Vegetation management supporting map
The vegetation management supporting map provides information on regional ecosystems, wetlands, watercourses and essential habitat.

Coastal/non-coastal map
The coastal/non-coastal map confirms whether the lot, or which parts of the lot, are considered coastal or non-coastal for the purposes of the accepted development vegetation clearing codes and State Code 16 of the State Development Assessment Provisions (SDAP).

Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture
The Agricultural Land Class map confirms the location and extent of land mapped as Agricultural Land Classes A or B as identified on the State Planning Interactive Mapping System. Please note that this map does not include areas identified as Agricultural Land Class A or B in local government planning schemes. This map can be used to identify Agricultural Land Class A or B areas under the "Managing regulated regrowth vegetation" accepted development vegetation clearing code.

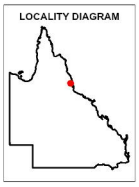
4.1 Regulated vegetation management map



Regulated Vegetation Management Map

- Category A area (Vegetation offsets/compliance notices/VDecs)
- Category B area (Remnant vegetation)
- Category C area (High-value regrowth vegetation)
- Category R area (Reef regrowth watercourse vegetation)
- Category X area (Exempt clearing work on Freehold, Indigenous and Leasehold land)
- Water
- Other land parcel boundaries
- Selected Lot and Plan

LOCALITY DIAGRAM



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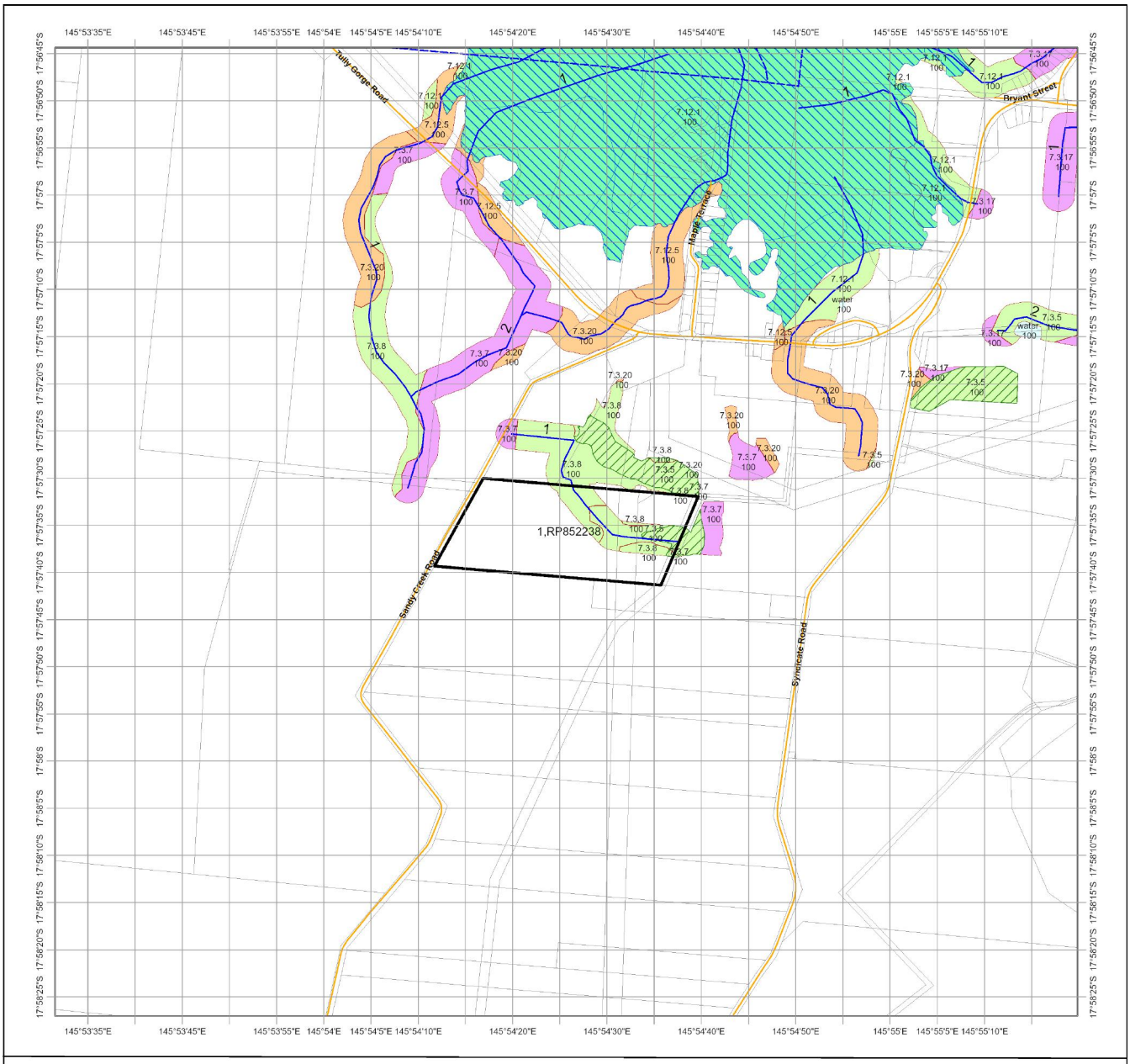
Additional information required for the assessment of vegetation values is provided in the accompanying "Vegetation Management Supporting map". For further information go to the web site: www.resources.qld.gov.au or contact the Department of Resources.

Digital data for the regulated vegetation management map is available from the Queensland Spatial Portal at http://www.information.qld.gov.au/

Land parcel boundaries are provided as locational aid only.

This map is updated on a monthly basis to ensure new PMAVs are included as they are approved.

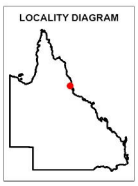
4.2 Vegetation management supporting map



Vegetation Management Supporting Map

- Category A or B area containing endangered regional ecosystems
- Category A or B area containing of concern regional ecosystems
- Category A or B area that is a least concern regional ecosystem
- Category C or R area containing endangered regional ecosystems
- Category C or R area containing of concern regional ecosystems
- Category C or R area that is a least concern regional ecosystem
- Category X area
- Water
- Wetland on the vegetation management wetlands map
- Essential habitat on the essential habitat map
- Essential habitat species record
- Watercourses and drainage features on the vegetation management watercourse and drainage features map (Stream order shown as black number against stream where available)
- Highway
- Connector
- Street/Local Road
- National Parks, State Forest and other reserves
- Other land parcel boundaries
- Selected Lot and Plan

LOCALITY DIAGRAM



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Labels for Essential Habitat are centred on the area of enquiry.

Regional ecosystem linework has been compiled at a scale of 1:100 000, except in designated areas where a compilation scale of 1:50 000 is available. Linework should be used as a guide only. The positional accuracy of RE data mapped at a scale of 1:100 000 is +/- 100 metres.

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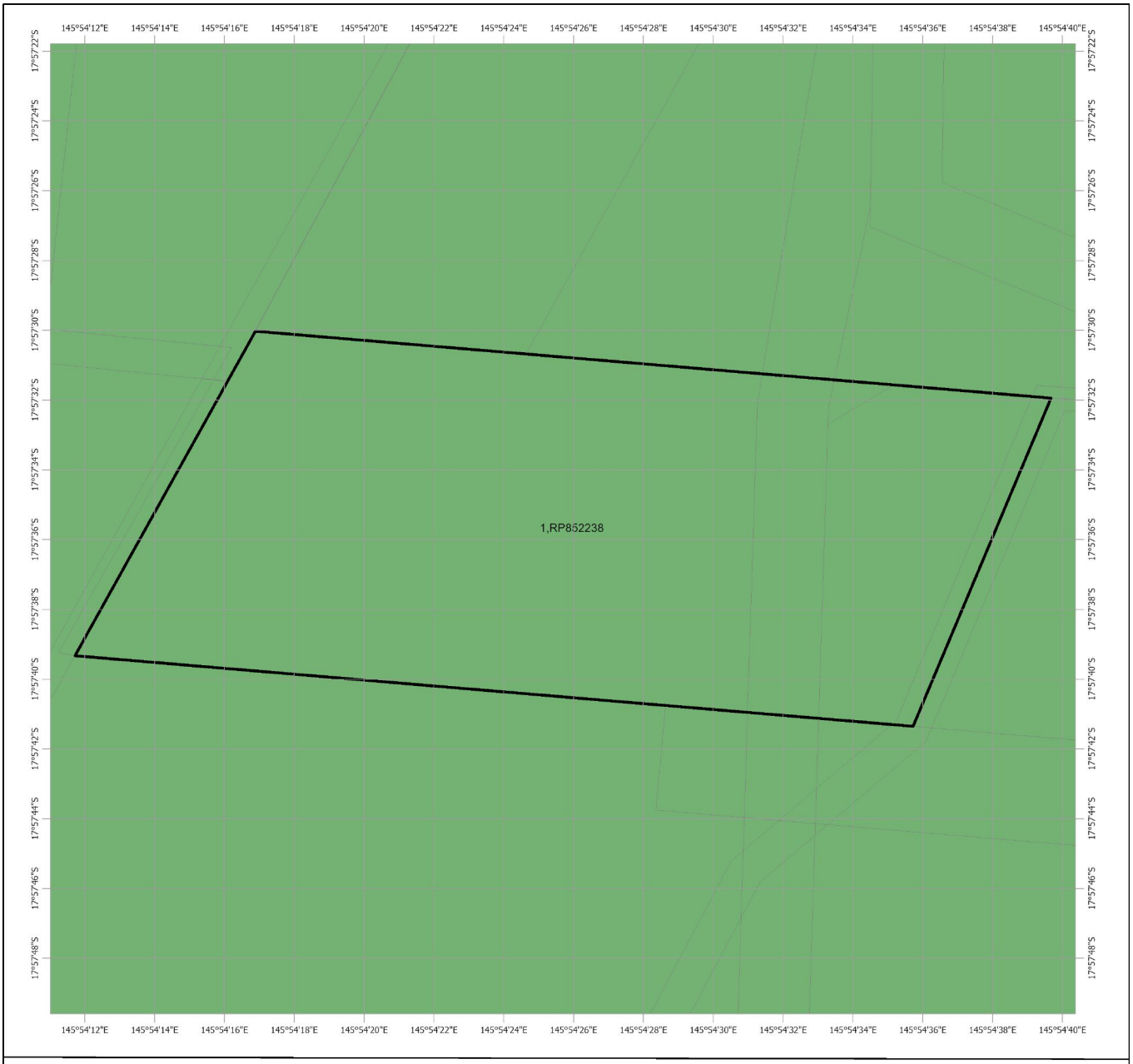
Additional information may be required for the purposes of land clearing or assessment of a regional ecosystem map or PMAV applications. For further information go to the web site: www.resources.qld.gov.au or contact the Department of Resources.

Digital data for the vegetation management watercourse and drainage feature map, vegetation management wetlands map, essential habitat map and the vegetation management remnant and regional ecosystem map are available from the Queensland Spatial Portal at http://www.information.qld.gov.au/

Land parcel boundaries are provided as locational aid only.

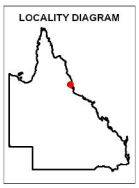
4.3 Coastal/non-coastal map



Coastal/Non Coastal Map

Coastal
Non Coastal
Other land parcel boundaries
Selected Lot and Plan

LOCALITY DIAGRAM



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Land parcel boundaries shown are provided as a locational aid only.

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GDA2020

4.4 Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture

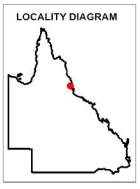
Agricultural Land Class A or B
as per State Planning Policy: State Interest for Agriculture

- Towns
- Rivers and creeks
- Freeways / motorways; Highways
- Secondary roads; Streets

Agricultural land class A or B

- A
- B
- Not class A or B
- Selected Lot and Plan

LOCALITY DIAGRAM



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5. Protected plants framework (administered by the Department of Environment, Science and Innovation (DESI))

In Queensland, all plants that are native to Australia are protected plants under the *Nature Conservation Act 1992* (NCA). The NCA regulates the clearing of protected plants 'in the wild' (see Operational policy: When a protected plant in Queensland is considered to be 'in the wild') that are listed as critically endangered, endangered, vulnerable or near threatened under the Act.

Please note that the protected plant clearing framework applies irrespective of the classification of the vegetation under the *Vegetation Management Act 1999* and any approval or exemptions given under another Act, for example, the *Vegetation Management Act 1999* or *Planning Regulation 2017*.

5.1 Clearing in high risk areas on the flora survey trigger map

The flora survey trigger map identifies high-risk areas for threatened and near threatened plants. These are areas where threatened or near threatened plants are known to exist or are likely to exist based on the habitat present. The flora survey trigger map for this property is provided in section 5.5.

If you are proposing to clear an area shown as high risk on the flora survey trigger map, a flora survey of the clearing impact area must be undertaken by a suitably qualified person in accordance with the Flora survey guidelines. The main objective of a flora survey is to locate any threatened or near threatened plants that may be present in the clearing impact area.

If the flora survey identifies that threatened or near threatened plants are not present within the clearing impact area or clearing within 100m of EVNT plants can be avoided, the clearing activity is exempt from a permit. An exempt clearing notification form must be submitted to the Department of Environment, Science and Innovation, with a copy of the flora survey report, at least one week prior to clearing.

If the flora survey identifies that threatened or near threatened plants are present in, or within 100m of, the area to be cleared, a clearing permit is required before any clearing is undertaken. The flora survey report, as well as an impact management report, must be submitted with the clearing permit application form.

5.2 Clearing outside high risk areas on the flora survey trigger map

In an area other than a high risk area, a clearing permit is only required where a person is, or becomes aware that threatened or near threatened plantsare present in, or within 100m of, the area to be cleared. You must keep a copy of the flora survey trigger map for the area subject to clearing for five years from the day the clearing starts. If you do not clear within the 12 month period that the flora survey trigger map was printed, you need to print and check a new flora survey trigger map.

5.3 Exemptions

Many activities are 'exempt' under the protected plant clearing framework, which means that clearing of native plants that are in the wild can be undertaken for these activities with no need for a flora survey or a protected plant clearing permit. The Information sheet - General exemptions for the take of protected plants provides some of these exemptions.

Some exemptions under the NCA are the same as exempt clearing work (formerly known as exemptions) under the *Vegetation Management Act 1999* (i.e. listed in Schedule 21 of the Planning Regulations 2017) while some are different.

5.4 Contact information for DESI

For further information on the protected plants framework:
Phone 1300 130 372 (and select option four)
Email palm@des.qld.gov.au
Visit https://www.qld.gov.au/environment/plants-animals/plants/protected-plants

5.5 Protected plants flora survey trigger map

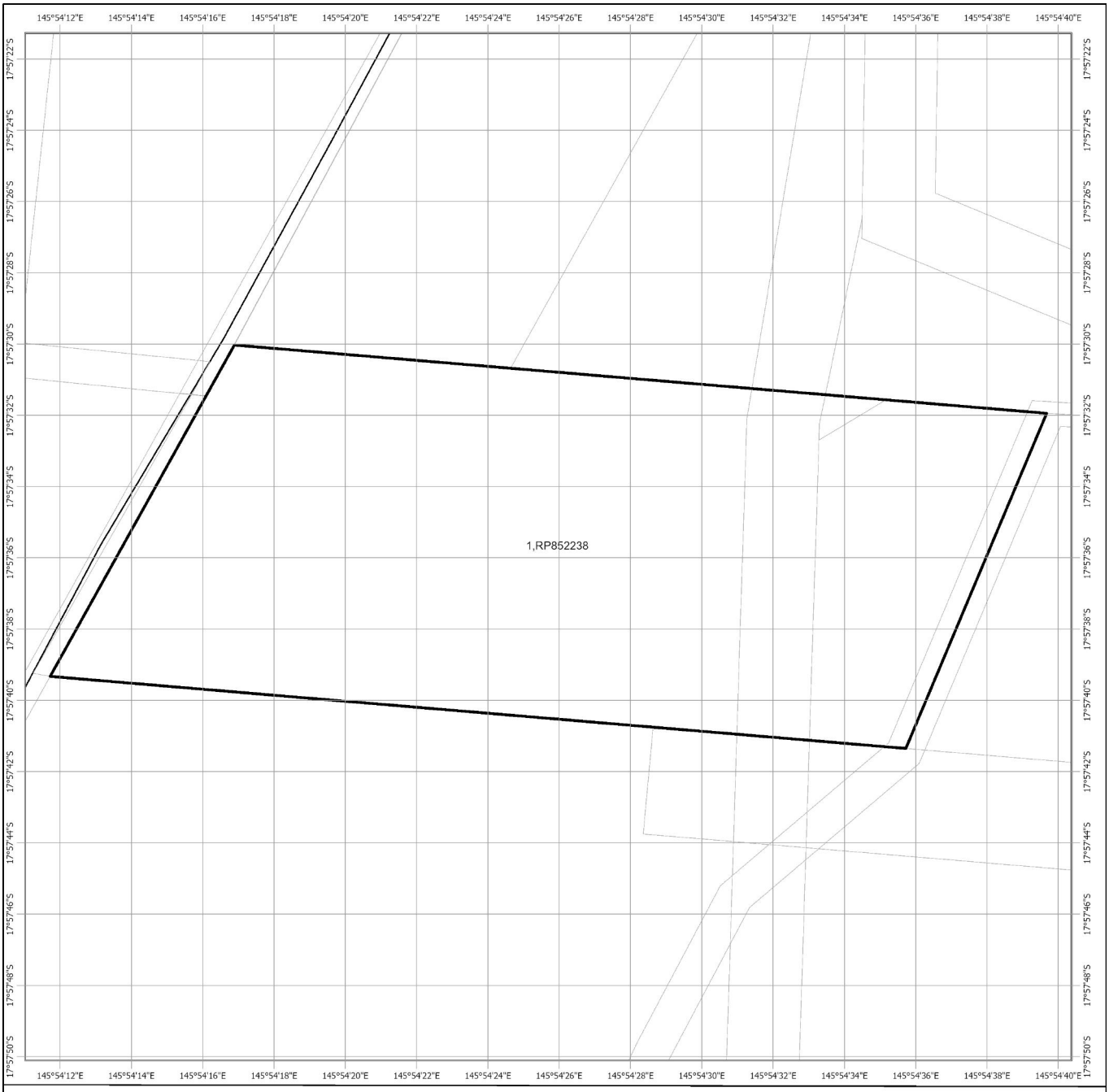
This map included may also be requested individually at: https://apps.des.qld.gov.au/map-request/flora-survey-trigger/.

Updates to the data informing the flora survey trigger map

The flora survey trigger map will be reviewed, and updated if necessary, at least every 12 months to ensure the map reflects the most up-to-date and accurate data available.

Species information

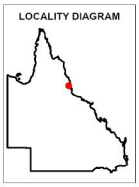
Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the Queensland Spatial Catalogue, the Department of Environment, Science and Innovation does not provide species information on request. Regardless of whether species information is available for a particular high risk area, clearing plants in a high risk area may require a flora survey and/or clearing permit. Please see the Department of Environment, Science and Innovation webpage on the clearing of protected plants for more information.



Protected Plants Flora Survey Trigger Map

High risk area
Other land parcel boundaries
Freeways / motorways / highways
Secondary roads / streets
Selected Lot and Plan

LOCALITY DIAGRAM



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This map shows areas where particular provisions of the Nature Conservation Act 1992 apply to the clearing of protected plants.

Land parcel boundaries are provided as locational aid only.

This map is produced at a scale relevant to the size of the area selected and should be printed as A4 size in portrait orientation.

For further information or assistance with interpretation of this product, please contact the Department of Environment, Science and Innovation at palm@des.qld.gov.au

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6. Koala protection framework (administered by the Department of Environment, Science and Innovation (DESI))

The koala (*Phascolarctos cinereus*) is listed in Queensland as endangered by the Queensland Government under *Nature Conservation Act 1992* and by the Australian Government under the *Environment Protection and Biodiversity Conservation Act 1999*.

The Queensland Government's koala protection framework is comprised of the *Nature Conservation Act 1992*, the Nature Conservation (Animals) Regulation 2020, the Nature Conservation (Koala) Conservation Plan 2017, the *Planning Act 2016* and the Planning Regulation 2017.

6.1 Koala mapping

6.1.1 Koala districts

The parts of Queensland where koalas are known to occur has been divided into three koala districts - koala district A, koala district B and koala district C. Each koala district is made up of areas with comparable koala populations (e.g. density, extent and significance of threatening processes affecting the population) which require similar management regimes.

Section 7.1 identifies which koala district your property is located in.

6.1.2 Koala habitat areas

Koala habitat areas are areas of vegetation that have been determined to contain koala habitat that is essential for the conservation of a viable koala population in the wild based on the combination of habitat suitability and biophysical variables with known relationships to koala habitat (e.g. landcover, soil, terrain, climate and ground water). In order to protect this important koala habitat, clearing controls have been introduced into the Planning Regulation 2017 for development in koala habitat areas.

Please note that koala habitat areas only exist in koala district A which is the South East Queensland "Shaping SEQ" Regional Plan area. These areas include the local government areas of Brisbane, Gold Coast, Logan, Lockyer Valley, Ipswich, Moreton Bay, Noosa, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba (urban extent).

There are two different categories of koala habitat area (core koala habitat area and locally refined koala habitat), which have been determined using two different methodologies. These methodologies are described in the document Spatial modelling in South East Queensland.

Section 7.2 shows any koala habitat area that exists on your property.

Under the Nature Conservation (Koala) Conservation Plan 2017, an owner of land (or a person acting on the owner's behalf with written consent) can request to make, amend or revoke a koala habitat area determination if they believe, on reasonable grounds, that the existing determination for all or part of their property is incorrect.

More information on requests to make, amend or revoke a koala habitat area determination can be found in the document Guideline - Requests to make, amend or revoke a koala habitat area determination.

The koala habitat area map will be updated at least annually to include any koala habitat areas that have been made, amended or revoked.

Changes to the koala habitat area map which occur between annual updates because of a request to make, amend or revoke a koala habitat area determination can be viewed on the register of approved requests to make, amend or revoke a koala habitat area available at: https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/koalamaps. The register includes the lot on plan for the change, the date the decision was made and the map issued to the landholder that shows areas determined to be koala habitat areas.

6.1.3 Koala priority areas

Koala priority areas are large, connected areas that have been determined to have the highest likelihood of achieving conservation outcomes for koalas based on the combination of habitat suitability, biophysical variables with known relationships to koala habitat (e.g. landcover, soil, terrain, climate and ground water) and a koala conservation cost benefit analysis.

Conservation efforts will be prioritised in these areas to ensure the conservation of viable koala populations in the wild including a focus on management (e.g. habitat protection, habitat restoration and threat mitigation) and monitoring. This includes a prohibition on clearing in koala habitat areas that are in koala priority areas under the Planning Regulation 2017 (subject to some exemptions).

Please note that koala priority areas only exist in koala district A which is the South East Queensland "Shaping SEQ" Regional Plan area. These areas include the local government areas of Brisbane, Gold Coast, Logan, Lockyer Valley, Ipswich, Moreton Bay, Noosa, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba (urban extent).

Section 7.2 identifies if your property is in a koala priority area.

6.1.4 Identified koala broad-hectare areas

There are seven identified koala broad-hectare areas in SEQ. These are areas of koala habitat that are located in areas committed to meet development targets in the SEQ Regional Plan to accommodate SEQ's growing population including bring-forward Greenfield sites under the Queensland Housing Affordability Strategy and declared master planned areas under the repealed *Sustainable Planning Act 2009* and the repealed *Integrated Planning Act 1997*.

Specific assessment benchmarks apply to development applications for development proposed in identified koala broad-hectare areas to ensure koala conservation measures are incorporated into the proposed development.

Section 7.2 identifies if your property is in an identified koala broad-hectare area.

6.2 Koala habitat planning controls

On 7 February 2020, the Queensland Government introduced new planning controls to the Planning Regulation 2017 to strengthen the protection of koala habitat in South East Queensland (i.e. koala district A).

More information on these planning controls can be found here:
https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy.

As a high-level summary, the koala habitat planning controls make:

- development that involves interfering with koala habitat (defined below) in an area that is both a koala priority area and a koala habitat area, prohibited development (i.e. development for which a development application cannot be made);
- development that involves interfering with koala habitat (defined below) in an area that is a koala habitat area but is not a koala priority area, assessable development (i.e. development for which development approval is required); and
- development that is for extractive industries where the development involves interfering with koala habitat (defined below) in an area that is both a koala habitat area and a key resource area, assessable development (i.e. development for which development approval is required).

Interfering with koala habitat means:

1. Removing, cutting down, ringbarking, pushing over, poisoning or destroying in anyway, including by burning, flooding or draining native vegetation in a koala habitat area; but
2. Does not include destroying standing vegetation stock or lopping a tree.

However, these planning controls do not apply if the development is exempted development as defined in Schedule 24 of the Planning Regulation 2017. More information on exempted development can be found here:
https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy.

There are also assessment benchmarks that apply to development applications for:

- building works, operational works, material change of use or reconfiguration of a lot where:

  - the local government planning scheme makes the development assessable;
  - the premises includes an area that is both a koala priority area and a koala habitat area; and
  - the development does not involve interfering with koala habitat (defined above); and

- development in identified koala broad-hectare areas.

The Guideline - Assessment Benchmarks in relation to Koala Habitat in South East Queensland assessment benchmarks outlines these assessment benchmarks, the intent of these assessment benchmarks and advice on how proposed development may meet these assessment benchmarks.

6.3 Koala Conservation Plan clearing requirements

Section 10 and 11 of the Nature Conservation (Koala) Conservation Plan 2017 prescribes requirements that must be met when clearing koala habitat in koala district A and koala district B.

These clearing requirements are independent to the koala habitat planning controls introduced into the Planning Regulation 2017, which means they must be complied with irrespective of any approvals or exemptions offered under other legislation.

Unlike the clearing controls prescribed in the Planning Regulation 2017 that are to protect koala habitat, the clearing requirements prescribed in the Nature Conservation (Koala) Conservation Plan 2017 are in place to prevent the injury or death of koalas when koala habitat is being cleared.

6.4 Contact information for DESI

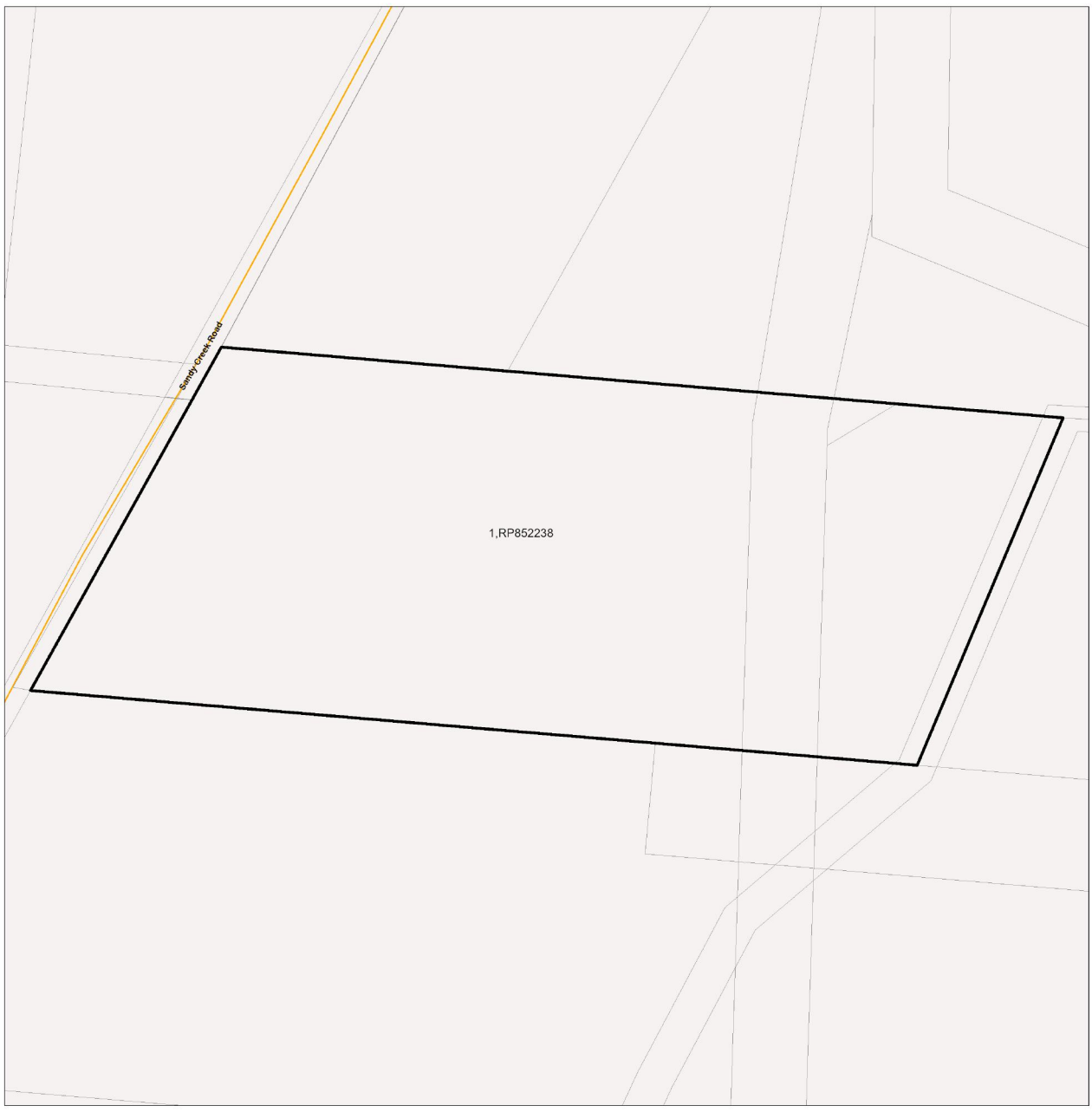
For further information on the koala protection framework:
Phone 13 QGOV (13 74 68)
Email koala.assessment@des.qld.gov.au
Visit https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping

7. Koala protection framework details for Lot: 1 Plan: RP852238

7.1 Koala districts

Koala District C

7.2 Koala priority area, koala habitat area and identified koala broad-hectare map

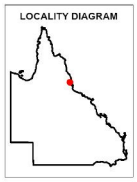


Koala priority area, koala habitat area and identified koala broad-hectare area map

- Koala habitat area (core)
- Koala habitat area (locally refined)
- Koala priority area
- Identified koala broad-hectare area
- Cadastral Boundaries
- Towns
- Major rivers/creeks
- Highway
- Connector
- Street/Local Road
- Queensland
- Selected Lot and Plan

The koala habitat mapping within South East Queensland uses regional ecosystem linework compiled at a scale varying from 1:25,000 to 1:100,000. Linework should be used as a guide only. The positional accuracy of regional ecosystem data mapped at a scale of 1:100,000 is +/- 100 metres.

LOCALITY DIAGRAM



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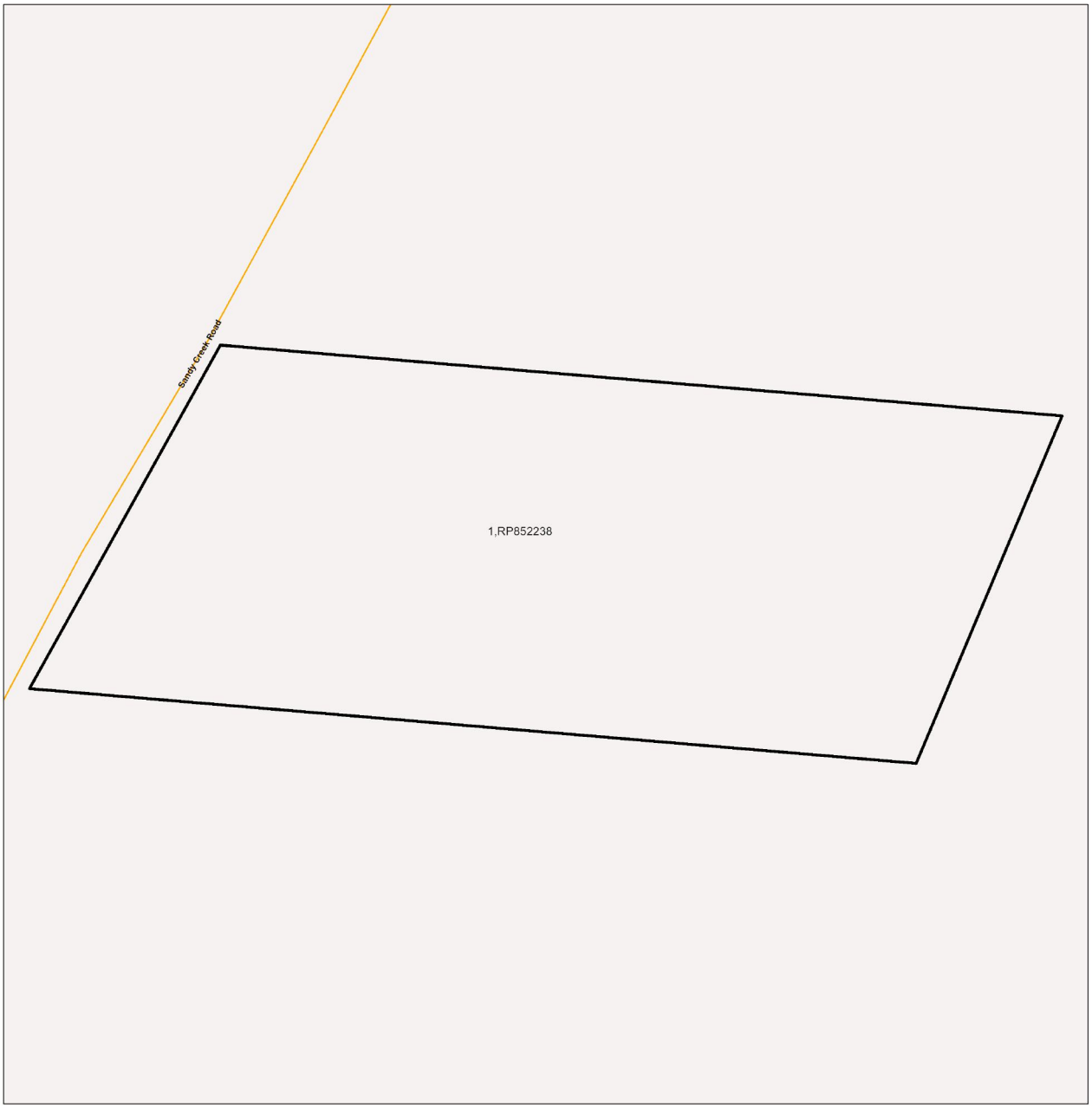
The koala conservation plan maps will be updated at least annually to include any koala habitat areas that have been made, amended or revoked.

In order to ensure that the most recent map for an area of interest can be accessed, prior to the annual update, a register of changes made to koala habitat areas as a result of the map amendment process will be available at: https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/. The register will include lot on plan for the change, the date the decision was made and the map issued to the landholder which shows areas determined to be koala habitat areas.

7.3 Koala habitat regional ecosystems for core koala habitat areas



Koala habitat regional ecosystems for core koala habitat areas

Koala habitat area (core)
Towns
Highway
Connector
Street/Local Road
Major rivers/creeks
Queensland
Selected Lot and Plan

LOCALITY DIAGRAM

N

0 47.5 95 142.5 190 237.5 m

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8. Other relevant legislation contacts list

Activity	Legislation	Agency	Contact details
• Interference with overland flow • Earthworks, significant disturbance	*Water Act 2000* *Soil Conservation Act 1986*	Department of Regional Development, Manufacturing and Water (Queensland Government) Department of Resources (Queensland Government)	Ph: 13 QGOV (13 74 68) www.rdmw.qld.gov.au/ www.resources.qld.gov.au
• Indigenous Cultural Heritage	*Aboriginal Cultural Heritage Act 2003* *Torres Strait Islander Cultural Heritage Act 2003*	Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships	Ph: 13 QGOV (13 74 68) www.datsip.qld.gov.au
• Mining and environmentally relevant activities • Infrastructure development (coastal) • Heritage issues	*Environmental Protection Act 1994* *Coastal Protection and Management Act 1995* *Queensland Heritage Act 1992*	Department of Environment, Science and Innovation (Queensland Government)	Ph: 13 QGOV (13 74 68) www.des.qld.gov.au
• Protected plants and protected areas	*Nature Conservation Act 1992*	Department of Environment, Science and Innovation (Queensland Government)	Ph: 1300 130 372 (option 4) palm@des.qld.gov.au www.des.qld.gov.au
• Koala mapping and regulations	*Nature Conservation Act 1992*	Department of Environment, Science and Innovation (Queensland Government)	Ph: 13 QGOV (13 74 68) Koala.assessment@des.qld.gov.au
• Interference with fish passage in a watercourse, mangroves • Forestry activities on State land tenures	*Fisheries Act 1994* *Forestry Act 1959*	Department of Agriculture and Fisheries (Queensland Government)	Ph: 13 QGOV (13 74 68) www.daf.qld.gov.au
• Matters of National Environmental Significance including listed threatened species and ecological communities	*Environment Protection and Biodiversity Conservation Act 1999*	Department of Agriculture, Water and the Environment (Australian Government)	Ph: 1800 803 772 www.environment.gov.au
• Development and planning processes	*Planning Act 2016* *State Development and Public Works Organisation Act 1971*	Department of State Development, Infrastructure, Local Government and Planning (Queensland Government)	Ph: 13 QGOV (13 74 68) www.dsdmip.qld.gov.au
• Local government requirements	*Local Government Act 2009* *Planning Act 2016*	Department of State Development, Infrastructure, Local Government and Planning (Queensland Government)	Ph: 13 QGOV (13 74 68) Your relevant local government office
• Harvesting timber in the Wet Tropics of Qld World Heritage area	*Wet Tropics World Heritage Protection and Management Act 1993*	Wet Tropics Management Authority	Ph: (07) 4241 0500 https://www.wettropics.gov.au/

Queensland Government

Department of the Environment, Tourism, Science and Innovation

Environmental Reports

Matters of State Environmental Significance

For the selected area of interest

Lot: 1 Plan: RP735276

Environmental Reports - General Information

The Environmental Reports portal provides for the assessment of selected matters of interest relevant to a user specified location, or area of interest (AOI). All area and derivative figures are relevant to the extent of matters of interest contained within the AOI unless otherwise stated. Please note, if a user selects an AOI via the "central coordinates" option, the resulting assessment area encompasses an area extending for a 2km radius from the point of interest.

All area and area derived figures included in this report have been calculated via reprojecting relevant spatial features to Albers equal-area conic projection (central meridian = 146, datum Geocentric Datum of Australia 2020). As a result, area figures may differ slightly if calculated for the same features using a different co-ordinate system.

Figures in tables may be affected by rounding.

The matters of interest reported on in this document are based upon available state mapped datasets. Where the report indicates that a matter of interest is not present within the AOI (e.g. where area related calculations are equal to zero, or no values are listed), this may be due either to the fact that state mapping has not been undertaken for the AOI, that state mapping is incomplete for the AOI, or that no values have been identified within the site.

The information presented in this report should be considered as a guide only and a field survey may be required to validate values on the ground.

Please direct queries about these reports to: Planning.Support@des.qld.gov.au

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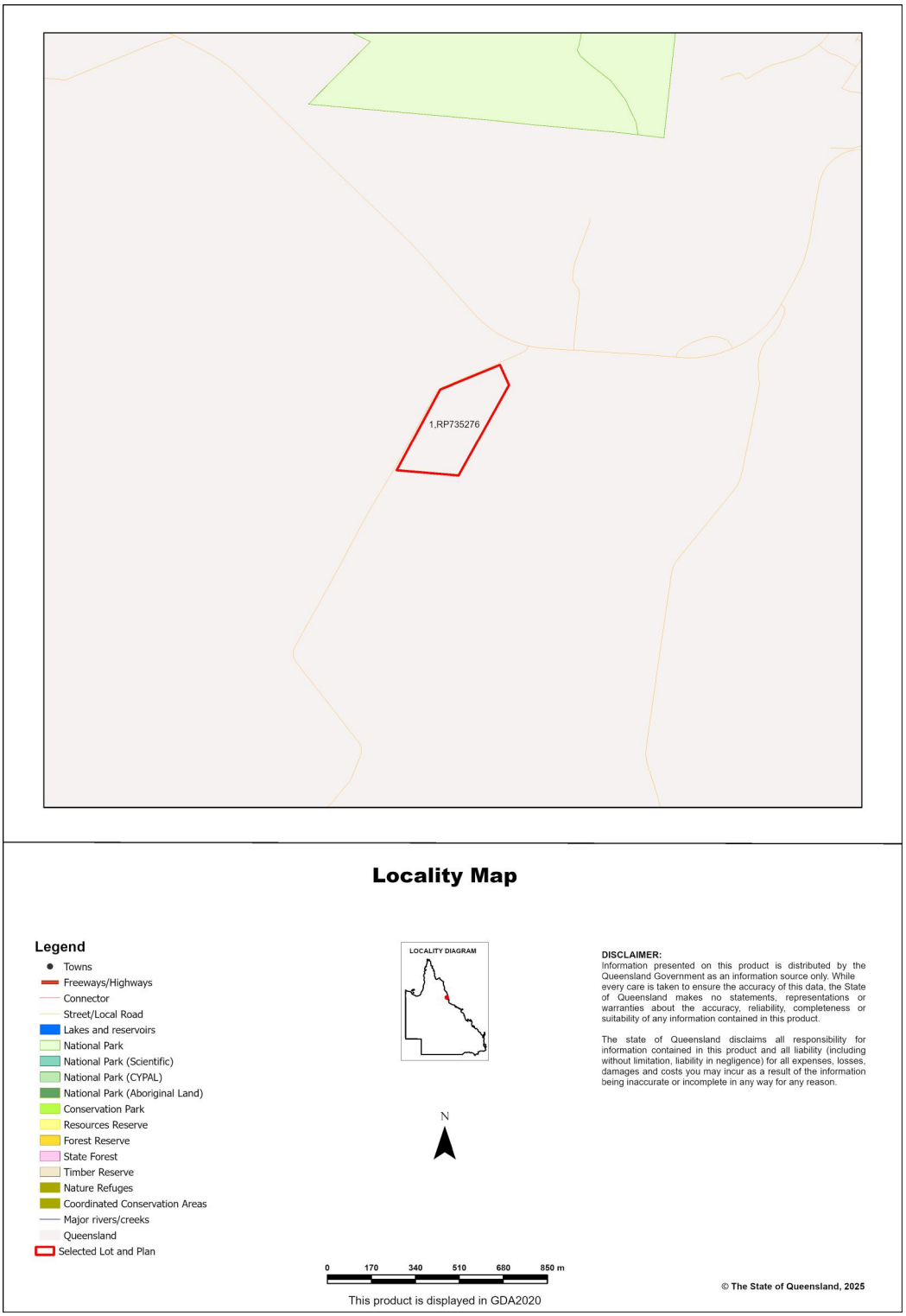
Assessment Area Details

The following table provides an overview of the area of interest (AOI) with respect to selected topographic and environmental values.

Table 1: Summary table, details for AOI: Lot: 1 Plan: RP735276, with area 8.96 ha

Local Government(s)	Catchment(s)	Bioregion(s)	Subregion(s)
Cassowary Coast Regional	Tully	Wet Tropics	Tully



Matters of State Environmental Significance (MSES)

MSES Categories

Queensland's State Planning Policy (SPP) includes a biodiversity State interest that states:

'The sustainable, long-term conservation of biodiversity is supported. Significant impacts on matters of national or state environmental significance are avoided, or where this cannot be reasonably achieved; impacts are minimised and residual impacts offset.'

The MSES mapping product is a guide to assist implementation of the SPP biodiversity policy. While it supports the SPP, the mapping does not replace the regulatory mapping or environmental values specifically called up under other laws or regulations.

The SPP defines matters of state environmental significance as:

- Protected areas (including all classes of protected area except coordinated conservation areas) under the *Nature Conservation Act 1992;*

- Marine parks and land within a 'marine national park', 'conservation park', 'scientific research', 'preservation' or 'buffer' zone under the Marine Parks Act 2004 ;

- Areas within declared fish habitat areas that are management A areas or management B areas under the Fisheries Regulation 2008;

- *Threatened wildlife under the Nature Conservation Act 1992* and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006;

- Regulated vegetation under the *Vegetation Management Act 1999* that is:

  - Category B areas on the regulated vegetation management map, that are 'endangered' or 'of concern' regional ecosystems;
  - Category C areas on the regulated vegetation management map that are 'endangered' or 'of concern' regional ecosystems;
  - Category R areas on the regulated vegetation management map;
  - Regional ecosystems that intersect with watercourses identified on the vegetation management watercourse and drainage feature map;
  - Regional ecosystems that intersect with wetlands identified on the vegetation management wetlands map;

- Strategic Environmental Areas under the *Regional Planning Interests Act 2014* ;

- Wetlands in a wetland protection area of wetlands of high ecological significance shown on the Map of Queensland Wetland Environmental Values under the Environment Protection Regulation 2019;

- Wetlands and watercourses in high ecological value waters defined in the Environmental Protection (Water) Policy 2009, schedule 2;
- Legally secured offset areas.

MSES Values Present

The MSES values that are present in the area of interest are summarised in the table below:

Table 2: Summary of MSES present within the AOI

1a Protected Areas- estates	0 ha	0.0%
1b Protected Areas- nature refuges	0 ha	0.0%
1c Protected Areas- special wildlife reserves	0 ha	0.0%
2 State Marine Parks- highly protected zones	0 ha	0.0%
3 Fish habitat areas (A and B areas)	0 ha	0.0%
4 Strategic Environmental Areas (SEA)	0 ha	0.0%
5 High Ecological Significance wetlands on the Map of Queensland Wetland Environmental Values	1.74 ha	19.4%
6a High Ecological Value (HEV) wetlands	0 ha	0.0%
6b High Ecological Value (HEV) waterways	0 km	Not applicable
7a Threatened (endangered or vulnerable) wildlife	0 ha	0.0%
7b Special least concern animals	0 ha	0.0%
7c i Koala habitat area - core (SEQ)	0 ha	0.0%
7c ii Koala habitat area - locally refined (SEQ)	0 ha	0.0%
7d Sea turtle nesting areas	0 km	Not applicable
8a Regulated Vegetation - Endangered/Of concern in Category B (remnant)	0 ha	0.0%
8b Regulated Vegetation - Endangered/Of concern in Category C (regrowth)	0 ha	0.0%
8c Regulated Vegetation - Category R (GBR riverine regrowth)	2.47 ha	27.6%
8d Regulated Vegetation - Essential habitat	0 ha	0.0%
8e Regulated Vegetation - intersecting a watercourse	0.3 km	Not applicable
8f Regulated Vegetation - within 100m of a Vegetation Management Wetland	1.52 ha	17.0%
9a Legally secured offset areas- offset register areas	0 ha	0.0%
9b Legally secured offset areas- vegetation offsets through a Property Map of Assessable Vegetation	0 ha	0.0%

Additional Information with Respect to MSES Values Present

MSES - State Conservation Areas

1a. Protected Areas - estates

(No results)

1b. Protected Areas - nature refuges

(No results)

1c. Protected Areas - special wildlife reserves

(No results)

2. State Marine Parks - highly protected zones

(No results)

3. Fish habitat areas (A and B areas)

(No results)

Refer to **Map 1 - MSES - State Conservation Areas** for an overview of the relevant MSES.

MSES - Wetlands and Waterways

4. Strategic Environmental Areas (SEA)

(No results)

5. High Ecological Significance wetlands on the Map of Queensland Wetland Environmental Values
Natural wetlands that are 'High Ecological Significance' (HES) on the Map of Queensland Wetland Environmental Values are present.

6a. Wetlands in High Ecological Value (HEV) waters

(no results)

6b. Waterways in High Ecological Value (HEV) waters

(no results)

Refer to **Map 2 - MSES - Wetlands and Waterways** for an overview of the relevant MSES.

MSES - Species

7a. Threatened (endangered or vulnerable) wildlife

Not applicable

7b. Special least concern animals

Not applicable

7c i. Koala habitat area - core (SEQ)

Not applicable

7c ii. Koala habitat area - locally refined (SEQ)

Not applicable

7d. Wildlife habitat (sea turtle nesting areas)

Not applicable

Threatened (endangered or vulnerable) wildlife habitat suitability models

Species	Common name	NCA status	Presence
Boronia keysii	Keys boronia	V	None
Calyptorhynchus lathami	Glossy black cockatoo	V	None
Casuarius casuarius johnsonii	Sthn population cassowary	E	None
Crinia tinnula	Wallum froglet	V	None
Denisonia maculata	Ornamental snake	V	None
Euastacus bindal	Mount Elliot crayfish	CR	None
Euastacus binzayedi		CR	None
Euastacus eungella		E	None
Euastacus hystricosus		E	None
Euastacus jagara	Jagara hairy crayfish	CR	None
Euastacus maidae		CR	None
Euastacus monteithorum		E	None
Euastacus robertsi		E	None
Taudactylus pleione	Kroombit tinkerfrog	E	None
Litoria freycineti	Wallum rocketfrog	V	None
Litoria olongburensis	Wallum sedgefrog	V	None
Macadamia integrifolia		V	None
Melaleuca irbyana	swamp tea-tree	E	None
Macadamia ternifolia		V	None
Macadamia tetraphylla	bopple nut	V	None
Petrogale penicillata	brush-tailed rock-wallaby	V	None
Petrogale coenensis	Cape York rock-wallaby	E	None
Petrogale purpureicollis	purple-necked rock-wallaby	V	None
Petrogale sharmani	Sharmans rock-wallaby	V	None
Petrogale xanthopus celeris	yellow-footed rock-wallaby (Qld subspecies)	V	None
Petaurus gracilis	Mahogany Glider	E	None
Petrogale persephone	Proserpine rock-wallaby	E	None
Phascolarctos cinereus	Koala - outside SEQ*	E	None
Pezoporus wallicus wallicus	Eastern ground parrot	V	None
Xeromys myoides	Water Mouse	V	None

*For koala model, this includes areas outside SEQ. Check 7c SEQ koala habitat for presence/absence.

Threatened (endangered or vulnerable) wildlife species records

(No results)

Special least concern animal species records

(No results)

Shorebird habitat (critically endangered/endangered/vulnerable)

Not applicable

Shorebird habitat (special least concern)

Not applicable

**Nature Conservation Act 1992 (NCA) Status- Endangered (E), Vulnerable (V) or Special Least Concern Animal (SL). Environment Protection and Biodiversity Conservation Act 1999 (EPBC) status: Critically Endangered (CE) Endangered (E), Vulnerable (V)*

Migratory status (M) - China and Australia Migratory Bird Agreement (C), Japan and Australia Migratory Bird Agreement (J), Republic of Korea and Australia Migratory Bird Agreement (R), Bonn Migratory Convention (B), Eastern Flyway (E)

To request a species list for an area, or search for a species profile, access Wildlife Online at:

https://www.qld.gov.au/environment/plants-animals/species-list/

Refer to **Map 3a - MSES - Species - Threatened (endangered or vulnerable) wildlife and special least concern animals** and **Map 3b - MSES - Species - Koala habitat area (SEQ)** and **Map 3c - MSES - Wildlife habitat (sea turtle nesting areas)** for an overview of the relevant MSES.

MSES - Regulated Vegetation

For further information relating to regional ecosystems in general, go to:

https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/

For a more detailed description of a particular regional ecosystem, access the regional ecosystem search page at:

https://environment.ehp.qld.gov.au/regional-ecosystems/

8a. Regulated Vegetation - Endangered/Of concern in Category B (remnant)

Not applicable

8b. Regulated Vegetation - Endangered/Of concern in Category C (regrowth)

Not applicable

8c. Regulated Vegetation - Category R (GBR riverine regrowth)

Regulated vegetation map category	Map number
R	8062

8d. Regulated Vegetation - Essential habitat

Not applicable

8e. Regulated Vegetation - intersecting a watercourse**

A vegetation management watercourse is mapped as present

8f. Regulated Vegetation - within 100m of a Vegetation Management wetland

Regulated vegetation map category	Map number
C	8062
R	8062

Refer to **Map 4 - MSES - Regulated Vegetation** for an overview of the relevant MSES.

MSES - Offsets

9a. Legally secured offset areas - offset register areas

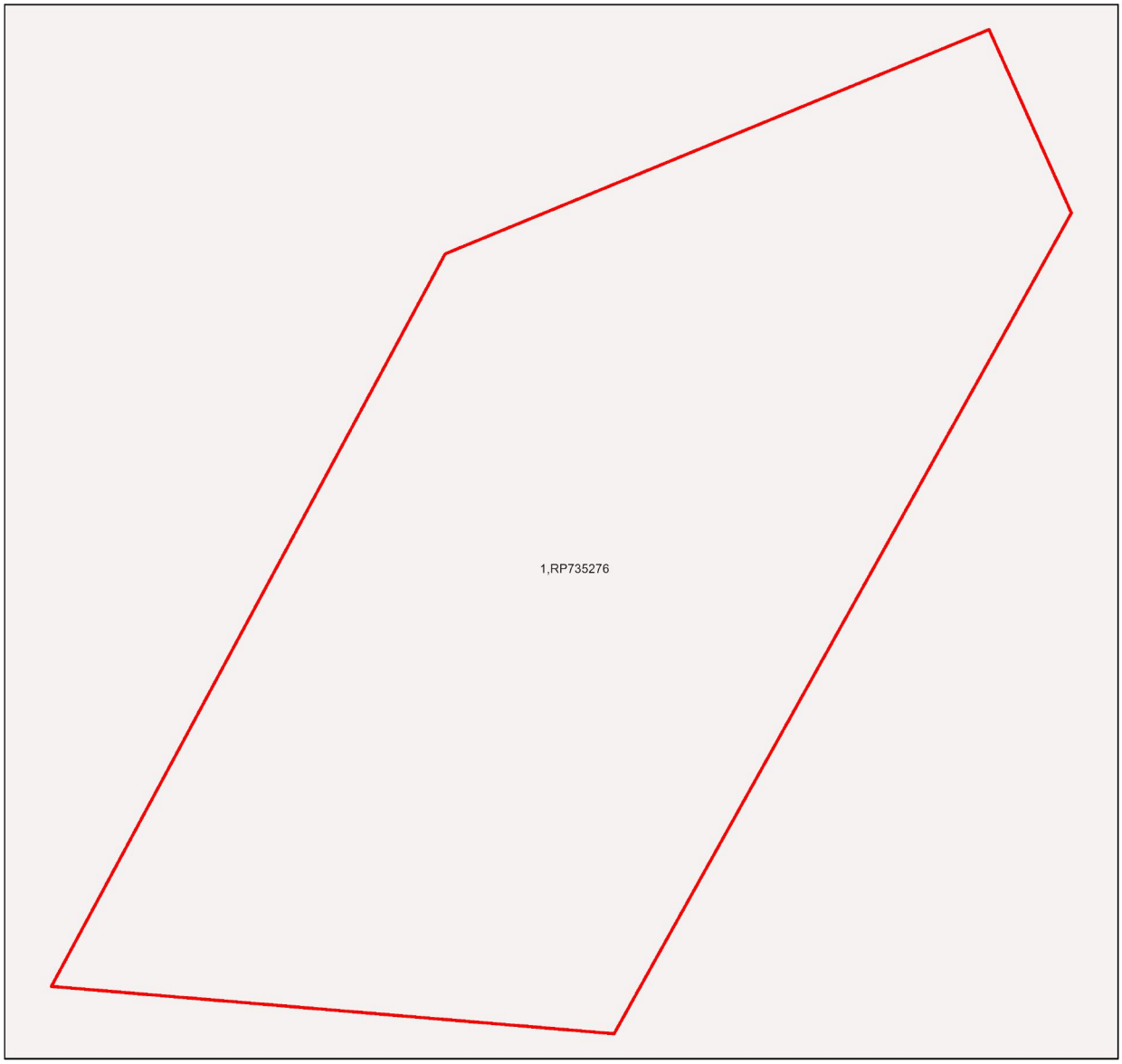
(No results)

9b. Legally secured offset areas - vegetation offsets through a Property Map of Assessable Vegetation

(No results)

Refer to **Map 5 - MSES - Offset Areas** for an overview of the relevant MSES.

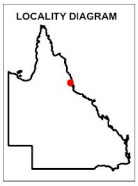
Map 1 - MSES - State Conservation Areas



MSES - State Conservation Areas

- Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- Protected area (estates, nature refuges, special wildlife reserves)
- Declared fish habitat area (A and B areas)
- Marine park (highly protected)
- Selected Lot and Plan

LOCALITY DIAGRAM



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N

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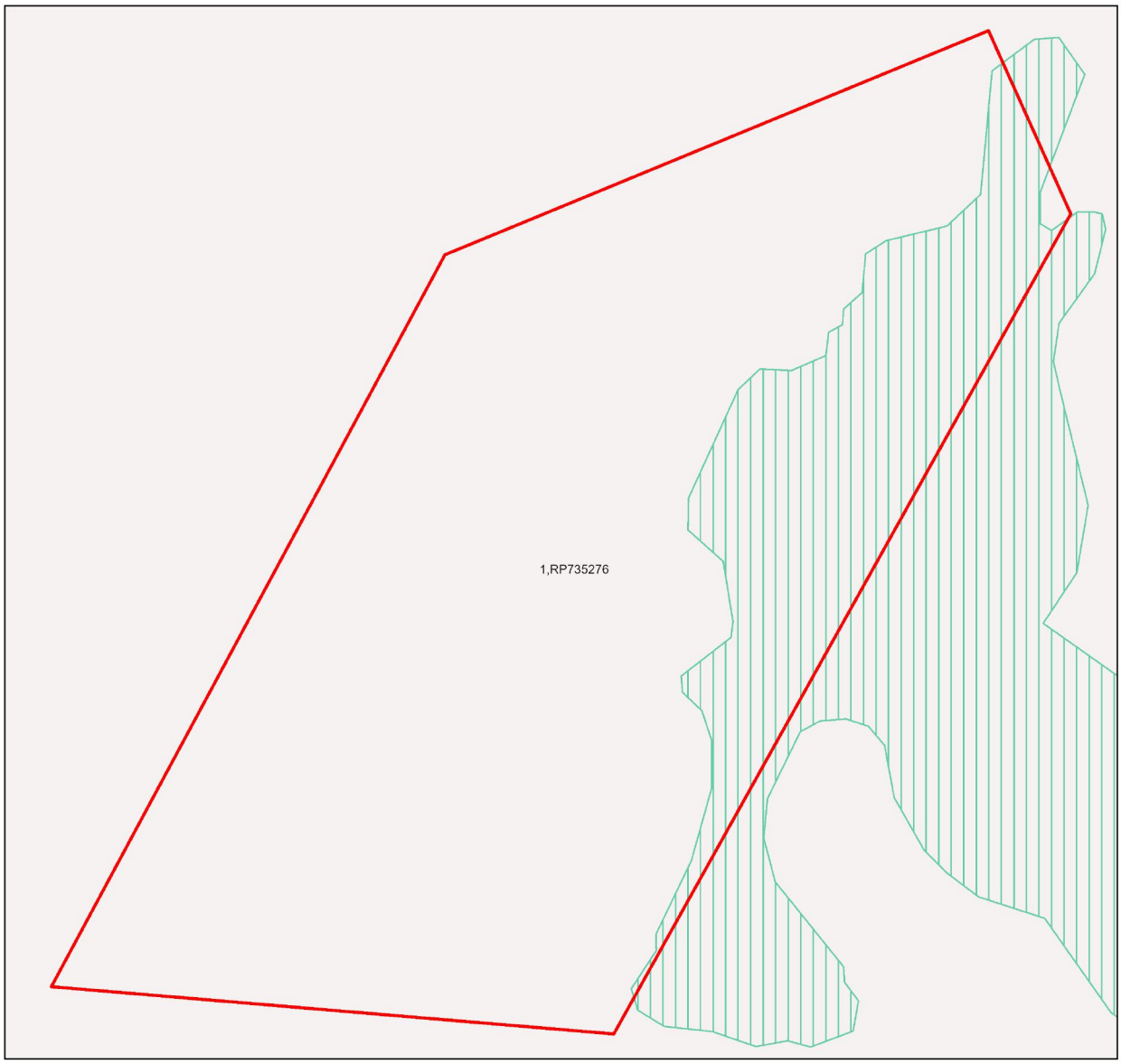
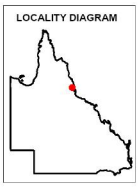
Map 2 - MSES - Wetlands and Waterways



MSES - Wetlands and Waterways

- ▲ Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- Declared high ecological value waters (watercourse)
- Strategic environmental area (designated precinct)
- Declared high ecological value waters (wetland)
- High ecological significance wetlands
- Selected Lot and Plan

LOCALITY DIAGRAM



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0 26 52 78 104 130 m

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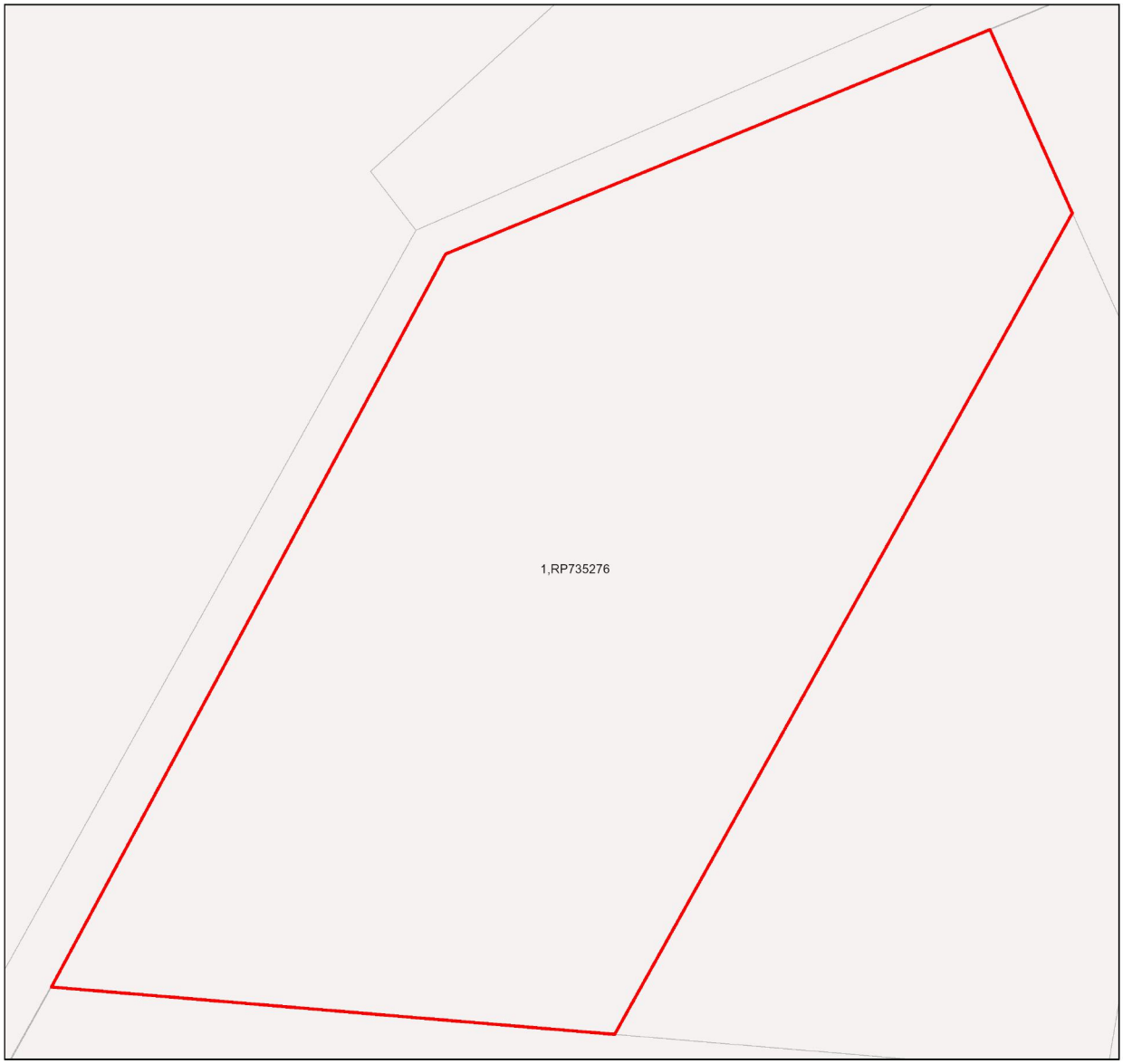
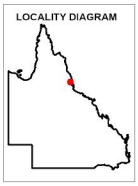
Map 3a - MSES - Species - Threatened (endangered or vulnerable) wildlife and special least concern animals



MSES - Species
Threatened (endangered or vulnerable) wildlife and special least concern animals

- Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- Wildlife habitat (special least concern)
- Wildlife habitat (endangered or vulnerable)
- Selected Lot and Plan



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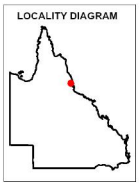
Map 3b - MSES - Species - Koala habitat area (SEQ)

MSES - Species
Koala habitat area (SEQ)

- Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- Koala habitat area (core)
- Koala habitat area (locally refined)
- Selected Lot and Plan

LOCALITY DIAGRAM



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The represented layers for SEQ 'koala habitat area-core' and 'koala habitat area- locally refined' in MSES are sourced directly from the regulatory mapping under the Nature Conservation (Koala) Conservation Plan 2017. Whilst every effort is made to ensure the information remains current, there may be delays between updating versions. Please refer to the original mapping for the most recent version. See https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping

The koala habitat mapping within South East Queensland uses regional ecosystem linework compiled at a scale varying from 1:25,000 to 1:100,000. Linework should be used as a guide only. The positional accuracy of regional ecosystem data mapped at a scale of 1:100,000 is +/- 100 metres.

0 24 48 72 96 120 m

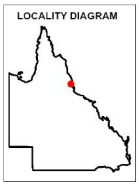
This product is displayed in GDA2020

Map 3c - MSES - Species - Wildlife habitat (sea turtle nesting areas)

MSES - Wildlife habitat (sea turtle nesting areas)

Towns
Freeways/Highways
Secondary roads
Major rivers/creeks
Wildlife habitat (sea turtle nesting areas)
Selected Lot and Plan

LOCALITY DIAGRAM



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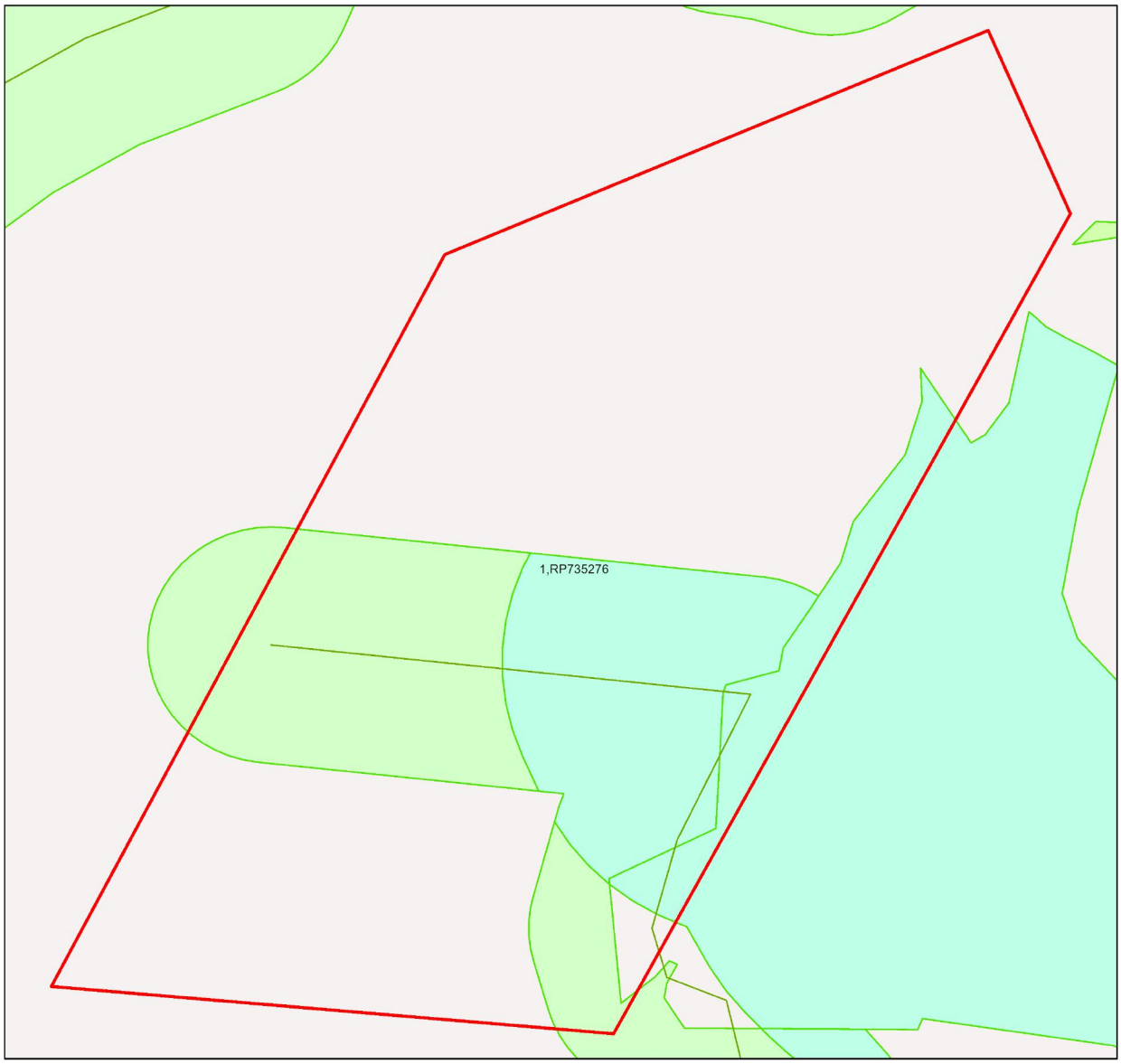
MSES mapping of sea turtle nesting areas identifies beaches where the recorded number of turtle nests are over 1% of the turtle species or genetic stock. The linework is also deliberately extended along nearby rocky coastlines and headlands to recognise that significant numbers of nesting adults and hatchlings can become disoriented by light pollution from development on rocky coastlines and headlands while navigating offshore from nesting beaches.

0 24 48 72 96 120 m

This product is displayed in GDA2020

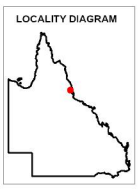
Map 4 - MSES - Regulated Vegetation



MSES - Regulated Vegetation

- ▲ Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- Regulated vegetation (intersecting a watercourse)
- Regulated vegetation (100m from wetland)
- Regulated vegetation (category B - endangered or of concern)
- Regulated vegetation (category C - endangered or of concern)
- Regulated vegetation (category R - GBR riverine)
- Regulated vegetation (essential habitat)
- Selected Lot and Plan

LOCALITY DIAGRAM



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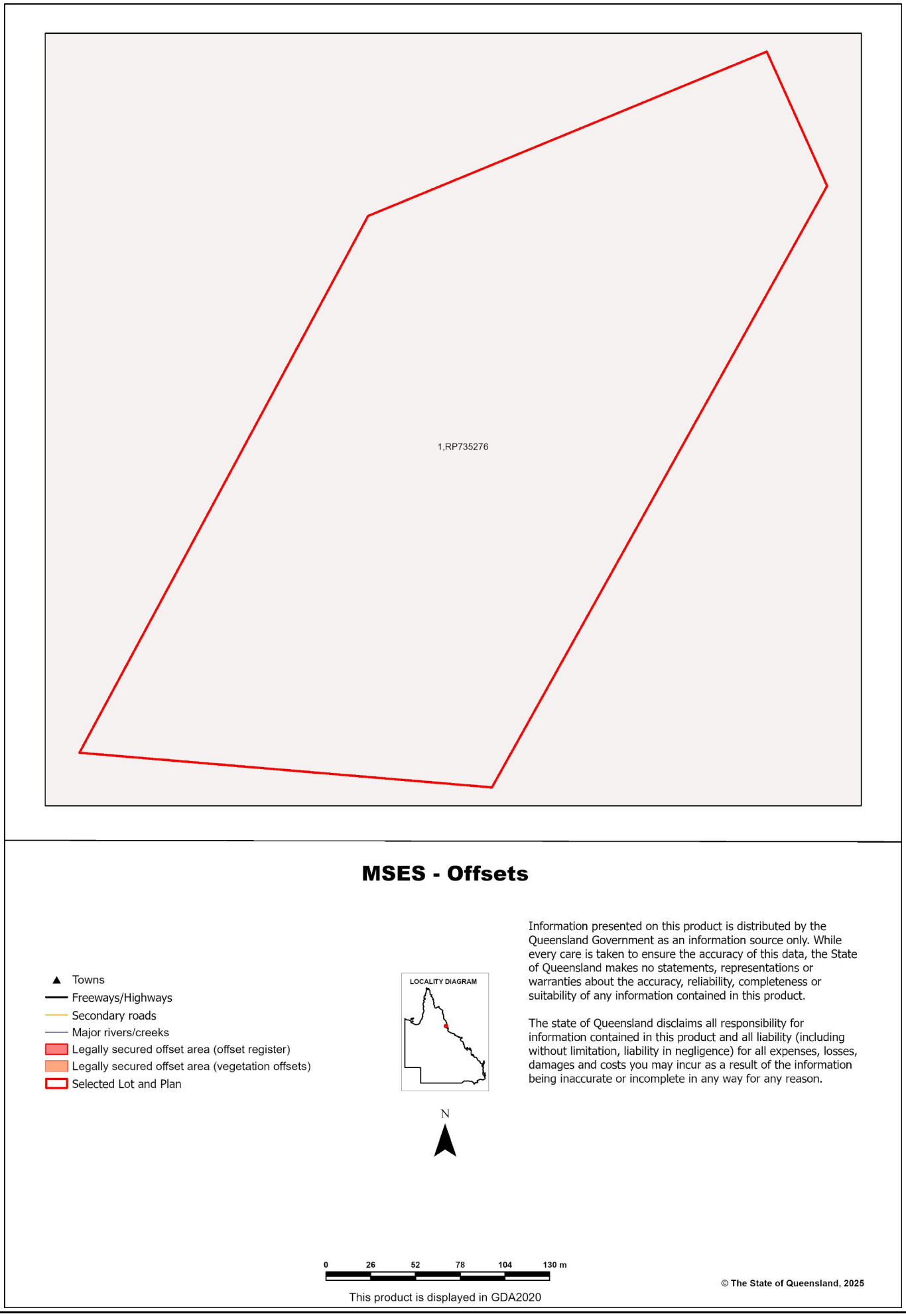
0 26 52 78 104 130 m

This product is displayed in GDA2020

Map 5 - MSES - Offset Areas



Appendices

Appendix 1 - Matters of State Environmental Significance (MSES) methodology

MSES mapping is a regional-scale representation of the definition for MSES under the State Planning Policy (SPP). Its primary purpose is to support implementation of the SPP biodiversity policy.

MSES mapping does not replace the regulatory mapping or environmental values specifically called up under other laws or regulations.

MSES mapping does not determine whether state or local development assessment is required. For state assessment triggers refer to the Development Assessment Mapping System (DAMS). For local assessment triggers, refer to the relevant local planning scheme.

The Queensland Government's "Method for mapping - matters of state environmental significance can be downloaded from:

http://www.ehp.qld.gov.au/land/natural-resource/method-mapping-mses.html .

Appendix 2 - Source Data

The datasets listed below are available on request from:

http://qldspatial.information.qld.gov.au/catalogue/custom/index.page

- Matters of State environmental significance

Note: MSES mapping is not based on new or unique data. The primary mapping product draws data from a number of underlying environment databases and geo-referenced information sources. MSES mapping is a versioned product that is updated generally on a twice-yearly basis to incorporate the changes to underlying data sources. Several components of MSES mapping made for the current version may differ from the current underlying data sources. To ensure accuracy, or proper representation of MSES values, it is strongly recommended that users refer to the underlying data sources and review the current definition of MSES in the State Planning Policy, before applying the MSES mapping.

Individual MSES layers can be attributed to the following source data available at QSpatial:

MSES layers	**current QSpatial data (http://qspatial.information.qld.gov.au)**
Protected Areas-Estates, Nature Refuges, Special Wildlife Reserves	- Protected areas of Queensland - Nature Refuges - Queensland - Special Wildlife Reserves- Queensland
Marine Park-Highly Protected Zones	Moreton Bay marine park zoning 2008
Fish Habitat Areas	Queensland fish habitat areas
Strategic Environmental Areas-designated	Regional Planning Interests Act - Strategic Environmental Areas
HES wetlands	Map of Queensland Wetland Environmental Values
Wetlands in HEV waters	HEV waters: - EPP Water intent for waters Source Wetlands: - Queensland Wetland Mapping (Current version 5) Source Watercourses: - Vegetation management watercourse and drainage feature map (1:100000 and 1:250000)
Wildlife habitat (threatened and special least concern)	-WildNet database species records - habitat suitability models (various) - SEQ koala habitat areas under the Koala Conservation Plan 2019
VMA regulated regional ecosystems	Vegetation management regional ecosystem and remnant map
VMA Essential Habitat	Vegetation management - essential habitat map
VMA Wetlands	Vegetation management wetlands map
Legally secured offsets	Vegetation Management Act property maps of assessable vegetation. For offset register data-contact DETSI
Regulated Vegetation Map	Vegetation management - regulated vegetation management map

Appendix 3 - Acronyms and Abbreviations

AOI	- Area of Interest
DETSI	- Department of the Environment, Tourism, Science and Innovation
EP Act	- Environmental Protection Act 1994
EPP	- Environmental Protection Policy
GDA2020	- Geocentric Datum of Australia 2020
GEM	- General Environmental Matters
GIS	- Geographic Information System
MSES	- Matters of State Environmental Significance
NCA	- Nature Conservation Act 1992
RE	- Regional Ecosystem
SPP	- State Planning Policy
VMA	- Vegetation Management Act 1999

Queensland Government

Department of the Environment, Tourism, Science and Innovation

Environmental Reports

Matters of State Environmental Significance

For the selected area of interest

Lot: 1 Plan: RP852238

Environmental Reports - General Information

The Environmental Reports portal provides for the assessment of selected matters of interest relevant to a user specified location, or area of interest (AOI). All area and derivative figures are relevant to the extent of matters of interest contained within the AOI unless otherwise stated. Please note, if a user selects an AOI via the "central coordinates" option, the resulting assessment area encompasses an area extending for a 2km radius from the point of interest.

All area and area derived figures included in this report have been calculated via reprojecting relevant spatial features to Albers equal-area conic projection (central meridian = 146, datum Geocentric Datum of Australia 2020). As a result, area figures may differ slightly if calculated for the same features using a different co-ordinate system.

Figures in tables may be affected by rounding.

The matters of interest reported on in this document are based upon available state mapped datasets. Where the report indicates that a matter of interest is not present within the AOI (e.g. where area related calculations are equal to zero, or no values are listed), this may be due either to the fact that state mapping has not been undertaken for the AOI, that state mapping is incomplete for the AOI, or that no values have been identified within the site.

The information presented in this report should be considered as a guide only and a field survey may be required to validate values on the ground.

Please direct queries about these reports to: Planning.Support@des.qld.gov.au

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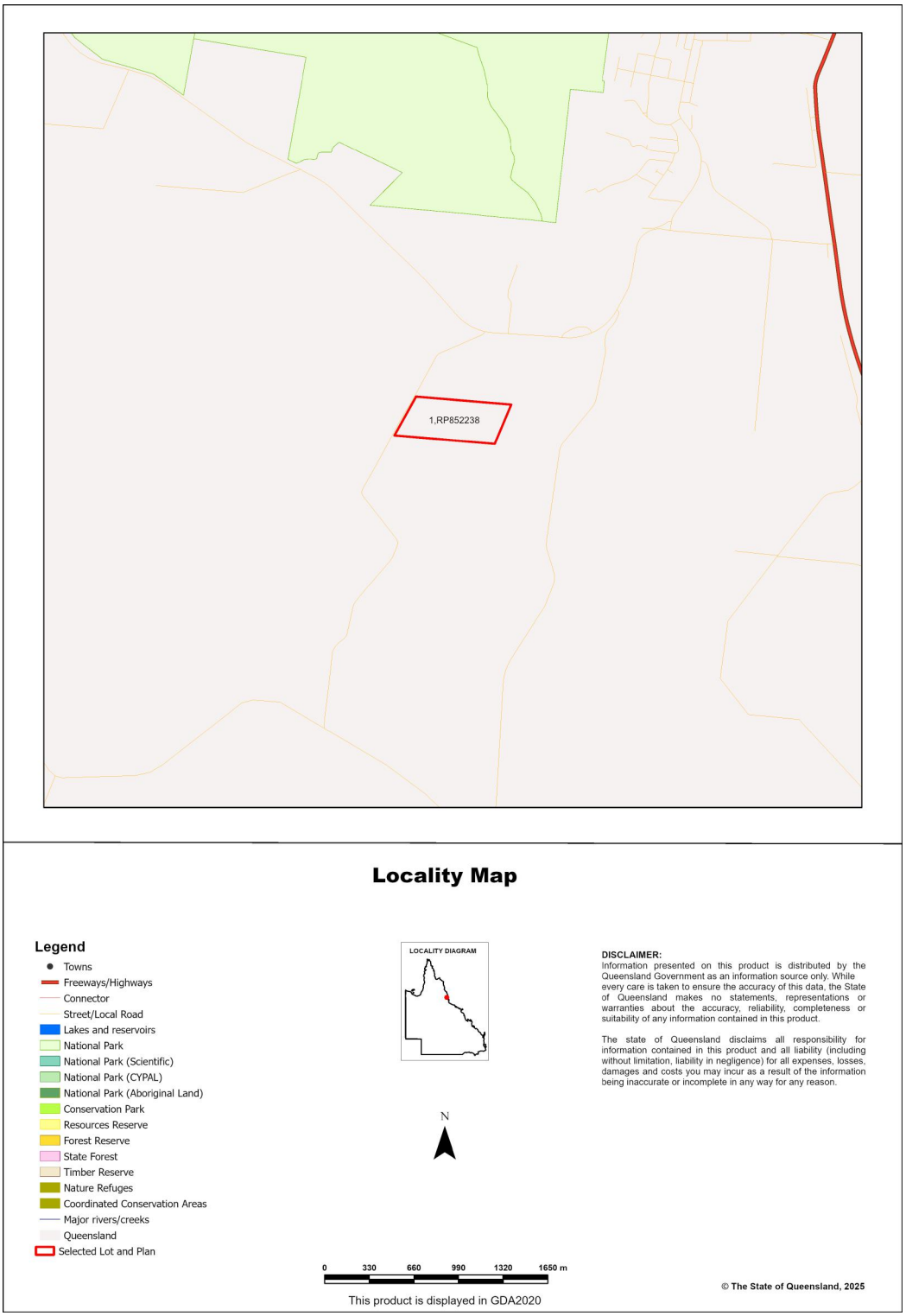
Table of Contents

Assessment Area Details

The following table provides an overview of the area of interest (AOI) with respect to selected topographic and environmental values.

Table 1: Summary table, details for AOI: Lot: 1 Plan: RP852238, with area 20.61 ha

Local Government(s)	Catchment(s)	Bioregion(s)	Subregion(s)
Cassowary Coast Regional	Tully	Wet Tropics	Tully



Matters of State Environmental Significance (MSES)

MSES Categories

Queensland's State Planning Policy (SPP) includes a biodiversity State interest that states:

'The sustainable, long-term conservation of biodiversity is supported. Significant impacts on matters of national or state environmental significance are avoided, or where this cannot be reasonably achieved; impacts are minimised and residual impacts offset.'

The MSES mapping product is a guide to assist implementation of the SPP biodiversity policy. While it supports the SPP, the mapping does not replace the regulatory mapping or environmental values specifically called up under other laws or regulations.

The SPP defines matters of state environmental significance as:

- Protected areas (including all classes of protected area except coordinated conservation areas) under the *Nature Conservation Act 1992;*

- Marine parks and land within a 'marine national park', 'conservation park', 'scientific research', 'preservation' or 'buffer' zone under the Marine Parks Act 2004 ;

- Areas within declared fish habitat areas that are management A areas or management B areas under the Fisheries Regulation 2008;

- *Threatened wildlife under the Nature Conservation Act 1992* and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006;

- Regulated vegetation under the *Vegetation Management Act 1999* that is:

  - Category B areas on the regulated vegetation management map, that are 'endangered' or 'of concern' regional ecosystems;
  - Category C areas on the regulated vegetation management map that are 'endangered' or 'of concern' regional ecosystems;
  - Category R areas on the regulated vegetation management map;
  - Regional ecosystems that intersect with watercourses identified on the vegetation management watercourse and drainage feature map;
  - Regional ecosystems that intersect with wetlands identified on the vegetation management wetlands map;

- Strategic Environmental Areas under the *Regional Planning Interests Act 2014* ;

- Wetlands in a wetland protection area of wetlands of high ecological significance shown on the Map of Queensland Wetland Environmental Values under the Environment Protection Regulation 2019;

- Wetlands and watercourses in high ecological value waters defined in the Environmental Protection (Water) Policy 2009, schedule 2;
- Legally secured offset areas.

MSES Values Present

The MSES values that are present in the area of interest are summarised in the table below:

Table 2: Summary of MSES present within the AOI

1a Protected Areas- estates	0 ha	0.0%
1b Protected Areas- nature refuges	0 ha	0.0%
1c Protected Areas- special wildlife reserves	0 ha	0.0%
2 State Marine Parks- highly protected zones	0 ha	0.0%
3 Fish habitat areas (A and B areas)	0 ha	0.0%
4 Strategic Environmental Areas (SEA)	0 ha	0.0%
5 High Ecological Significance wetlands on the Map of Queensland Wetland Environmental Values	0.81 ha	3.9%
6a High Ecological Value (HEV) wetlands	0 ha	0.0%
6b High Ecological Value (HEV) waterways	0 km	Not applicable
7a Threatened (endangered or vulnerable) wildlife	0 ha	0.0%
7b Special least concern animals	0 ha	0.0%
7c i Koala habitat area - core (SEQ)	0 ha	0.0%
7c ii Koala habitat area - locally refined (SEQ)	0 ha	0.0%
7d Sea turtle nesting areas	0 km	Not applicable
8a Regulated Vegetation - Endangered/Of concern in Category B (remnant)	0 ha	0.0%
8b Regulated Vegetation - Endangered/Of concern in Category C (regrowth)	0 ha	0.0%
8c Regulated Vegetation - Category R (GBR riverine regrowth)	4.15 ha	20.1%
8d Regulated Vegetation - Essential habitat	0 ha	0.0%
8e Regulated Vegetation - intersecting a watercourse	0.4 km	Not applicable
8f Regulated Vegetation - within 100m of a Vegetation Management Wetland	2.27 ha	11.0%
9a Legally secured offset areas- offset register areas	0 ha	0.0%
9b Legally secured offset areas- vegetation offsets through a Property Map of Assessable Vegetation	0 ha	0.0%

Additional Information with Respect to MSES Values Present

MSES - State Conservation Areas

1a. Protected Areas - estates

(No results)

1b. Protected Areas - nature refuges

(No results)

1c. Protected Areas - special wildlife reserves

(No results)

2. State Marine Parks - highly protected zones

(No results)

3. Fish habitat areas (A and B areas)

(No results)

Refer to **Map 1 - MSES - State Conservation Areas** for an overview of the relevant MSES.

MSES - Wetlands and Waterways

4. Strategic Environmental Areas (SEA)

(No results)

5. High Ecological Significance wetlands on the Map of Queensland Wetland Environmental Values
Natural wetlands that are 'High Ecological Significance' (HES) on the Map of Queensland Wetland Environmental Values are present.

6a. Wetlands in High Ecological Value (HEV) waters

(no results)

6b. Waterways in High Ecological Value (HEV) waters

(no results)

Refer to **Map 2 - MSES - Wetlands and Waterways** for an overview of the relevant MSES.

MSES - Species

7a. Threatened (endangered or vulnerable) wildlife

Not applicable

7b. Special least concern animals

Not applicable

7c i. Koala habitat area - core (SEQ)

Not applicable

7c ii. Koala habitat area - locally refined (SEQ)

Not applicable

7d. Wildlife habitat (sea turtle nesting areas)

Not applicable

Threatened (endangered or vulnerable) wildlife habitat suitability models

Species	Common name	NCA status	Presence
Boronia keysii	Keys boronia	V	None
Calyptorhynchus lathami	Glossy black cockatoo	V	None
Casuarius casuarius johnsonii	Sthn population cassowary	E	None
Crinia tinnula	Wallum froglet	V	None
Denisonia maculata	Ornamental snake	V	None
Euastacus bindal	Mount Elliot crayfish	CR	None
Euastacus binzayedi		CR	None
Euastacus eungella		E	None
Euastacus hystricosus		E	None
Euastacus jagara	Jagara hairy crayfish	CR	None
Euastacus maidae		CR	None
Euastacus monteithorum		E	None
Euastacus robertsi		E	None
Taudactylus pleione	Kroombit tinkerfrog	E	None
Litoria freycineti	Wallum rocketfrog	V	None
Litoria olongburensis	Wallum sedgefrog	V	None
Macadamia integrifolia		V	None
Melaleuca irbyana	swamp tea-tree	E	None
Macadamia ternifolia		V	None
Macadamia tetraphylla	bopple nut	V	None
Petrogale penicillata	brush-tailed rock-wallaby	V	None
Petrogale coenensis	Cape York rock-wallaby	E	None
Petrogale purpureicollis	purple-necked rock-wallaby	V	None
Petrogale sharmani	Sharmans rock-wallaby	V	None
Petrogale xanthopus celeris	yellow-footed rock-wallaby (Qld subspecies)	V	None
Petaurus gracilis	Mahogany Glider	E	None
Petrogale persephone	Proserpine rock-wallaby	E	None
Phascolarctos cinereus	Koala - outside SEQ*	E	None
Pezoporus wallicus wallicus	Eastern ground parrot	V	None
Xeromys myoides	Water Mouse	V	None

*For koala model, this includes areas outside SEQ. Check 7c SEQ koala habitat for presence/absence.

Threatened (endangered or vulnerable) wildlife species records

(No results)

Special least concern animal species records

(No results)

Shorebird habitat (critically endangered/endangered/vulnerable)

Not applicable

Shorebird habitat (special least concern)

Not applicable

**Nature Conservation Act 1992 (NCA) Status- Endangered (E), Vulnerable (V) or Special Least Concern Animal (SL). Environment Protection and Biodiversity Conservation Act 1999 (EPBC) status: Critically Endangered (CE) Endangered (E), Vulnerable (V)*

Migratory status (M) - China and Australia Migratory Bird Agreement (C), Japan and Australia Migratory Bird Agreement (J), Republic of Korea and Australia Migratory Bird Agreement (R), Bonn Migratory Convention (B), Eastern Flyway (E)

To request a species list for an area, or search for a species profile, access Wildlife Online at:

https://www.qld.gov.au/environment/plants-animals/species-list/

Refer to **Map 3a - MSES - Species - Threatened (endangered or vulnerable) wildlife and special least concern animals** and **Map 3b - MSES - Species - Koala habitat area (SEQ)** and **Map 3c - MSES - Wildlife habitat (sea turtle nesting areas)** for an overview of the relevant MSES.

MSES - Regulated Vegetation

For further information relating to regional ecosystems in general, go to:

https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/

For a more detailed description of a particular regional ecosystem, access the regional ecosystem search page at:

https://environment.ehp.qld.gov.au/regional-ecosystems/

8a. Regulated Vegetation - Endangered/Of concern in Category B (remnant)

Not applicable

8b. Regulated Vegetation - Endangered/Of concern in Category C (regrowth)

Not applicable

8c. Regulated Vegetation - Category R (GBR riverine regrowth)

Regulated vegetation map category	Map number
R	8062

8d. Regulated Vegetation - Essential habitat

Not applicable

8e. Regulated Vegetation - intersecting a watercourse**

A vegetation management watercourse is mapped as present

8f. Regulated Vegetation - within 100m of a Vegetation Management wetland

Regulated vegetation map category	Map number
C	8062
R	8062

Refer to **Map 4 - MSES - Regulated Vegetation** for an overview of the relevant MSES.

MSES - Offsets

9a. Legally secured offset areas - offset register areas

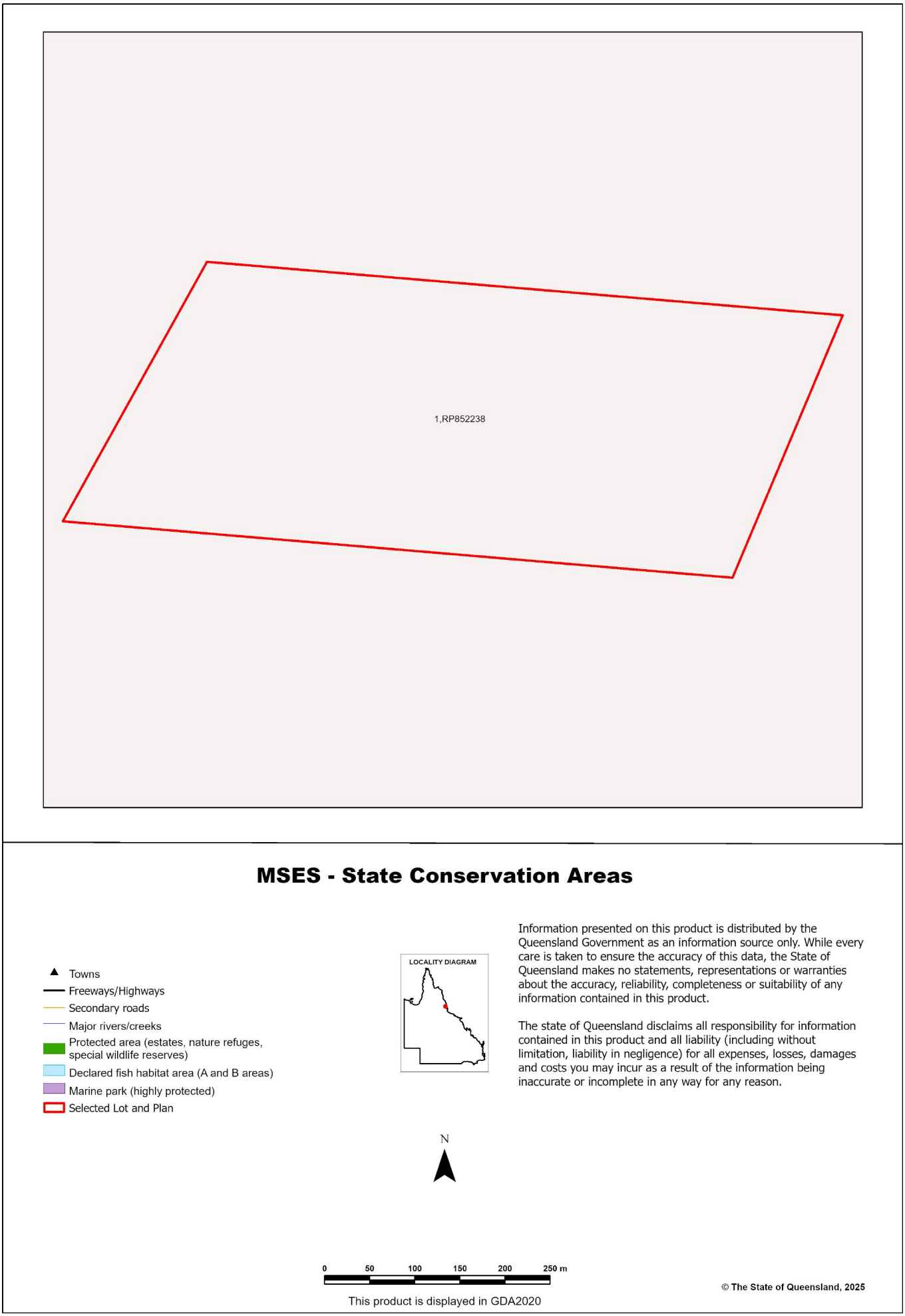
(No results)

9b. Legally secured offset areas - vegetation offsets through a Property Map of Assessable Vegetation

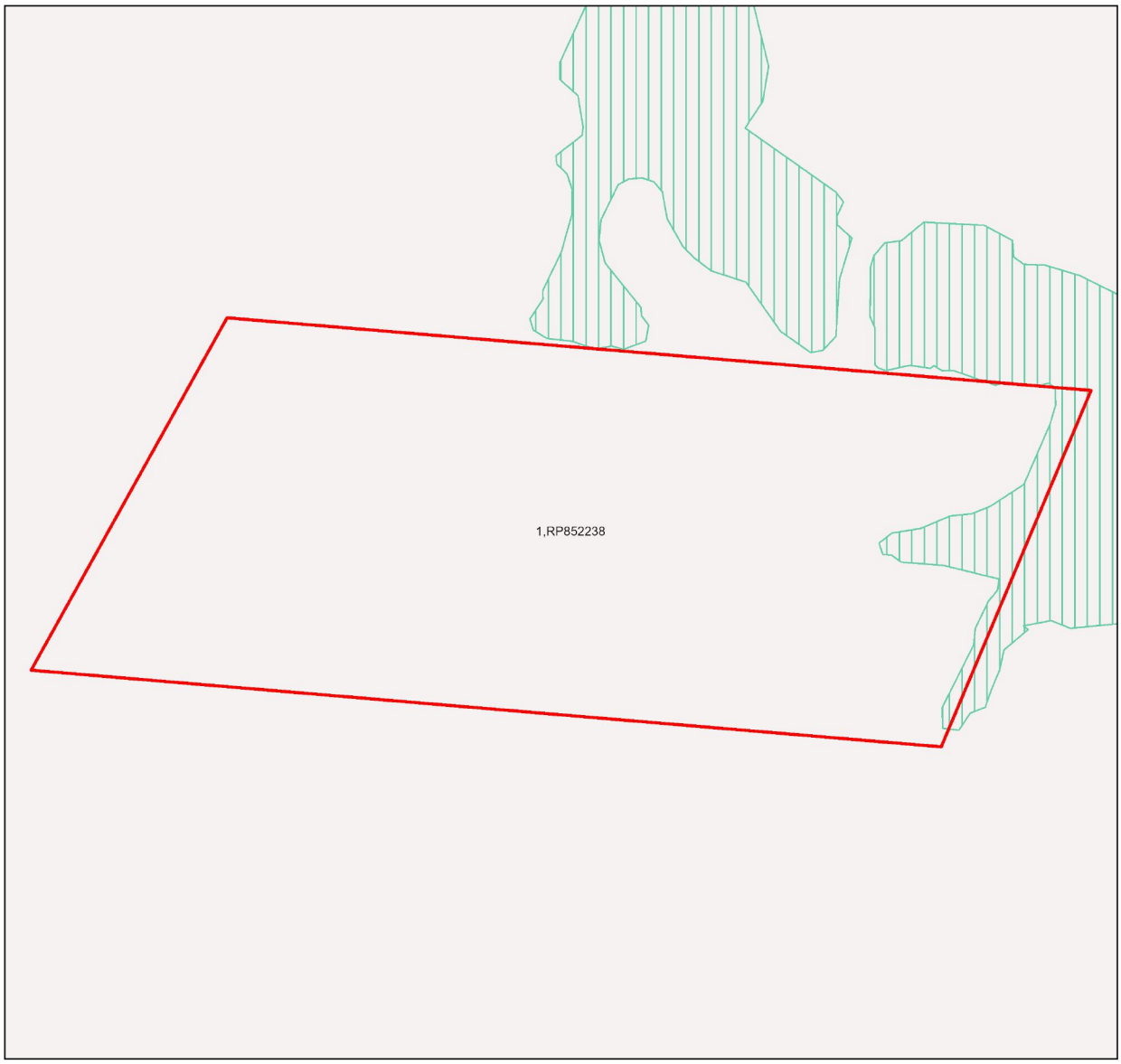
(No results)

Refer to **Map 5 - MSES - Offset Areas** for an overview of the relevant MSES.

Map 1 - MSES - State Conservation Areas



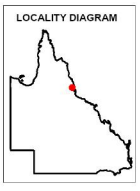
Map 2 - MSES - Wetlands and Waterways



MSES - Wetlands and Waterways

- ▲ Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- Declared high ecological value waters (watercourse)
- Strategic environmental area (designated precinct)
- Declared high ecological value waters (wetland)
- High ecological significance wetlands
- Selected Lot and Plan

LOCALITY DIAGRAM



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0 50 100 150 200 250 m

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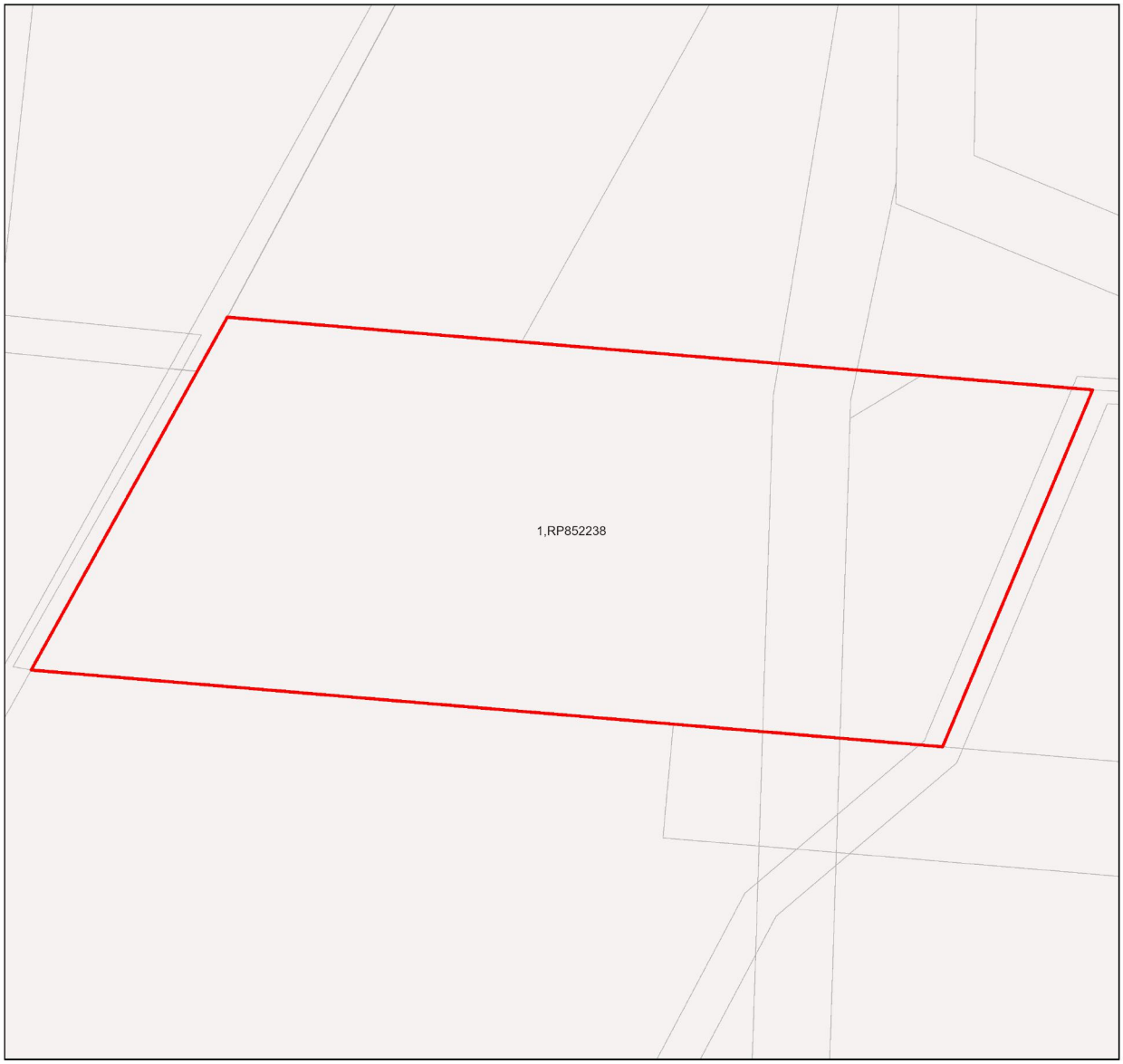
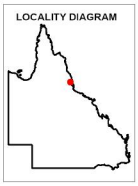
Map 3a - MSES - Species - Threatened (endangered or vulnerable) wildlife and special least concern animals



MSES - Species
Threatened (endangered or vulnerable) wildlife and special least concern animals

- ▲ Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- Wildlife habitat (special least concern)
- Wildlife habitat (endangered or vulnerable)
- Selected Lot and Plan



N

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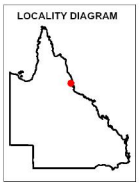
Map 3b - MSES - Species - Koala habitat area (SEQ)

MSES - Species
Koala habitat area (SEQ)

- Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- Koala habitat area (core)
- Koala habitat area (locally refined)
- Selected Lot and Plan

LOCALITY DIAGRAM



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The represented layers for SEQ 'koala habitat area-core' and 'koala habitat area- locally refined' in MSES are sourced directly from the regulatory mapping under the Nature Conservation (Koala) Conservation Plan 2017. Whilst every effort is made to ensure the information remains current, there may be delays between updating versions. Please refer to the original mapping for the most recent version. See https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping

The koala habitat mapping within South East Queensland uses regional ecosystem linework compiled at a scale varying from 1:25,000 to 1:100,000. Linework should be used as a guide only. The positional accuracy of regional ecosystem data mapped at a scale of 1:100,000 is +/- 100 metres.

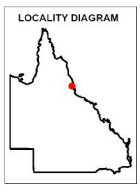
0 47.5 95 142.5 190 237.5 m

This product is displayed in GDA2020

Map 3c - MSES - Species - Wildlife habitat (sea turtle nesting areas)

MSES - Wildlife habitat (sea turtle nesting areas)

- Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- Wildlife habitat (sea turtle nesting areas)
- Selected Lot and Plan



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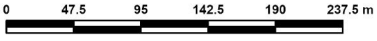
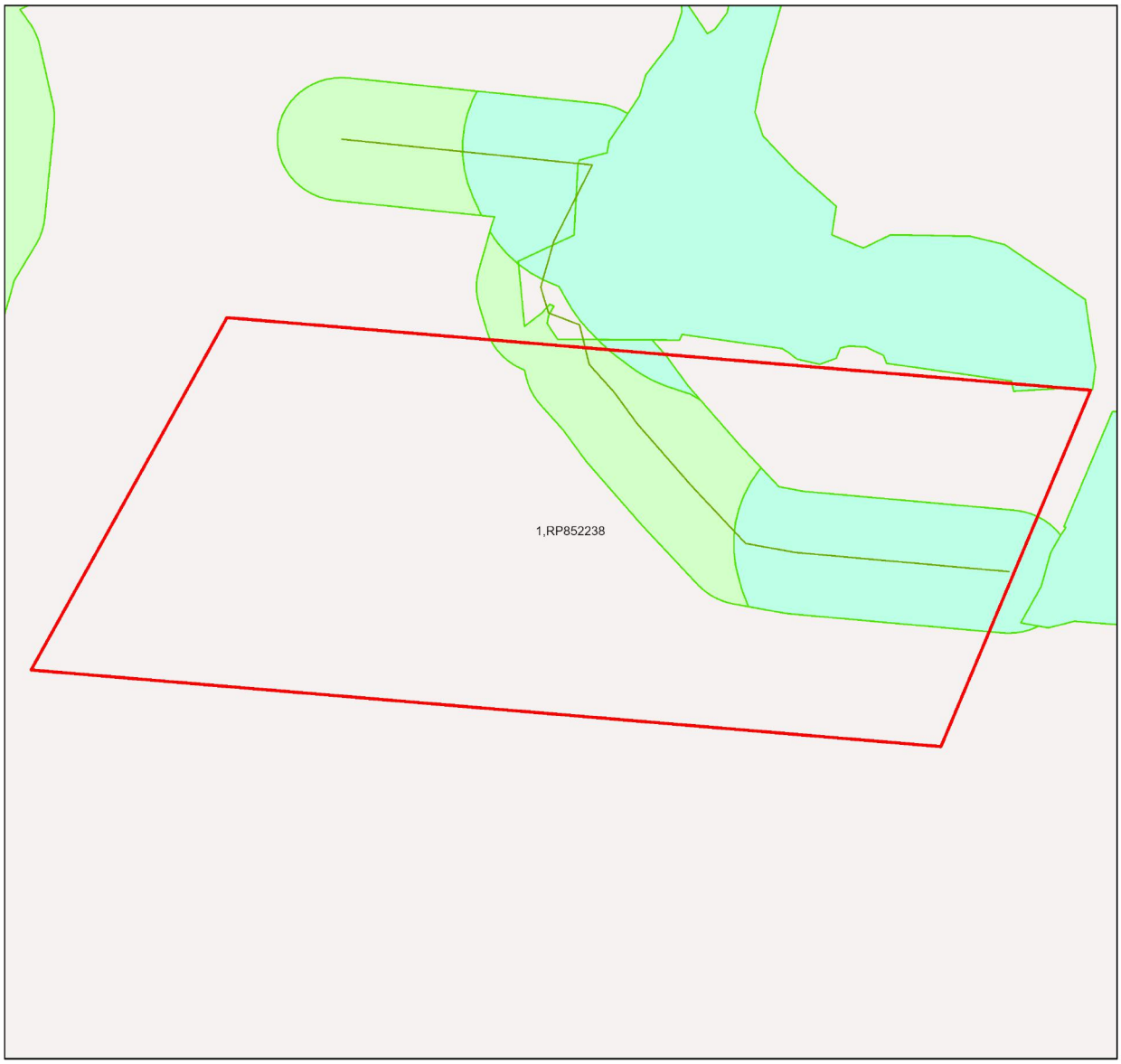
MSES mapping of sea turtle nesting areas identifies beaches where the recorded number of turtle nests are over 1% of the turtle species or genetic stock. The linework is also deliberately extended along nearby rocky coastlines and headlands to recognise that significant numbers of nesting adults and hatchlings can become disoriented by light pollution from development on rocky coastlines and headlands while navigating offshore from nesting beaches.



This product is displayed in GDA2020

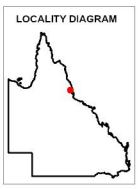
Map 4 - MSES - Regulated Vegetation



MSES - Regulated Vegetation

- ▲ Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- Regulated vegetation (intersecting a watercourse)
- Regulated vegetation (100m from wetland)
- Regulated vegetation (category B - endangered or of concern)
- Regulated vegetation (category C - endangered or of concern)
- Regulated vegetation (category R - GBR riverine)
- Regulated vegetation (essential habitat)
- Selected Lot and Plan

LOCALITY DIAGRAM



N

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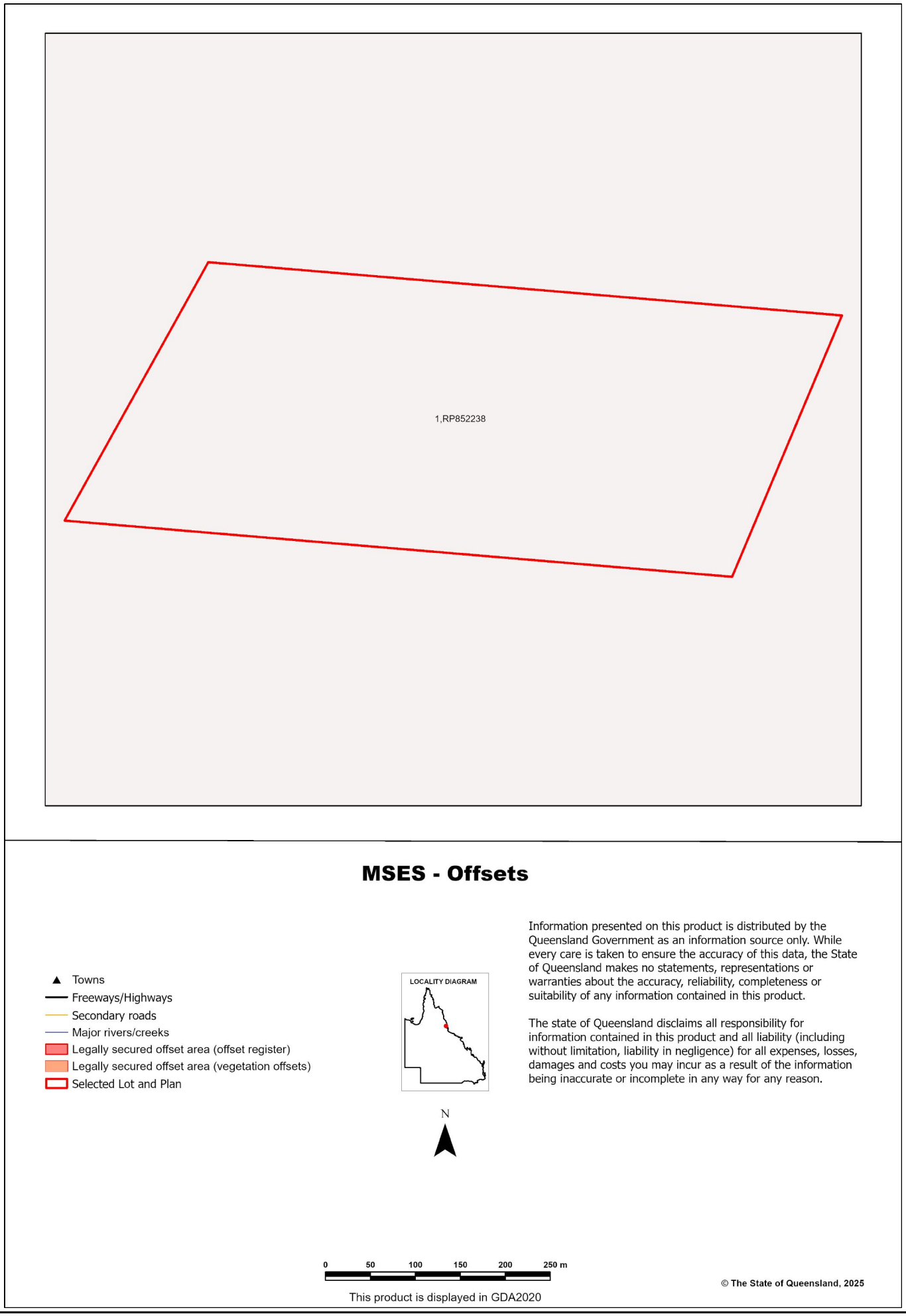
0 50 100 150 200 250 m

This product is displayed in GDA2020

Map 5 - MSES - Offset Areas



Appendices

Appendix 1 - Matters of State Environmental Significance (MSES) methodology

MSES mapping is a regional-scale representation of the definition for MSES under the State Planning Policy (SPP). Its primary purpose is to support implementation of the SPP biodiversity policy.

MSES mapping does not replace the regulatory mapping or environmental values specifically called up under other laws or regulations.

MSES mapping does not determine whether state or local development assessment is required. For state assessment triggers refer to the Development Assessment Mapping System (DAMS). For local assessment triggers, refer to the relevant local planning scheme.

The Queensland Government's "Method for mapping - matters of state environmental significance can be downloaded from:

http://www.ehp.qld.gov.au/land/natural-resource/method-mapping-mses.html .

Appendix 2 - Source Data

The datasets listed below are available on request from:

http://qldspatial.information.qld.gov.au/catalogue/custom/index.page

- Matters of State environmental significance

Note: MSES mapping is not based on new or unique data. The primary mapping product draws data from a number of underlying environment databases and geo-referenced information sources. MSES mapping is a versioned product that is updated generally on a twice-yearly basis to incorporate the changes to underlying data sources. Several components of MSES mapping made for the current version may differ from the current underlying data sources. To ensure accuracy, or proper representation of MSES values, it is strongly recommended that users refer to the underlying data sources and review the current definition of MSES in the State Planning Policy, before applying the MSES mapping.

Individual MSES layers can be attributed to the following source data available at QSpatial:

MSES layers	**current QSpatial data (http://qspatial.information.qld.gov.au)**
Protected Areas-Estates, Nature Refuges, Special Wildlife Reserves	- Protected areas of Queensland - Nature Refuges - Queensland - Special Wildlife Reserves- Queensland
Marine Park-Highly Protected Zones	Moreton Bay marine park zoning 2008
Fish Habitat Areas	Queensland fish habitat areas
Strategic Environmental Areas-designated	Regional Planning Interests Act - Strategic Environmental Areas
HES wetlands	Map of Queensland Wetland Environmental Values
Wetlands in HEV waters	HEV waters: - EPP Water intent for waters Source Wetlands: - Queensland Wetland Mapping (Current version 5) Source Watercourses: - Vegetation management watercourse and drainage feature map (1:100000 and 1:250000)
Wildlife habitat (threatened and special least concern)	-WildNet database species records - habitat suitability models (various) - SEQ koala habitat areas under the Koala Conservation Plan 2019
VMA regulated regional ecosystems	Vegetation management regional ecosystem and remnant map
VMA Essential Habitat	Vegetation management - essential habitat map
VMA Wetlands	Vegetation management wetlands map
Legally secured offsets	Vegetation Management Act property maps of assessable vegetation. For offset register data-contact DETSI
Regulated Vegetation Map	Vegetation management - regulated vegetation management map

Appendix 3 - Acronyms and Abbreviations

AOI	- Area of Interest
DETSI	- Department of the Environment, Tourism, Science and Innovation
EP Act	- Environmental Protection Act 1994
EPP	- Environmental Protection Policy
GDA2020	- Geocentric Datum of Australia 2020
GEM	- General Environmental Matters
GIS	- Geographic Information System
MSES	- Matters of State Environmental Significance
NCA	- Nature Conservation Act 1992
RE	- Regional Ecosystem
SPP	- State Planning Policy
VMA	- Vegetation Management Act 1999

Queensland Government

WildNet species list

Search Criteria: Species List for a Specified Point
Species: All
Type: All
Queensland status: Rare and threatened species
Records: All
Date: All
Latitude: -17.9591
Longitude: 145.9068
Distance: 10
Email: chris.beavon@attexo.com.au
Date submitted: Wednesday 04 Sep 2024 14:24:29
Date extracted: Wednesday 04 Sep 2024 14:30:03

The number of records retrieved = 17

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians	Hylidae	*Litoria dayi*	Australian lacelid		V	V	2
animals	amphibians	Hylidae	*Litoria nannotis*	waterfall frog		E		1
animals	amphibians	Hylidae	*Litoria rheocola*	common mistfrog		E		6/1
animals	amphibians	Hylidae	*Litoria serrata*	tapping green eyed frog		V		2
animals	birds	Accipitridae	*Erythrotriorchis radiatus*	red goshawk		E	E	1
animals	birds	Casuariidae	*Casuarius casuarius (southern population)*	southern cassowary (southern population)		E	E	56
animals	birds	Psittaculidae	*Cyclopsitta diophthalma macleayana*	Macleay's fig-parrot		V		2
animals	mammals	Petauridae	*Petaurus gracilis*	mahogany glider		E	E	13/2
animals	reptiles	Crocodylidae	*Crocodylus porosus*	estuarine crocodile		V		2
plants	land plants	Aristolochiaceae	*Pararistolochia praevenosa*			NT		1/1
plants	land plants	Burseraceae	*Canarium acutifolium var. acutifolium*			V	V	1/1
plants	land plants	Costaceae	*Cheilocostus potierae*			E		2/2
plants	land plants	Cyperaceae	*Eleocharis retroflexa*			V	V	1/1
plants	land plants	Leguminosae	*Dioclea hexandra*			E		1/1
plants	land plants	Lycopodiaceae	*Phlegmariurus phlegmarioides*			V		1/1
plants	land plants	Monimiaceae	*Steganthera australiana*			NT		1/1
plants	land plants	Myrtaceae	*Rhodamnia sessiliflora*			E		1/1

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992.*
The codes are Extinct (EX), Extinct in the Wild (PE), Critically Endangered (CR), Endangered (E), Vulnerable (V), Near Threatened (NT), Special Least Concern (SL) and Least Concern (C).

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999.*
The values of EPBC are Extinct (EX), Extinct in the Wild (XW), Critically Endangered (CE), Endangered (E), Vulnerable (V) and Conservation Dependent (CD).

Records - The first number indicates the total number of records of the taxon (wildlife records and species listings for selected areas).
This number is output as 99999 if it equals or exceeds this value. A second number located after a / indicates the number of specimen records for the taxon.
This number is output as 999 if it equals or exceeds this value.

EPBC Act Protected Matters Report

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

Report created: 04-Sep-2024

Summary

Matters of National Environment Significance

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

World Heritage Properties:	2
National Heritage Places:	3
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	17
Commonwealth Marine Area:	1
Listed Threatened Ecological Communities:	4
Listed Threatened Species:	99
Listed Migratory Species:	65

Other Matters Protected by the EPBC Act

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

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

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

Commonwealth Lands:	4
Commonwealth Heritage Places:	1
Listed Marine Species:	116
Whales and Other Cetaceans:	12
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	70
Regional Forest Agreements:	None
Nationally Important Wetlands:	13
EPBC Act Referrals:	65
Key Ecological Features (Marine):	None
Biologically Important Areas:	6
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

World Heritage Properties			[Resource Information]
Name	State	Legal Status	Buffer Status
Great Barrier Reef	QLD	Declared property	In buffer area only
Wet Tropics of Queensland	QLD	Declared property	In buffer area only

National Heritage Places			[Resource Information]
Name	State	Legal Status	Buffer Status
Indigenous			
Wet Tropics World Heritage Area (Indigenous Values)	QLD	Within listed place	In buffer area only
Natural			
Great Barrier Reef	QLD	Listed place	In buffer area only
Wet Tropics of Queensland	QLD	Listed place	In buffer area only

Great Barrier Reef Marine Park			[Resource Information]
Zone Type	Zone ID	IUCN	Buffer Status
Commonwealth Island (GBRMPA)	Kent Island (17043104)	IV	In buffer area only
Commonwealth Island (GBRMPA)	South Island (18008103)	II	In buffer area only
Commonwealth Island (Other)	Lindquist Island (17040102)	VI	In buffer area only
Conservation Park	CP-17-4044	IV	In buffer area only
Conservation Park	CP-17-4045	IV	In buffer area only
Conservation Park	CP-18-4046	IV	In buffer area only
General Use	GU-16-6004	VI	In buffer area only
Habitat Protection	HP-17-5138	VI	In buffer area only
Habitat Protection	HP-17-5139	VI	In buffer area only
Habitat Protection	HP-17-5140	VI	In buffer area only
Habitat Protection	HP-17-5142	VI	In buffer area only
Marine National Park	MNP-17-1069	II	In buffer area only
Marine National Park	MNP-17-1070	II	In buffer area only

Zone Type	Zone ID	IUCN	Buffer Status
Marine National Park	MNP-17-1073	II	In buffer area only
Marine National Park	MNP-17-1074	II	In buffer area only
Marine National Park	MNP-17-1075	II	In buffer area only
Marine National Park	MNP-18-1077	II	In buffer area only

Commonwealth Marine Area [Resource Information]

Approval is required for a proposed activity that is located within the Commonwealth Marine Area which has, will have, or is likely to have a significant impact on the environment. Approval may be required for a proposed action taken outside a Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area.

Feature Name	Buffer Status
Commonwealth Marine Areas (EPBC Act)	In buffer area only

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Broad leaf tea-tree (Melaleuca viridiflora) woodlands in high rainfall coastal north Queensland	Endangered	Community likely to occur within area	In buffer area only
Littoral Rainforest and Coastal Vine Thickets of Eastern Australia	Critically Endangered	Community likely to occur within area	In buffer area only
Lowland tropical rainforest of the Wet Tropics	Endangered	Community likely to occur within area	In buffer area only
Mabi Forest (Complex Notophyll Vine Forest 5b)	Critically Endangered	Community likely to occur within area	In buffer area only

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Arenaria interpres			
Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
Calidris acuminata			
Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In buffer area only
Casuarius casuarius listed as Casuarius casuarius johnsonii Southern Cassowary [1096]	Endangered	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Erythrotriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat known to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat known to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area	In buffer area only
Poephila cincta cincta Southern Black-throated Finch [64447]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In buffer area only
Tyto novaehollandiae kimberli Masked Owl (northern) [26048]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area	In buffer area only
FISH			
Cairnsichthys rhombosomoides Cairns Rainbowfish, Northern Soft-spined Sunfish [86541]	Endangered	Species or species habitat known to occur within area	In buffer area only
Melanotaenia eachamensis Lake Eacham Rainbowfish [26185]	Endangered	Species or species habitat known to occur within area	In buffer area only
Stiphodon semoni Opal Cling Goby [83909]	Critically Endangered	Species or species habitat known to occur within area	In feature area
FROG			

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Litoria dayi](#) Australian Lace-lid, Lace-eyed Tree Frog, Day's Big-eyed Treefrog [86707]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Litoria nyakalensis](#) Mountain Mist Frog, Nyakala Frog [1820]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
[Pseudophryne covacevichae](#) Magnificent Brood Frog [64385]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
MAMMAL			
[Balaenoptera musculus](#) Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
[Bettongia tropica](#) Northern Bettong [214]	Endangered	Species or species habitat may occur within area	In buffer area only
[Dasyurus hallucatus](#) Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat likely to occur within area	In feature area
[Dasyurus maculatus gracilis](#) Spotted-tailed Quoll (North Queensland), Yarri [64475]	Endangered	Species or species habitat known to occur within area	In feature area
[Hipposideros semoni](#) Semon's Leaf-nosed Bat, Greater Wart-nosed Horseshoe-bat [180]	Vulnerable	Species or species habitat may occur within area	In feature area
[Macroderma gigas](#) Ghost Bat [174]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
[Mesembriomys gouldii rattoides](#) Black-footed Tree-rat (north Queensland), Shaggy Rabbit-rat [87620]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Petauroides minor](#) Greater Glider (northern), Greater Glider (north-eastern Queensland) [92008]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Petaurus australis brevirostrum listed as Petaurus australis Wet Tropics subspecies			
Northern Yellow-bellied Glider, Wet Tropics Yellow-bellied Glider [93739]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Petaurus gracilis			
Mahogany Glider [26775]	Endangered	Species or species habitat known to occur within area	In feature area
Petrogale sharmani			
Mount Claro Rock Wallaby, Sharman's Rock Wallaby [59281]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)			
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In buffer area only
Pteropus conspicillatus			
Spectacled Flying-fox [185]	Endangered	Species or species habitat known to occur within area	In feature area
Pteropus poliocephalus			
Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Rhinolophus robertsi			
Large-eared Horseshoe Bat, Greater Large-eared Horseshoe Bat [87639]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Saccolaimus saccolaimus nudicluniatus			
Bare-rumped Sheath-tailed Bat, Bare-rumped Sheathtail Bat [66889]	Vulnerable	Species or species habitat known to occur within area	In feature area
Xeromys myoides			
Water Mouse, False Water Rat, Yirrkoo [66]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
PLANT			
Alloxylon flammeum			
Red Silky Oak, Queensland Waratah, Tree Waratah [56400]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Aponogeton bullosus [8299]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Aponogeton prolifer an aquatic herb [82016]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Arthraxon hispidus Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Asplenium pellucidum [21662]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Bulbophyllum globuliforme Miniature Moss-orchid, Hoop Pine Orchid [6649]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Canarium acutifolium [23956]	Vulnerable	Species or species habitat known to occur within area	In feature area
Carronia pedicellata [24178]	Endangered	Species or species habitat known to occur within area	In feature area
Chingia australis [24603]	Endangered	Species or species habitat known to occur within area	In feature area
Coleus gratus listed as Plectranthus gratus [91401]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Corunastylis tecta listed as Genoplesium tectum [78698]	Endangered	Species or species habitat known to occur within area	In buffer area only
Dendrobium callitrophilum listed as Tropilis callitrophilis Thin Feather Orchid [56050]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dendrobium mirbelianum Dark-stemmed Antler Orchid, Mangrove Orchid [14310]	Endangered	Species or species habitat may occur within area	In buffer area only
Dendrobium nindii an orchid [11289]	Endangered	Species or species habitat may occur within area	In buffer area only
Dichanthium setosum bluegrass [14159]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diplazium cordifolium [15585]	Vulnerable	Species or species habitat known to occur within area	In feature area
Diplazium pallidum [12764]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Eleocharis retroflexa a sedge [23672]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Lastreopsis walleri a fern [18229]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Leichhardtia araujacea [91900]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Lindsaea pulchella var. blanda [20842]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Myrmecodia beccarii Ant Plant [11852]	Vulnerable	Species or species habitat known to occur within area	In feature area
Phaius australis Lesser Swamp-orchid [5872]	Endangered	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Phaius pictus [22564]	Vulnerable	Species or species habitat known to occur within area	In feature area
Phalaenopsis rosenstromii listed as Phalaenopsis amabilis subsp. rosenstromii Native Moth Orchid [15984]	Endangered	Species or species habitat may occur within area	In buffer area only
Phlegmariurus delbrueckii listed as Phlegmariurus marsupiiformis Water Tassel-fern, Tea Leaf Tassel, Tea-leaf Tassel-fern [90429]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Phlegmariurus filiformis Rat's Tail Tassel-fern [86551]	Endangered	Species or species habitat known to occur within area	In feature area
Phlegmariurus lockyeri [86552]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Phlegmariurus squarrosus Rock Tassel-fern, Water Tassel-fern [86556]	Critically Endangered	Species or species habitat may occur within area	In feature area
Phlegmariurus tetrastichoides Square Tassel Fern [86555]	Vulnerable	Species or species habitat known to occur within area	In feature area
Plesioneuron tuberculatum [24604]	Endangered	Species or species habitat known to occur within area	In feature area
Polyphlebium endlicherianum Middle Filmy Fern [87494]	Endangered	Species or species habitat known to occur within area	In feature area
Polyscias bellendenkerensis [7237]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Prostanthera clotteniana [76165]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Ristantia gouldii [18776]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Syzygium hodgkinsoniae Smooth-bark Rose Apple, Red Lilly Pilly [3539]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Tephrosia leveillei [16946]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Tomophyllum walleri [83507]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Triplarina nitchaga [64593]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Vappodes lithocola Dwarf Butterfly Orchid, Cooktown Orchid [78893]	Endangered	Species or species habitat may occur within area	In buffer area only
Zeuxine polygonoides Velvet Jewel Orchid [46794]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding known to occur within area	In buffer area only
Delma mitella Atherton Delma, Legless Lizard [25931]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Egernia rugosa			
Yakka Skink [1420]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Eretmochelys imbricata			
Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Lepidochelys olivacea			
Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Breeding likely to occur within area	In buffer area only
Natator depressus			
Flatback Turtle [59257]	Vulnerable	Breeding known to occur within area	In buffer area only
SHARK			
Carcharodon carcharias			
White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pristis pristis			
Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pristis zijsron			
Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Rhincodon typus			
Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sphyrna lewini			
Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only

Listed Migratory Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus			
Common Noddy [825]		Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Apus pacificus](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
[Fregata ariel](#) Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area	In buffer area only
[Fregata minor](#) Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat known to occur within area	In buffer area only
[Onychoprion anaethetus](#) Bridled Tern [82845]		Breeding known to occur within area	In buffer area only
[Phaethon lepturus](#) White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
[Sterna dougallii](#) Roseate Tern [817]		Breeding known to occur within area	In buffer area only
[Sterna sumatrana](#) Black-naped Tern [800]		Breeding known to occur within area	In buffer area only
[Sternula albifrons](#) Little Tern [82849]		Breeding known to occur within area	In buffer area only
Migratory Marine Species			
[Anoxypristis cuspidata](#) Narrow Sawfish, Knifetooth Sawfish [68448]		Species or species habitat known to occur within area	In buffer area only
[Balaenoptera edeni](#) Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
[Balaenoptera musculus](#) Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
[Carcharhinus longimanus](#) Oceanic Whitetip Shark [84108]		Breeding may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Carcharodon carcharias](#) White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Caretta caretta](#) Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
[Chelonia mydas](#) Green Turtle [1765]	Vulnerable	Breeding known to occur within area	In buffer area only
[Crocodylus porosus](#) Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
[Dermochelys coriacea](#) Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
[Dugong dugon](#) Dugong [28]		Species or species habitat known to occur within area	In buffer area only
[Eretmochelys imbricata](#) Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
[Lamna nasus](#) Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area	In buffer area only
[Lepidochelys olivacea](#) Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Breeding likely to occur within area	In buffer area only
[Megaptera novaeangliae](#) Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
[Mobula alfredi as Manta alfredi](#) Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat likely to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding known to occur within area	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]		Species or species habitat known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sousa sahulensis as Sousa chinensis Australian Humpback Dolphin [87942]		Breeding known to occur within area	In buffer area only

Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Hirundo rustica Barn Swallow [662]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Monarcha melanopsis](#) Black-faced Monarch [609]		Species or species habitat known to occur within area	In feature area
[Motacilla cinerea](#) Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat likely to occur within area	In feature area
[Myiagra cyanoleuca](#) Satin Flycatcher [612]		Species or species habitat known to occur within area	In feature area
[Rhipidura rufifrons](#) Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
[Symposiachrus trivirgatus as Monarcha trivirgatus](#) Spectacled Monarch [83946]		Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
[Arenaria interpres](#) Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area
[Calidris canutus](#) Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area	In buffer area only
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Roosting likely to occur within area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Roosting likely to occur within area	In buffer area only
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Roosting likely to occur within area	In buffer area only
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Pandion haliaetus](#) Osprey [952]		Species or species habitat known to occur within area	In buffer area only
[Pluvialis squatarola](#) Grey Plover [865]	Vulnerable	Roosting known to occur within area	In buffer area only
[Thalasseus bergii](#) Greater Crested Tern [83000]		Breeding known to occur within area	In buffer area only
[Tringa brevipes](#) Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only
[Tringa nebularia](#) Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In buffer area only
[Xenus cinereus](#) Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area	In buffer area only

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Defence		
Defence - AIRTC INNISFAIL ; INNISFAIL TRG DEP [31472]	QLD	In buffer area only
Defence - AIRTC INNISFAIL ; INNISFAIL TRG DEP [31471]	QLD	In buffer area only
Defence - INNISFAIL TRAINING DEPOT [31005]	QLD	In buffer area only
Defence - JTTRE - COWLEY BEACH INISFAIL [30002]	QLD	In buffer area only

Commonwealth Heritage Places [Resource Information]

Name	State	Status	Buffer Status
Natural			
[Tully Training Area](#)	QLD	Listed place	In buffer area only

Listed Marine Species [Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
[Anous stolidus](#) Common Noddy [825]		Species or species habitat known to occur within area	In buffer area only
[Anseranas semipalmata](#) Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
[Apus pacificus](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
[Arenaria interpres](#) Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
[Bubulcus ibis as Ardea ibis](#) Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area
[Calidris canutus](#) Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In buffer area only
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Calidris ruficollis](#) Red-necked Stint [860]		Roosting known to occur within area overfly marine area	In buffer area only
[Calidris tenuirostris](#) Great Knot [862]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
[Chalcites osculans as Chrysococcyx osculans](#) Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
[Charadrius leschenaultii](#) Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Charadrius mongolus](#) Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
[Charadrius ruficapillus](#) Red-capped Plover [881]		Roosting known to occur within area overfly marine area	In buffer area only
[Fregata ariel](#) Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area	In buffer area only
[Fregata minor](#) Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat known to occur within area	In buffer area only
[Gallinago hardwickii](#) Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
[Gallinago megala](#) Swinhoe's Snipe [864]		Roosting likely to occur within area overfly marine area	In buffer area only
[Gallinago stenura](#) Pin-tailed Snipe [841]		Roosting likely to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Hirundo rustica Barn Swallow [662]		Species or species habitat known to occur within area overfly marine area	In feature area
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat may occur within area overfly marine area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Roosting likely to occur within area overfly marine area	In buffer area only
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only
Onychoprion anaethetus as Sterna anaethetus Bridled Tern [82845]		Breeding known to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In buffer area only
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Sterna dougallii Roseate Tern [817]		Breeding known to occur within area	In buffer area only
Sterna sumatrana Black-naped Tern [800]		Breeding known to occur within area	In buffer area only
Sternula albifrons as Sterna albifrons Little Tern [82849]		Breeding known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Symposiachrus trivirgatus as Monarcha trivirgatus](#) Spectacled Monarch [83946]		Species or species habitat known to occur within area overfly marine area	In feature area
[Thalasseus bengalensis as Sterna bengalensis](#) Lesser Crested Tern [66546]		Breeding known to occur within area	In buffer area only
[Thalasseus bergii as Sterna bergii](#) Greater Crested Tern [83000]		Breeding known to occur within area	In buffer area only
[Tringa brevipes as Heteroscelus brevipes](#) Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only
[Tringa nebularia](#) Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In buffer area only
[Xenus cinereus](#) Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Fish			
[Acentronura tentaculata](#) Shortpouch Pygmy Pipehorse [66187]		Species or species habitat may occur within area	In buffer area only
[Bulbonaricus davaoensis](#) Davao Pughead Pipefish [66190]		Species or species habitat may occur within area	In buffer area only
[Choeroichthys brachysoma](#) Pacific Short-bodied Pipefish, Short-bodied Pipefish [66194]		Species or species habitat may occur within area	In buffer area only
[Choeroichthys sculptus](#) Sculptured Pipefish [66197]		Species or species habitat may occur within area	In buffer area only
[Choeroichthys suillus](#) Pig-snouted Pipefish [66198]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Corythoichthys amplexus Fijian Banded Pipefish, Brown-banded Pipefish [66199]		Species or species habitat may occur within area	In buffer area only
Corythoichthys flavofasciatus Reticulate Pipefish, Yellow-banded Pipefish, Network Pipefish [66200]		Species or species habitat may occur within area	In buffer area only
Corythoichthys intestinalis Australian Messmate Pipefish, Banded Pipefish [66202]		Species or species habitat may occur within area	In buffer area only
Corythoichthys ocellatus Orange-spotted Pipefish, Ocellated Pipefish [66203]		Species or species habitat may occur within area	In buffer area only
Corythoichthys paxtoni Paxton's Pipefish [66204]		Species or species habitat may occur within area	In buffer area only
Corythoichthys schultzi Schultz's Pipefish [66205]		Species or species habitat may occur within area	In buffer area only
Cosmocampus maxweberi Maxweber's Pipefish [66209]		Species or species habitat may occur within area	In buffer area only
Doryrhamphus dactyliophorus Banded Pipefish, Ringed Pipefish [66210]		Species or species habitat may occur within area	In buffer area only
Doryrhamphus excisus Bluestripe Pipefish, Indian Blue-stripe Pipefish, Pacific Blue-stripe Pipefish [66211]		Species or species habitat may occur within area	In buffer area only
Doryrhamphus janssi Cleaner Pipefish, Janss' Pipefish [66212]		Species or species habitat may occur within area	In buffer area only
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Festucalex gibbsi Gibbs' Pipefish [66215]		Species or species habitat may occur within area	In buffer area only
Halicampus dunckeri Red-hair Pipefish, Duncker's Pipefish [66220]		Species or species habitat may occur within area	In buffer area only
Halicampus grayi Mud Pipefish, Gray's Pipefish [66221]		Species or species habitat may occur within area	In buffer area only
Halicampus macrorhynchus Whiskered Pipefish, Ornate Pipefish [66222]		Species or species habitat may occur within area	In buffer area only
Halicampus mataafae Samoan Pipefish [66223]		Species or species habitat may occur within area	In buffer area only
Halicampus nitidus Glittering Pipefish [66224]		Species or species habitat may occur within area	In buffer area only
Halicampus spinirostris Spiny-snout Pipefish [66225]		Species or species habitat may occur within area	In buffer area only
Hippichthys cyanospilos Blue-speckled Pipefish, Blue-spotted Pipefish [66228]		Species or species habitat may occur within area	In buffer area only
Hippichthys heptagonus Madura Pipefish, Reticulated Freshwater Pipefish [66229]		Species or species habitat may occur within area	In buffer area only
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In buffer area only
Hippichthys spicifer Belly-barred Pipefish, Banded Freshwater Pipefish [66232]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hippocampus bargibanti Pygmy Seahorse [66721]		Species or species habitat may occur within area	In buffer area only
Hippocampus histrix Spiny Seahorse, Thorny Seahorse [66236]		Species or species habitat may occur within area	In buffer area only
Hippocampus kuda Spotted Seahorse, Yellow Seahorse [66237]		Species or species habitat may occur within area	In buffer area only
Hippocampus planifrons Flat-face Seahorse [66238]		Species or species habitat may occur within area	In buffer area only
Hippocampus zebra Zebra Seahorse [66241]		Species or species habitat may occur within area	In buffer area only
Micrognathus andersonii Anderson's Pipefish, Shortnose Pipefish [66253]		Species or species habitat may occur within area	In buffer area only
Micrognathus brevirostris thorntail Pipefish, Thorn-tailed Pipefish [66254]		Species or species habitat may occur within area	In buffer area only
Microphis brachyurus Short-tail Pipefish, Short-tailed River Pipefish [66257]		Species or species habitat may occur within area	In buffer area only
Nannocampus pictus Painted Pipefish, Reef Pipefish [66263]		Species or species habitat may occur within area	In buffer area only
Phoxocampus diacanthus Pale-blotched Pipefish, Spined Pipefish [66266]		Species or species habitat may occur within area	In buffer area only
Siokunichthys breviceps Softcoral Pipefish, Soft-coral Pipefish [66270]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Solegnathus hardwickii Pallid Pipehorse, Hardwick's Pipehorse [66272]		Species or species habitat may occur within area	In buffer area only
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area	In buffer area only
Solenostomus paradoxus Ornate Ghostpipefish, Harlequin Ghost Pipefish, Ornate Ghost Pipefish [66184]		Species or species habitat may occur within area	In buffer area only
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In buffer area only
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In buffer area only
Trachyrhamphus longirostris Straightstick Pipefish, Long-nosed Pipefish, Straight Stick Pipefish [66281]		Species or species habitat may occur within area	In buffer area only
Mammal			
Dugong dugon Dugong [28]		Species or species habitat known to occur within area	In buffer area only
Reptile			
Aipysurus duboisii Dubois' Sea Snake, Dubois' Seasnake, Reef Shallows Sea Snake [1116]		Species or species habitat may occur within area	In buffer area only
Aipysurus laevis Olive Sea Snake, Olive-brown Sea Snake [1120]		Species or species habitat may occur within area	In buffer area only
Aipysurus mosaicus as Aipysurus eydouxii Mosaic Sea Snake [87261]		Species or species habitat may occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding known to occur within area	In buffer area only
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Hydrophis elegans Elegant Sea Snake, Bar-bellied Sea Snake [1104]		Species or species habitat may occur within area	In buffer area only
Hydrophis hardwickii as Lapemis hardwickii Spine-bellied Sea Snake [93516]		Species or species habitat may occur within area	In buffer area only
Hydrophis kingii as Disteira kingii Spectacled Sea Snake [93511]		Species or species habitat may occur within area	In buffer area only
Hydrophis macdowelli as Hydrophis mcdowelli MacDowell's Sea Snake, Small-headed Sea Snake, [75601]		Species or species habitat may occur within area	In buffer area only
Hydrophis major as Disteira major Olive-headed Sea Snake [93512]		Species or species habitat may occur within area	In buffer area only
Hydrophis ornatus Spotted Sea Snake, Ornate Reef Sea Snake [1111]		Species or species habitat may occur within area	In buffer area only
Hydrophis peronii as Acalyptophis peronii Horned Sea Snake [93509]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hydrophis platura as Pelamis platurus Yellow-bellied Sea Snake [93746]		Species or species habitat may occur within area	In buffer area only
Hydrophis stokesii as Astrotia stokesii Stokes' Sea Snake [93510]		Species or species habitat may occur within area	In buffer area only
Hydrophis zweiffei as Enhydrina schistosa Australian Beaked Sea Snake [93514]		Species or species habitat may occur within area	In buffer area only
Laticauda colubrina Yellow-lipped Sea Krait [1092]		Species or species habitat may occur within area	In buffer area only
Laticauda laticaudata a sea krait [1093]		Species or species habitat may occur within area	In buffer area only
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Breeding likely to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding known to occur within area	In buffer area only

Whales and Other Cetaceans			[Resource Information]
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In buffer area only
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]		Species or species habitat known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Sousa sahulensis Australian Humpback Dolphin [87942]		Breeding known to occur within area	In buffer area only
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Alcock	Forest Reserve	QLD	In buffer area only
Ant Plant East	Nature Refuge	QLD	In buffer area only
Ant Plant West	Nature Refuge	QLD	In buffer area only
Barnard Island Group	National Park	QLD	In buffer area only
Basilisk	Nature Refuge	QLD	In buffer area only
Basilisk Range	National Park	QLD	In buffer area only

Protected Area Name	Reserve Type	State	Buffer Status
Brook Islands	National Park	QLD	In buffer area only
Brooks Beach	Nature Refuge	QLD	In buffer area only
Cassowary Connection	Nature Refuge	QLD	In buffer area only
Cassowary Connection	Nature Refuge	QLD	In buffer area only
Chakoro	Nature Refuge	QLD	In buffer area only
Clump Mountain	National Park	QLD	In buffer area only
Dallachy Creek	Fish Habitat Area (A)	QLD	In buffer area only
Djilgarin	Conservation Park	QLD	In buffer area only
Djiru	National Park	QLD	In buffer area only
Edmund Kennedy	NRS Addition - Gazettal in Progress	QLD	In buffer area only
Etty Bay Road	Conservation Park	QLD	In buffer area only
Family Islands	National Park	QLD	In buffer area only
Girramay	National Park	QLD	In buffer area only
Girringun	National Park	QLD	In buffer area only
Girringun	Indigenous Protected Area	QLD	In buffer area only
Girringun	Indigenous Protected Area	QLD	In buffer area only
Goold Island	National Park	QLD	In buffer area only
Great Barrier Reef Coast	Marine Park	QLD	In buffer area only
Gulngay	National Park	QLD	In buffer area only
Gurrbum	Nature Refuge	QLD	In buffer area only
Gurrbum	Nature Refuge	QLD	In buffer area only
Hinchinbrook	Fish Habitat Area (A)	QLD	In buffer area only
Hinchinbrook Island	National Park	QLD	In buffer area only
Hinchinbrook Island area	Dugong Protection Area (A)	QLD	In buffer area only
Hull River	National Park	QLD	In buffer area only

Protected Area Name	Reserve Type	State	Buffer Status
Hull River	Fish Habitat Area (A)	QLD	In buffer area only
Jalum	Conservation Park	QLD	In buffer area only
Japoon	National Park	QLD	In buffer area only
Japoon	Forest Reserve	QLD	In buffer area only
Kirrama	National Park	QLD	In buffer area only
Koombooloomba	Conservation Park	QLD	In buffer area only
Koombooloomba	National Park	QLD	In buffer area only
Koombooloomba South	Forest Reserve	QLD	In buffer area only
Kurrimine Beach	National Park	QLD	In buffer area only
Kurrimine Beach	Conservation Park	QLD	In buffer area only
Litoria Springs	Nature Refuge	QLD	In buffer area only
Maalan	National Park	QLD	In buffer area only
Maria Creek	National Park	QLD	In buffer area only
Maria Creek	Nature Refuge	QLD	In buffer area only
Meingan Creek	Conservation Park	QLD	In buffer area only
Melaleuca	Nature Refuge	QLD	In buffer area only
Meunga Creek	Fish Habitat Area (A)	QLD	In buffer area only
Moresby Range	National Park	QLD	In buffer area only
Moresby Range	Resources Reserve	QLD	In buffer area only
Mount Mackay	National Park	QLD	In buffer area only
Murray River	Fish Habitat Area (A)	QLD	In buffer area only
Murray Upper Wetlands	Nature Refuge	QLD	In buffer area only
Palmerston Rocks	National Park	QLD	In buffer area only
Palmerston Rocks Corridor	Nature Refuge	QLD	In buffer area only
Seafarm	Nature Refuge	QLD	In buffer area only
Tam O'Shanter	Forest Reserve	QLD	In buffer area only
Tully Falls	National Park	QLD	In buffer area only

Protected Area Name	Reserve Type	State	Buffer Status
Tully Falls	Forest Reserve	QLD	In buffer area only
Tully Gorge	National Park	QLD	In buffer area only
Tully River	Fish Habitat Area (A)	QLD	In buffer area only
Walter Hill Range	Conservation Park	QLD	In buffer area only
Warrina	Conservation Park	QLD	In buffer area only
Warrubullen	Conservation Park	QLD	In buffer area only
Wompoo	Nature Refuge	QLD	In buffer area only
Wooroonooran	National Park	QLD	In buffer area only
Wreck Creek	Fish Habitat Area (A)	QLD	In buffer area only
Yabullum	Nature Refuge	QLD	In buffer area only
Yourka	Nature Refuge	QLD	In buffer area only
Yourka Reserve	Nature Refuge	QLD	In buffer area only

Nationally Important Wetlands		[Resource Information]
Wetland Name	State	Buffer Status
Blencoe Falls - Blencoe Creek	QLD	In buffer area only
Cowley Area	QLD	In buffer area only
Edmund Kennedy Wetlands	QLD	In buffer area only
Great Barrier Reef Marine Park	QLD	In buffer area only
Herbert River Gorge	QLD	In buffer area only
Hinchinbrook Channel	QLD	In buffer area only
Innisfail Area	QLD	In buffer area only
Kurrimine Area	QLD	In buffer area only
Licuala Palm Forest	QLD	In buffer area only
Missionary Bay	QLD	In buffer area only
Nandroya Falls	QLD	In buffer area only
Tully River - Murray River Floodplains	QLD	In feature area
Yuccabine Creek	QLD	In buffer area only

EPBC Act Referrals				[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Mission Beach Helipad and Aviation Facility	2023/09493		Completed	In buffer area only
Action clearly unacceptable				
Subdivide into 40 lots	2008/4257	Action Clearly Unacceptable	Completed	In buffer area only
Controlled action				
13 Lot residential subdivision	2008/4678	Controlled Action	Post-Approval	In buffer area only
179 lot Residential development and construction of artificial lake	2008/4365	Controlled Action	Post-Approval	In buffer area only
24 Lot Residential Subdivision	2008/3943	Controlled Action	Post-Approval	In buffer area only
275/132kVTransmission Line Replacement Project	2010/5346	Controlled Action	Post-Approval	In feature area
30 Lot Residential Subdivision	2008/3942	Controlled Action	Post-Approval	In buffer area only
48 Lot Residential Subdivision and Associated Infrastructure	2009/5228	Controlled Action	Completed	In buffer area only
7km Sugar Cane Tramway	2009/5177	Controlled Action	Post-Approval	In buffer area only
Allan Sellars Farm Subdivision	2009/4779	Controlled Action	Completed	In buffer area only
Construction of Breakwaters, Port Hinchinbrook Resort and Boat Harbour	2004/1826	Controlled Action	Post-Approval	In buffer area only
Coquette Point Recreational Vehicle (RV) Park, QLD	2012/6482	Controlled Action	Completed	In buffer area only
Development of a resort complex	2005/2389	Controlled Action	Post-Approval	In buffer area only
Electrocution of Spectacled flying-foxes to protect a lychee orchard	2002/571	Controlled Action	Completed	In buffer area only
Electrocution of Spectacled flying-foxes to protect a lychee orchard at Kennedy,	2001/480	Controlled Action	Completed	In buffer area only
Expansion of Existing Prawn Aquaculture Facility	2001/479	Controlled Action	Post-Approval	In buffer area only
High Voltage Electricity Transmission Line	2001/232	Controlled Action	Post-Approval	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Horizon Resort residential development	2006/2941	Controlled Action	Completed	In buffer area only
Lilliponds Residential Resort Estate, Tully Mission Beach Road	2005/2335	Controlled Action	Post-Approval	In buffer area only
Maintenance Dredging and Offshore Disposal	2009/4696	Controlled Action	Completed	In buffer area only
Mourilyan Silca Sand Project	2003/1123	Controlled Action	Post-Approval	In buffer area only
Nemourna Residential Subdivision, Lot 44, Esplanade, Mission Beach	2008/4616	Controlled Action	Post-Approval	In buffer area only
Port Hinchinbrook Resort Stage II	2003/1246	Controlled Action	Completed	In buffer area only
Prawn Farm Expansion Stage 2	2001/208	Controlled Action	Completed	In buffer area only
Prawn Farm Lot 310 on NR6952	2001/161	Controlled Action	Post-Approval	In buffer area only
Residential development	2006/3066	Controlled Action	Post-Approval	In buffer area only
Residential Estate, Lot 97 Nonda Street, Mission Beach	2007/3371	Controlled Action	Post-Approval	In buffer area only
Residential Sub-Division	2010/5331	Controlled Action	Post-Approval	In buffer area only
Rockingham Close residential development, Lot 66 on SP164474, Wongaling Beach Q	2009/5051	Controlled Action	Completed	In buffer area only
Sea Borne Urban Development	2010/5606	Controlled Action	Completed	In buffer area only
Sewerage Treatment Plant & Outfall	2010/5448	Controlled Action	Completed	In buffer area only
Six allotment subdivision and associated infrastructure	2009/5109	Controlled Action	Post-Approval	In buffer area only
Talisman Saber 2005 Military Exercise	2004/1819	Controlled Action	Post-Approval	In buffer area only
Taylor Family Health Retreat	2009/4785	Controlled Action	Completed	In buffer area only
Tourist - Residential Development, off Jackey Jackey Street	2005/1996	Controlled Action	Post-Approval	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Tully-Mission Beach Road 40 Lot Residential Subdivision	2008/3959	Controlled Action	Post-Approval	In buffer area only
Vegetation clearing	2005/2152	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Bruce Highway - Smiths Gap Overtaking Lane and Fauna Crossing	2019/8573	Not Controlled Action	Completed	In buffer area only
Canopy Walk	2002/714	Not Controlled Action	Completed	In buffer area only
Cardwell Foreshore Reconstruction Project	2012/6457	Not Controlled Action	Completed	In buffer area only
Castaways Mission Beach, Mission Beach, Qld	2018/8332	Not Controlled Action	Completed	In buffer area only
Changes to telecommunications facility at Dunk Island Resort	2008/4193	Not Controlled Action	Completed	In buffer area only
Commerical & Residential Development, Wongaling Beach, Qld	2014/7211	Not Controlled Action	Completed	In buffer area only
Department of State Development, Infrastructure and Planning/Transport - water/Boat Bay, 2km north o	2014/7189	Not Controlled Action	Completed	In buffer area only
Development of additional accommodation for Dunk Island Resort	2004/1423	Not Controlled Action	Completed	In buffer area only
Expansion of Aquaculture facility	2002/707	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In buffer area only
Mission Beach Clump Point Boating Infrastructure Project, Qld	2017/7924	Not Controlled Action	Completed	In buffer area only
Mission Beach Safe Boating Infrastructure Project, Mission Beach, QLD	2013/7100	Not Controlled Action	Completed	In buffer area only
Mission Beach sewerage scheme	2002/827	Not Controlled Action	Completed	In buffer area only
Moresby River Barramundi aquaculture facility	2001/433	Not Controlled Action	Completed	In buffer area only
Prawn Farm Expansion Stage 1	2001/207	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Telecommunications Facility	2002/840	Not Controlled Action	Completed	In buffer area only
Vegetation Clearance	2001/482	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
'Liquid at Mission Beach' Residential Development	2007/3815	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Bruce Highway Upgrade	2006/2967	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Dispersal of Spectacled Flying Fox, Paronella Park, Mena Creek, Qld	2013/7052	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
El Arish to Mission Beach Road Upgrade	2001/287	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Establishment of Eleven Sneaker Ranges in the Jarra Creek and Impact Sectors of	2002/896	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Powerlink Queensland Innisfail to Edmonton replacement high voltage transmission	2006/3145	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Residential Subdivision & Associated Works Alexander Drive RP732173	2005/2022	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Residential Subdivision Lot 502 SP110366	2003/1286	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Shared Bikeway/Walkway - Stage 2	2010/5474	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Waste Transfer Station (Minor)	2001/284	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Referral decision				

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Referral decision				
Canopy Walk Construction	2001/486	Referral Decision	Completed	In buffer area only

Biologically Important Areas			[Resource Information]
Scientific Name	Behaviour	Presence	Buffer Status
Dolphins			
Sousa chinensis Indo-Pacific Humpback Dolphin [50]	Breeding	Known to occur	In buffer area only
Sousa chinensis Indo-Pacific Humpback Dolphin [50]	Foraging	Likely to occur	In buffer area only
Tursiops aduncus Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Breeding	Likely to occur	In buffer area only
Tursiops aduncus Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Breeding	Known to occur	In buffer area only
Seabirds			
Sterna sumatrana Black-naped Tern [800]	Breeding	Known to occur	In buffer area only
Whales			
Megaptera novaeangliae Humpback Whale [38]	Breeding and calving	Known to occur	In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

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

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Attexo

Appendix B

Likelihood of occurrence assessment

Threatened Ecological Community	EPBC Status	Habitat Description	Source	Likelihood- Desktop only	Likelihood - Refined
Broad leaf tea-tree (Melaleuca viridiflora) woodlands in high rainfall coastal north Queensland	Endangered	This ecological community is restricted to the Wet Tropics and Central Mackay Coast bioregions where it occurs in high rainfall floodplain areas. While most occurrences are found within 20 km of the east coast, some patches of the community lie further inland. It occurs on poorly drained floodplains with a land form that is sloping to flat, and it occurs on landzones 3 (Quaternary alluvial systems) and 5 (plains and plateaus on Tertiary land surfaces). Soils are duplex with an impeded layer several centimetres below the surface which causes surface water to be present during the wet season. Inundation can persist for up to a few months (TSSC 2012a). It is typically a woodland (but can have a forest structure in some areas) where M. viridiflora is dominant in the canopy and a diversity of grasses, sedges and forbs occupy the ground layer (DSEWPC 2012b). The structure and floristics of this community vary in response to different soil types, extent of inundation in the wet season and successional responses to fire and grazing (DSEWPC 2012b). This TEC is associated with the following Queensland Regional Ecosystems (REs): 7.3.8a, 7.3.8b, 7.3.8c, 7.3.8d, 7.5.4g, 8.3.2, 8.5.2a, 8.5.2c and 8.5.6 (TSSC 2012).	PMST	**Likely to Occur**. Constituent Regional Ecosystems (RE 7.3.8c-d) are mapped within the Project area and the neighbouring Powerlink property.	**Unlikely to Occur**. Ground-truthing of the vegetation in the Survey Area recorded no instances of this TEC, nor any of the constituent RE.
Littoral Rainforest and Coastal Vine Thickets of Eastern Australia	Critically Endangered	The ecological community represents a complex of rainforest and coastal vine thickets, including some that are deciduous, on the east coast of Australia. Typically, the ecological community occurs within two kilometres of the coast or adjacent to a large salt water body, such as an estuary and, thus, is influenced by the sea. Within Australia, littoral rainforest occurs along the coast from far eastern Victoria up the east coast through NSW and Qld and across the NT and WA. In Qld, the REs that equate wholly to the ecological community are: 3.2.1a; 3.2.1b; 3.2.12; 3.2.13; 3.2.28; 3.2.29; 3.2.31; 3.2.11; 3.12.20; 7.2.1a-i; 7.2.2a-h; 7.2.5a; 7.2.6b; 7.11.3b; 7.12.11d; 8.2.2 and 12.2.2.	PMST	**Unlikely to Occur**. No associated Regional Ecosystems are mapped within the Project area.	**Unlikely to Occur**. Ground-truthing of the vegetation in the Survey Area recorded no instances of this TEC, nor any of the constituent RE.
Lowland tropical rainforest of the Wet Tropics	Endangered	The ecological community described in this Conservation Advice includes the plants, animals and other organisms typically associated with a type of lowland tropical rainforest that is found in the Wet Tropics region of north Queensland. It is usually a structurally complex, evergreen tall forest with a relatively high species diversity (compared with other Australian rainforests), and a predominance of large-leaved tree species (mesophyll, leaf blade length of 12.5 – 25 cm) and notophylls (< 12.5 cm). Vines and lianas, and epiphytes, are relatively common, and in an Australian rainforest context, so are herbaceous ground layer plant species. The ecological community also includes lowland structurally simple mesophyll vine forests such as those with a prominent layer of Archontophoenix alexandrae (Alexandra Palm, sometimes known as Feather Palm) and/or Licuala ramsayi var. ramsayi (Fan Palm), typically occurring on poorly drained alluvial plains. Distinctive faunal components include tree kangaroos, cassowaries, riflebirds, tree frogs, butterflies, velvet worms, and a range of endemic canopy arthropods (DAWE 2021). Queensland REs associated with this TEC include: 3.3.1, 3.3.4, 3.3.5, 3.3.6, 3.8.2, 7.3.3, 7.3.4, 7.3.10, 7.3.17, 7.3.20, 7.3.23, 7.3.25, 7.3.38, 7.3.49, 7.3.50, 7.8.1, 7.8.2, 7.8.11, 7.8.12, 7.8.14, 7.11.1, 7.11.2, 7.11.3, 7.11.7, 7.11.23, 7.11.24, 7.11.25, 7.11.30, 7.12.1, 7.12.2, 7.12.7, 7.12.11, 7.12.39, and 7.12.40.	PMST	**Likely to Occur**. Constituent Regional Ecosystems (RE 7.12.1) are mapped within the Project area, and the neighbouring Powerlink property and surrounds (REs 7.3.17, 7.3.20).	**Unlikely to Occur**. Ground-truthing of the vegetation in the Survey Area recorded no instances of this TEC, nor any of the constituent RE.
Mabi Forest (Complex Notophyll Vine Forest 5b)	Critically Endangered	This ecological community occurs on moist lowlands, foothills and uplands, on highly fertile basalt-derived soils. It is restricted to those mapped areas of RE 7.8.3 and other patches identified as Complex Notophyll Vine Forest 5b in the Wet Tropics bioregion (TSSC 2002). The TEC is associated with the following Queensland REs: 7.8.3 and 7.3.37.	PMST	**Unlikely to Occur**. No associated Regional Ecosystems are mapped within the Project area.	**Unlikely to Occur**. Ground-truthing of the vegetation in the Survey Area recorded no instances of this TEC, nor any of the constituent RE.

Common Name	Scientific Name	EPBC Status	NC Status	Habitat Description	Source	Likelihood- Desktop only	Likelihood - Refined
Bird Species							
Common Sandpiper	*Actitis hypoleucos*	Mi, Ma	-	Shallow, pebbly, muddy or sandy edges of rivers and streams, coastal to far inland; dams, lakes, sewage ponds; margins of tidal rivers; waterways in mangroves or saltmarsh; mudflats; rocky or sandy beaches; causeways, riverside lawns, drains and street gutters (Pizzey & Knight 1999).	PMST	**Potential to Occur**. Broadly suitable habitat is mapped in the Project area and a recent record exists within 50 km (9 km NW 2011).	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Common Noddy	*Anous stolidus*	Mi, Ma	-	In Australia, the Common Noddy mainly occurs in oceans off the QLD coast, but the species also occurs off the north-west and central WA coast. During the breeding season the Common Noddy usually occurs on or near islands, on rocky islets and stacks with precipitous cliffs, or on shoals of cays of coral or sand. They will forage in surrounding waters (DoE 2024).	PMST	**Unlikely to Occur**. Although there is a record within 50 km, there is no suitable habitat mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Fork-tailed Swift	*Apus pacificus*	Mi, Ma	-	Almost exclusively ariel, occurring over inland plains, but sometimes over foothills or in coastal areas; often over cliffs, beach, and islands and sometimes well out to sea. Can also occur over built-up areas, but mostly over dry or open habitats such as riparian woodland, tea-tree swamps, low scrub, heathland and saltmarsh. The species is a non-breeding visitor to Australia, and has records are widespread, but scattered across the coastal areas, and are more widespread west of the Great Divide (DoE 2024).	PMST	**Unlikely to Occur**. While broadly suitable habitat for this species is mapped in the Study area, there are no records within 50 km.	**Unlikely to Occur**. Field survey confirmed that preferred habitat for this nomadic, migratory and primarily aerial species species is not present in the Project area.
Ruddy Turnstone	*Arenaria interpres*	V, Mi, Ma	V	Widespread within Australia during the austral summer non-breeding season. Found mostly in coastal regions, with occasional inland records. Strong preference for rocky shores or beaches where there are large deposits of rotting seaweed. Found around tidal reefs and pools, weed covered rocks, on mudflats, and occasionally inland on shallow waters, sewage ponds, commercial salt fields, or over open or ploughed ground (DCCEEW 2024).	PMST	**Unlikely to Occur**. Although there is a record within 50 km, there is no suitable habitat mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Sharp-tailed Sandpiper	*Calidris acuminata*	V, Mi, Ma	V	The sharp-tailed sandpiper breeds in northern Siberia but migrates south to winter in Australia and New Zealand. Non-breeding habitat includes tidal mudflats, saltmarshes, mangroves; shallow fresh, brackish, or saline inland wetlands; floodwaters, irrigated pastures and crops; sewage ponds and salt fields (Pizzey & Knight 1999).	PMST	**Unlikely to Occur**. Suitable habitat for this species is not mapped in the Study area and there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Red Knot, Knot	*Calidris canutus*	V, Mi, Ma	V	Widespread non-breeding visitor to the Australian coast. In Australia, mainly inhabits intertidal mudflats, sandflats, and sandy beaches of sheltered coasts and sometimes on sandy beaches or shallow pools on exposed rock platforms. They are occasionally seen on terrestrial saline wetlands near the coast and on sewage ponds and salt works (DCCEEW 2024).	PMST	**Unlikely to Occur**. Suitable habitat for this species is not mapped in the Study area and there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.

Curlew Sandpiper	*Calidris ferruginea*	CE, Mi, Ma	CR	Mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms (Pizzey and Knight 1999). They are also recorded inland, though less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They generally roost on bare dry shingle, shell or sand beaches, sandpits, and islets in or around coastal or near-coastal lagoons and other wetlands (DCCEEW 2023).	PMST	**Unlikely to Occur**. Suitable habitat for this species is not mapped in the Study area and there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Pectoral Sandpiper	*Calidris melanotos*	Mi, Ma	-	In Queensland, records are predominantly concentrated around Cairns, but scattered records also occur east of the Great Divide between Townsville and Yeppoon and in the state's southeast. Habitat preferences include shallow fresh to saline wetlands, and the species is found around coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, rive pools, creeks, floodplains, and artificial wetlands (DoE 2024).	PMST	**Unlikely to Occur**. Suitable habitat for this species is not mapped in the Study area and there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Red-necked Stint	*Calidris ruficollis*	Mi, Ma	-	Distributed along most of the Australian coastline during the non-breeding season (austral summer). In Australasia, is found mostly in coastal areas including sheltered inlets, bays, lagoons, and estuaries with intertidal mudflats, and sometimes on protected sandy or coralline shores. Also occur in salt works and sewage farms; saltmarsh; ephemeral or permanent shallow wetlands near the coast or inland (DoE 2024).	PMST	**Unlikely to Occur**. Suitable habitat for this species is not mapped in the Study area and there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Great Knot	*Calidris tenuirostris*	V, Mi, Ma	V	In Australasia, the species typically prefers sheltered coastal habitats, with large intertidal mudflats or sand flats. This includes inlets, bays, harbours, estuaries, and lagoons. They are occasionally found on exposed reefs or rock platforms, shorelines with mangrove vegetation, ponds in saltworks, at swamps near the coast, salt lakes and non-tidal lagoons. Typically roost in large groups in open areas (DCCEEW 2024).	PMST	**Unlikely to Occur**. Suitable habitat for this species is not mapped in the Study area and there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Southern Cassowary	*Casuarius casuarius (southern population)*	E	E	Although occurring primarily in rainforest and associated vegetation mosaics, the cassowary also uses woodland, swamp and disturbed habitats as intermittent food sources and as connecting habitat between more suitable sites. It requires a high diversity of fruiting trees to provide a year-round supply of fleshy fruits. While some habitats may be important only briefly in the annual cycle of food production, they may be crucial to the survival of cassowaries whose home range encompasses them. At times of food stress in the rainforest, such as after cyclones, food resources in non-rainforest habitats may be more important (QGEPA 2007).	PMST, WildNet	**Likely to Occur**. Broadly suitable rainforest habitat is mapped in the Study area and a recent, nearby exists (0.43 km NE 2022).	**Potential to Occur**. Field survey confirmed that preferred habitat for this species is not present in the Project area. However some species of suitable feed trees were recorded in the neighbouring vegetation. These feed trees and nearby species records make it difficult to completely rule out the potential for the species to utilise the vegetation on the neighbouring Powerlink property.
Greater Sand Plover, Large Sand Plover	*Charadrius leschenaultii*	V, Mi, Ma	V	In Australia, the Greater Sand Plover occurs in coastal areas in all states, through the greatest numbers occur in northern Australia, especially the nor-west. This species breeds in central Asia. In the nonbreeding ground in Australasia, the species is almost entirely coastal, inhabiting littoral and estuarine habitats. They mainly occur on sheltered sandy, shelly, or muddy beaches with large intertidal mudflats or sandbanks, as well as sandy estuarine lagoons, inshore reefs, rock platforms, small rocky islands or sandy cays on coral reefs. They are also occasionally recorded on near-coastal saltworks and salt lakes, including marginal saltmarsh, and on brackish swamps. They seldom occur at shallow freshwater wetlands (DCCEEW 2023).	PMST	**Unlikely to Occur**. Suitable habitat for this species is not mapped in the Study area and there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Lesser Sand Plover, Mongolian Plover	*Charadrius mongolus*	E, Mi, Ma	E	Breeding in the northern hemisphere and migrates annually to Australia for the austral summer. Widespread in Australian coastal regions, mainly in northern and eastern Australia. Almost strictly coastal in Australia, with a preference for sandy beaches, mudflats of coastal bays and estuaries, sandflats and dunes, and occasionally mangrove mudflats (TSSC 2016).	PMST	**Unlikely to Occur**. Although there is a record within 50 km, there is no suitable habitat mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Oriental Cuckoo, Horsfield's Cuckoo	*Cuculus optatus*	Mi	-	Within Australia, the species uses a range of vegetated habitats including monsoon rainforest, open Casuarina, Acacia, Eucalyptus or wet sclerophyll forest, and more occasionally swamps, mangroves and plantations (Payne and Kirwan 2020) and appears quite often along edges of forests, or ecotones between forest types (DoE 2015) (Menkhorst, et al. 2017). This cuckoo species feeds arboreal, foraging for invertebrates on loose bark on the trunks and branches of trees, and among the foliage, including in mistletoes. It will forage from the ground but requires shrubs or trees from which it sallies and returns to consume prey items. Caterpillars have been noted as a preferred food source. Oriental Cuckoos tend to forage individually and have only been recorded foraging in pairs when infestations of caterpillars occur (DoE 2015).	PMST	**Potential to Occur**. Broadly suitable rainforest and eucalypt woodland habitat is mapped in the Project area and a recent record exists within 50 km (20.55 km NE 2012).	**Unlikely to Occur**. While there is broadly suitable eucalypt woodland on the neighbouring Powerlink property, field survey confirmed that, in the Project area, broadly suitable habitat is very limited and preferred foraging habitat for this species is not present.
Red Goshawk	*Erythrotriorchis radiatus*	E	E	The Red Goshawk is endemic to Australia where it is very sparsely dispersed across approximately 15% of coastal and sub-coastal Australia from western Kimberly to north-eastern NSW, and occasionally on continental islands. It has probably always occurred in central Australia, where three widely-spaced, recent confirmed sightings corroborate earlier, previously doubted records, however no breeding has been recorded in central Australia. This species occurs in coastal and sub-coastal areas in wooded and forested lands of tropical and warm-temperate Australia. Riverine forests are also used frequently. Such habitats typically support high bird numbers and biodiversity, especially medium to large species which the red goshawk requires for prey (DCCEEW 2023).	PMST, WildNet	**Unlikely to Occur**. Although there is a record within 50 km, suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Grey Falcon	*Falco hypoleucos*	V	V	They Grey Falcon's habitat includes lightly treed inland plains; gibber deserts, sandridges, pastoral lands, timbered watercourses; seldom in driest deserts. Resident or nomadic visitor to inland parts of all mainland states (Pizzey & Knight 1999).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Lesser Frigatebird, Least Frigatebird	*Fregata ariel*	Mi, Ma	-	It is a widespread seabird, with major colonies in the Indian Ocean, West and Central Pacific and Southern Atlantic. They inhabit remote islands in tropical and sub-tropical seas, where it breeds in small bushes, mangroves and even on the ground. Outside the breeding season it is sedentary, with immature and non-breeding individuals dispersing throughout tropical seas (Pizzey & Knight 1999).	PMST	**Unlikely to Occur**. Although there is a record within 50 km, suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Great Frigatebird, Greater Frigatebird	*Fregata minor*	Mi, Ma	-	The Great Frigatebird is a widespread seabird, with major colonies in the Indian Ocean, West and Central Pacific and Southern Atlantic. Typically pelagic, occasionally observed in inshore shelf waters. Feeds by snatching fish and squid from surface of the sea. Occurs from Pt. Coats, WA to North Stradbroke Island, Qld (Morecombe 2003).	PMST	**Unlikely to Occur**. Although there is a record within 50 km, suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian)	*Fregetta grallaria grallaria*	V	-	The White-bellied Storm-Petrel breeds on small offshore islets and rocks in the Lord Howe Island group, including Roach Island and Balls Pyramid. They occur across sub-tropical and tropical waters in the Tasman Sea, Coral Sea and possibly, the central Pacific Ocean. In the non-breeding season, they reach the forages over near-shore waters along the continental shelf of mainland Australia (DoE 2024).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.

Latham's Snipe, Japanese Snipe	*Gallinago hardwickii*	V, Mi, Ma	V	Latham's Snipe is a non-breeding visitor to south-eastern Australia and is a passage migrant through northern Australia. This species has been recorded along the east coast of Australia from Cape York Peninsula through to south-eastern SA. It occurs in permanent and ephemeral wetlands up to 2000m ASL, where they usually inhabit open, freshwater wetlands with low, dense vegetation (e.g. swamps, flooded grasslands or heathlands, around bogs and other water bodies). They can also occur in habitats with saline or brackish water, in modified or artificial habitats, and in habitats located close to humans or human activity (DCCEEW 2024).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable "wet meadow" habitat for this species within the Project area.
Swinhoe's Snipe	*Gallinago megala*	Mi, Ma	-	Swinhoe's Snipe habitat in Australia includes dense growths of grass and rushes around edges of fresh and brackish wetlands (BirdLife Australia 2023). The species spends its breeding period in the northern hemisphere and only visits Australia between October and April. Few records exist in Australia; however, habitat may occur along most of the east coast of the country (DoE 2024).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Pin-tailed Snipe	*Gallinago stenura*	Mi, Ma	-	In Australia, the Pin-tailed Snipe is usually found on freshwater wetlands on coastal plains, such as swamps, soaks, river pools, floodwaters and sewage ponds; not normally in saline or inter-tidal wetlands (BirdLife Australia 2023) (DoE 2024). The species spends its breeding period in the northern hemisphere and only visits Australia between September and March (DoE 2024), however the distribution throughout Australia is poorly understood (BirdLife Australia 2023). Suitable habitat may occur along most of the east coast of the country (DoE 2024).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
White-throated Needletail	*Hirundapus caudacutus*	V, Mi, Ma	V	Almost exclusively aerial from heights of less than 1m up to more than 1000m above the ground. Most often recorded above wooded areas, including open forest and rainforest and also are commonly recorded over heathland and coastal cliffs (TSSC 2019).	PMST	**Potential to Occur**. Broadly suitable habitat for this species is mapped in the Study area and there is a record within 50 km (18.02 km NE 2006).	**Potential to Occur**. While there is a record of the species within 50 km (18.02 km NE 2006), the species is migratory and nomadic and may only occur in the airspace over the Project area on a seasonal and/or infrequent basis. .
Barn Swallow	*Hirundo rustica*	Mi, Ma	-	The Barn Swallow usually occurs in northern Australia, on Cocos-Keeling Island, Christmas Island, Ashmore Reef , and patchily along the north coast of the mainland from the Pilbara region, Western Australia, to Fraser Island in Queensland. The species has been recorded irregularly further south in Western Australia, in areas such as Derby and Carnarvon, and in South Australia near Koolunga, Roxby Downs, Nantawarra and south of Innamincka. Vagrants have also been recorded as far south as Sydney. In Australia, the Barn Swallow is recorded in open country in coastal lowlands, often near water, towns and cities. Birds are often sighted perched on overhead wires, and also in or over freshwater wetlands, paperbark Melaleuca woodland, mesophyll shrub thickets and tussock grassland (DoE 2024)	PMST	**Unlikely to Occur**. While broadly suitable habitat for this species is mapped in the Study area, there are no records within 50 km.	**Unlikely to Occur**. While broadly suitable habitat for this species occurs within the Project area, there are no records within 50 km.
Asian Dowitcher	*Limnodromus semipalmatus*	V, Mi, Ma	V	The Asian Dowitcher is a rare to uncommon summer migrant from south-east Asia. It is peak abundance in Australia is typically late summer, but relative density is low. It often joins flocks of other large migratory shorebirds where it feeds on tidal mudflats, beaches, commercial saltfields and sewage ponds (Pizzey & Knight 1999).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Bar-tailed Godwit	*Limosa lapponica*	Mi, Ma	-	The temperate or tropical winter habitats are usually located around intertidal areas along muddy coastlines, estuaries, lagoons, sewage ponds, brackish or saline inland lakes, flooded pastures and airfields (Pizzey and Knight 1999).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit	*Limosa lapponica baueri*	E	E	The bar-tailed godwit (both subspecies combined) have been recorded in the coastal areas of all Australian states. It is widespread in the Torres Strait and along the eastern and south-east coasts of QLD, NSW and VIC. These species migrate southwards for the boreal winter. L. l. menzbieri has a more westerly migration than L. l. baueri. They are usually located around intertidal areas along muddy coastlines, estuaries, lagoons, sewage ponds, brackish or saline inland lakes, flooded pastures and airfields (Pizzey & Knight 1999) (DCCEEW 2024).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Grey Wagtail	*Motacilla cinerea*	Mi, Ma	-	The grey wagtail is a scarce but regular visitor to northern Australia (Menkhorst et al 2019). The species inhabits fast-flowing mountain streams and rivers with riffles and exposed rocks or shoals (also waterfalls), often in forested areas. The species is also found in lowland watercourses and canals, where there are artificial waterfall and weirs etc. (Tyler 2020).	PMST	**Unlikely to Occur**. While there is a record within 50 km, suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Yellow Wagtail	*Motacilla flava*	Mi, Ma	-	This species move south from their breeding distribution in North America to northern Australia during their northern Summer. In northern Australia, wintering yellow wagtail visitors have been recorded in open areas of short grass with clumps of pandanus and small eucalyptus, and observed feeding near sewage ponds. Elsewhere, in open areas with water, along banks of semipermanent streams, in areas adjacent to sugarcane (Saccarum officinarum) fields that are used as roosts; as well as in sparse grasslands, acacia steppe, and drying swamps; usually in association with wild and domestic grazing mammals (Badyaev 2020).	PMST	**Unlikely to Occur**. While broadly suitable habitat for this species is mapped in the Study area, there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Eastern Curlew, Far Eastern Curlew	*Numenius madagascariensis*	CE, Mi, Ma	CR	Inhabits estuaries, tidal mudflats, sandspits, saltmarshes, mangroves; occasionally fresh or brackish lakes; bare grasslands near water (Pizzey & Knight 1999). The Eastern Curlew breeds in northeast Asia and is a common summer migrant to Australian coastlines, although about 25% of the population remains all year round (Finn, Catterall, & Driscoll 2001) (Finn, Catterall, & Driscoll 2007) (Geering, Agnew, & Harding 2007).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Little Curlew, Little Whimbrel	*Numenius minutus*	Mi, Ma	-	Dry grasslands, floodplains, margins of drying swamps; tidal mudflats, airfields, playing fields, crops, commercial saltfields and sewage ponds (Pizzey & Knight 1999).	PMST	**Unlikely to Occur**. While there is a record within 50 km, suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Whimbrel	*Numenius phaeopus*	Mi, Ma	-	Estuaries, mangroves, tidal flats, coral cays, exposed reefs, flooded paddocks, sewage ponds, bare grasslands, sports grounds and lawns (Pizzey & Knight 1999).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Bridled Tern	*Onychoprion anaethetus*	Mi, Ma	-	Tropical and subtropical seas; offshore islands; rarely coasts (Pizzey & Knight 1999).	PMST	**Unlikely to Occur**. While there is a record within 50 km, suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.

Osprey	*Pandion haliaetus*	Mi, Ma	-	Osprey habitat includes littoral areas, terrestrial wetlands and coastal lands of tropical and temperate Australia and inland along large rivers mainly in the northern part of the country. The species prefers extensive sheets of clear open water, fresh, brackish or saline for fishing (BirdLife Australia 2023). Breeding range extends mainly around the northern coast of Australia from Albany, WA to Lake Macquarie, NSW. Non-breeding range includes the whole of the Australian mainland coastal region (DoE 2024).	PMST	**Potential to Occur**. Broadly suitable habitat for this species is mapped in the Study area and there is a record within 50 km (16.17 km NW 2021).	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
White-tailed Tropicbird	*Phaethon lepturus*	Mi, Ma	-	In Australian waters, the species is likely pelagic and is rarely found inshore or over beach habitat. Breeding habitat occurs on tropical islands or atolls (BirdLife Australia, 2023t). Possible species habitat includes marine areas to the Australian coast, north from Geraldton, WA to Narooma, NSW (DoE 2024).	PMST	**Unlikely to Occur**. There are no records within 50 km and suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Grey Plover	*Pluvialis squatarola*	V, Mi, Ma	V	Grey Plovers occur almost entirely in coastal areas, where they usually inhabit sheltered embayments, estuaries and lagoons with mudflats and sandflats, and occasionally on rocky coasts with wave-cut platforms or reef-flats, or on reefs within muddy lagoons. They also occur around terrestrial wetlands such as near-coastal lakes and swamps, or salt-lakes. Grey Plovers breed in tundra, often at higher elevations and generally in dry positions, such as on low ridges or bluffs, in areas vegetated with sedges, moss, lichen and stunted trees, and interspersed with large wetlands and patches of snow and unmelted ice (DCCEEW 2024f).	PMST	**Potential to Occur**. Broadly suitable habitat for this species is mapped in the Study area and there is a record within 50 km (17.15 km NW 2019).	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Southern Black-throated Finch	*Poephila cincta cincta*	E	E	Found in the Townsville area, around Ingham and central-eastern Queensland. Occurs mainly in grassy, open woodlands and forests, typically dominated by Eucalyptus, Corymbia and Melaleuca, and occasionally in tussock grasslands or freshwater wetlands, often along or near watercourses, or in the vicinity of water (DoE 2024).	PMST	**Unlikely to Occur**. While broadly suitable habitat is mapped within the Srudy area. No records exist within 50 km.	**Unlikely to Occur**. Field survey did not record any prefrerred habitat for this species within the Project area.
Australian Painted Snipe	*Rostratula australis*	E, Ma	E	Inhabits well-vegetated shallows and margins of wetlands, dams, sewage ponds and other water courses; wet pastures, marshy areas, irrigation systems, lignum, tea-tree scrub and open timber (Pizzey & Knight 1999). Occurs mostly in south-eastern Australia but dispersive in response to rainfall. The species has a broad range of distribution throughout Australia but has a close association with brackish or freshwater terrestrial wetlands, especially temporary ones which have muddy margins. (BirdLife Australia 2023).	PMST	**Unlikely to Occur**. While broadly suitable habitat is mapped within the Powerlink properties neighbouring the Project area. No records have been recorded within 50 km.	**Unlikely to Occur**. While field surveys recorded broadly suitable habitat in the Survey area. No records have been recorded within 50 km.
Roseate Tern	*Sterna dougallii*	Mi, Ma	-	Offshore waters, islands, coral reefs, sand cays, beaches, and tidal inlets (Pizzey & Knight 1999).	PMST	**Unlikely to Occur**. Although there is a record within 50 km, there is suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Black-naped Tern	*Sterna sumatrana*	Mi, Ma	-	In Australia, Black-naped Terns are found mainly in the central north and north-east of the country along the coast and through the islands, where they breed, and waters of the Great Barrier Reef and Coral Sea. They are rarely found in inshore waters except when breeding. They are mainly associated with small, offshore sand and coral cays, coral reefs and lagoons, and sandy and rocky islands and islets, and surrounding seas (Pizzey & Knight 1999) (Marchant & Higgins 2006).	PMST	**Unlikely to Occur**. Although there is a record within 50 km, there is suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Little Tern	*Sternula albifrons*	Mi, Ma	-	Inhabits coastal waters, bays, inlets, saline or brackish lakes, salt fields and sewage ponds near coast throughout northwest, north, east and southeast Australia (Pizzey & Knight, 1999). It can also be found further inland, sometimes up to several kilometres from the sea.	PMST	**Unlikely to Occur**. Although there is a record within 50 km, there is suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Greater Crested Tern	*Thalasseus bergii*	Mi, Ma	-	The Greater Crested Tern can be found on islands and coastlines of the tropical and subtropical Old World, ranging from the Atlantic Coast of South Africa, south around the Cape and continuing along the coast of Africa and Asia almost without break to south-east Asia and Australia. This species remains sedentary in their breeding areas or disperse locally, although some are more migratory. The species breeds in large dense colonies, or in small groups of less than 10 pairs amidst colonies of other species (BirdLife Australia 2023).	PMST	**Unlikely to Occur**. Although there is a record within 50 km, there is suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Grey-tailed Tattler	*Tringa brevipes*	Mi, Ma	-	Found in estuaries, tidal mudflats, mangroves, wave-washed rocks and reefs, shallow river margins, coastal or inland (Pizzey & Knight 1999). In Australia adults arrive in the north coast from late Aug to early Sep.	PMST	**Unlikely to Occur**. There is suitable habitat is not mapped within the Study area and no records exist within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Common Greenshank, Greenshank	*Tringa nebularia*	E, Mi, Ma	E	In Queensland, the species is widespread in the Gulf country and eastern Gulf of Carpentaria (DCCEEW 2024). Found in mudflats, estuaries, saltmarshes, margins of lakes, wetlands, claypans, fresh and salines, commercial salt fields, sewage ponds (Pizzey & Knight 1999).	PMST	**Unlikely to Occur**. There is suitable habitat is not mapped within the Study area and no records exist within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Masked Owl (northern)	*Tyto novaehollandiae kimberli*	V	V	In northern Australia, the Masked Owl has been recorded from riparian forest, rainforest, open forest, Melaleuca swamps and the edges of mangroves, as well as along the margins of sugar cane fields (DoE 2024)	PMST	**Unlikely to Occur**. While broadly suitable habitat is mapped within the Powerlink properties neighbouring the Project area. No records have been recorded within 50 km.	**Unlikely to Occur**. While field surveys recorded broadly suitable habitat in the Survey area. No records have been recorded within 50 km.
Terek Sandpiper	*Xenus cinereus*	V, Mi, Ma	V	The Terek Sandpiper has a primarily coastal distribution, with occasional recorded inland. They mostly forage in the open, on soft wet intertidal mudflats or in sheltered estuaries, embayments, harbours or lagoons. The species has also been recorded on islets, mudbanks, sandbanks and spits, and near mangroves. They prefer to roost in or among mangroves where they perch in branches or roots up to 2m from the ground (DCCEEW 2024).	PMST	**Unlikely to Occur**. Although there is a record within 50 km, there is suitable habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat for this species within the Project area.
Mammal Species							

Northern Bettong	*Bettongia tropica*	E	E	Habitat of the northern bettong includes a range of eucalypt forest types, from tall and wet forest dominated by Eucalyptus grandis (flooded gum) and tall forest dominated by Eucalyptus resinifera (red mahogany), abutting the rainforest, to medium height and drier woodlands dominated by Corymbia citriodora (lemon scented gum) and Corymbia platyphylla (poplar gum). Northern bettongs are heavily dependent on truffles (specialised fungi) as a food source during the wetter parts of the year. Truffles, belonging to about 36 species of fungus, generally comprise about 45 percent of the diet of northern bettongs. The subterranean stem bases from Alloteropsis semialata (cockatoo grass) and Hypoxis species (lilies) comprise 10 - 35 percent of the species' diet (TSSC 2016).	PMST	**Unlikely to Occur**. Suitable habitat for this species is not mapped in the Study area.	**Unlikely to Occur**. Field survey did not record suitable forest habitat in the Project Area.
Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu]	*Dasyurus hallucatus*	E	C	The northern quoll occurs across much of northern Australia, from south-eastern Queensland to the south-west Kimberley, with a disjunct population in the Pilbara. In the Northern Territory it is restricted to the Top End. The species occupies a diversity of habitats across its range which includes rocky areas, eucalypt forest and woodlands, rainforest, sandy lowlands and beaches, shrubland, grasslands and desert. The habitat generally encompasses some form of rocky area for denning purposes with surrounding vegetated habitats used for foraging and dispersal (DoE 2024).	PMST	**Unlikely to Occur.** While there is a record within 50 km, suitabale rocky habitat is unlikely to occur within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat in the Project Area.
Spotted-tailed Quoll (North Queensland), Yarri	*Dasyurus maculatus gracilis*	E	E	The Spotted-tailed Quoll occurs along the east coast of Australia from south east Queensland to South Australia and Tasmania. The Spotted-tailed Quoll has been recorded in a wide range of habitat types including dry and moist sclerophyll forests and woodlands, rainforest, coastal heathland, and riparian forest. This species been occasionally sighted in treeless areas, rocky outcrops and grazing lands. The Spotted-tailed Quoll shelters and dens in small caves, fallen logs with large hollows and tree hollows and may utilise numerous dens within its home range which has been estimated to be between 800 ha to 20 km2. The Spotted-tailed Quoll is partly arboreal and feeds upon a variety of prey species including birds, rodents, lizards, small wallabies, and even insects. The Spotted-tailed Quoll is also known to scavenge and feed upon carrion, road kills including wild dogs, and litter (DoE 2024).	PMST	**Unlikely to Occur.** While there is a record within 50 km, suitabale rocky habitat is unlikely to occur within the Study area.	**Unlikely to Occur**. Field survey did not record any suitable habitat in the Project Area.
Semon's Leaf-nosed Bat, Greater Wart-nosed Horseshoe-bat	*Hipposideros semoni*	V	E	Semon's Leaf-nosed Bat is found in tropical rainforest, monsoon forest, wet sclerophyll forest and open savannah woodland. This species does not have an obligatory requirement for cave roosts. Daytime roost sites include tree hollows, deserted buildings in rainforest, road culverts and shallow caves amongst granite boulders or in fissures. They appear to prefer rainforest and are more likely to be tree-dwelling than cave-dwelling. It is often observed in "atypical places that are visited by humans" and there are examples of bats being observed in unoccupied houses (in an oven, clothes closet and on a picture rail) and the door handle of a car. The microclimate of such roosts is similar to that of ambient. The species is associated with the "Mabi forest (Complex notophyll vine forest 5b)", a Threatened Ecological Community listed under the EPBC Act 1999 (DoE 2024).	PMST	**Unlikely to Occur**. While some broadly suitable rainforest habitat for this species is mapped in the Study area, there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable rainforest, monsoon forest, wet schlerophyll forest or open savannah woodland habitat in the Project Area.
Ghost Bat	*Macroderma gigas*	V	E	Ghost bats occur in a wide range of habitats from rainforest, monsoon and vine scrub to open woodlands in arid areas. These habitats are used for foraging, while root habitat is more specific. Favoured roosting sites of the ghost bat are undisturbed caves or mineshafts which have several openings. Ghost bats occur in tropical regions in Queensland, and along the central and northern coast, from Rockhampton north to Cape York (TSSC 2016c).	PMST	**Unlikely to Occur**. While some broadly suitable rainforest habitat for this species is mapped in the Study area, there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable rainforest, monsoon forest, wet schlerophyll forest or open savannah woodland habitat in the Project Area.
Black-footed Tree-rat (north Queensland), Shaggy Rabbit-rat	*Mesembriomys gouldii rattoides*	V	C	In north Queensland, this species mostly occurs in eucalypt forests and woodlands, especially where hollows are relatively plentiful. There is also a record of denning in a hollow in a large rainforest tree near rainforest-eucalypt forest boundary at Iron Range (TSSC 2015). It has been recorded mostly from eucalypt forests and woodlands (but not rainforests) around Mareeba, but there are records sparsely across Cape York Peninsula, including recent records from Mungkan Kandju National Park and the Australian Wildlife Conservancy's Piccaninny Plains and Brooklyn wildlife sanctuaries (TSSC 2015).	PMST	**Unlikely to Occur**. While some broadly suitable eucalypt forest/woodland habitat for this species is mapped in the Study area, there are no records within 50 km.	**Unlikely to Occur**. Field survey did not record any suitable rainforest, monsoon forest, wet schlerophyll forest or open savannah woodland habitat in the Project Area.
Greater Glider (northern), Greater Glider (north-eastern Queensland)	*Petauroides minor*	V	V	The greater glider (northern) is an arboreal nocturnal marsupial, predominantly solitary and largely restricted to eucalypt forests and woodlands of north-eastern Australia. It is typically found in highest abundance on high elevation, wetter sites in open woodland to open forests, containing relatively old trees and abundant hollows. It is likely that only a proportion of forest in potential habitat areas is suitable for the species, as the structural attributes of the forest overstorey and forage quality it relies on vary considerably across the landscape (DCCEEW 2022).	PMST	**Potential to Occur**. Broadly suitable habitat is mapped in the Project area and a recent record exists within 50 km (40 km SE).	**Unlikely to Occur.** Following field survey of the Survey Area, vegetation is of insufficient age/size for this species. Furthermore, the young vegetation that is present, is considered not open enough to be suitable for this gliding species.
Northern Yellow-bellied Glider, Wet Tropics Yellow-bellied Glider	*Petaurus australis brevirostrum*	E	E	The Yellow-bellied Glider inhabits tall open forest on the western fringe of the Wet Tropics Heritage Area. Floristics of the forest may vary from one location to another but the presence of two eucalypt species, Eucalyptus resinifera and Eucalyptus grandis, is essential. The first is used for sap-feeding and the second as a den tree. These occur most commonly in the wetter areas of the open eucalypt forest. These two species of eucalypt also have disjunct distributions with isolated populations west of Mackay and in the Atherton region and main distributions further south (DoE 2024).	PMST	**Unlikely to Occur.** While broadly suitable habitat is mapped in the Project area, there are no nearby records of the species.	**Unlikely to Occur.** Following field survey of the Survey Area, vegetation is of insufficient age for this species and does not contain the essential species, *Eucalyptus resinifera* or *Eucalyptus grandis* .
Mahogany Glider	*Petaurus gracilis*	E	E	The mahogany glider is only found in a narrow 122 km long strip of the southern Wet Tropics of north Queensland. It soars through the open forests and woodlands, using a membrane that extends from its wrist to its ankle, and can travel up to 60 m in one glide. The glider prefers open forests as the habitat allows for uninterrupted gliding paths between trees. The species was first recorded in the 1880s, but disappeared until it was rediscovered and formally named almost 100 years later, in 1989 (DoE 2024). Mahogany gliders are nocturnal, gliding at night between feed trees and sometimes foraging as low as one metre off the ground on grass tree Xanthorrhoea johnsonii flower spikes. Although principally nectarivorous, the mahogany glider relies on many food sources such as nectar, pollen, mistletoe, insects, wattle exudates and honeydew (DAWE 2021). As the second largest Petaurid glider, the mahogany glider requires a more open forest structure for efficient gliding than the sympatric sugar glider. Petaurus gracilis averages approx 29 m per glide and launches from an average height of 19.75 m (DAWE 2021). Two types of vegetation present formidable ecological barriers for the western and southern boundaries of the species' distribution. They are upland rainforest, typically the dominant vegetation community along the escarpment of the Paluma, Seaview and Cardwell Ranges, and the drier Einasleigh woodlands to the south of Saltwater Creek (DAWE 2021).	PMST, WildNet	**Potential to Occur**. Broadly suitable habitat is mapped in the Project area and a recent record exists within 50 km (9 km NW).	**Unlikely to Occur.** Following field survey of the Survey Area, vegetation is unlikely to be suitable for mahogany glider. Vegetation is quite young, making it unsuitable for denning. Additionally, the forest structure is more closed than is generally preferred by this species. *Xanthorrhoea johnsonii* (a secondary food source for the species was not observed during survey.
Mount Claro Rock Wallaby, Sharman's Rock Wallaby	*Petrogale sharmani*	V	V	The range of Sharman's rock-wallaby is limited. It is known from only about 20 colonies scattered within a 2000 km2 area of the Seaview and Coane Ranges, west of Ingham in north-eastern Queensland. The species occurs in a variety of rocky habitats (including rocky outcrops, boulder piles, gorges, cliff lines and rocky slopes) within open forests or grassy woodlands. It shelters during the day in rocky refuges or dense vegetation, emerging at dusk to feed (TSSC 2016).	PMST	**Unlikely to Occur.** Suitable rocky habitat is unlikely to occur in the Project area.	**Unlikely to Occur.** Field survey confirmed that suitable rocky habitat does not occur in the Survey Area.

Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	*Phascolarctos cinereus*	E	E	The Koala is endemic to Australia. The biological species range extends from north-eastern QLD to the south-east corner of SA. Koalas naturally inhabit a range of temperate, subtropical and tropical forests, woodland and semi-arid communities dominated by Eucalyptus species. Their habitat can broadly be defined as any forest or woodland containing species that are a known Koala food tree, or shrubland with emergent food trees (DoE 2017).	PMST	**Potential to Occur**. Broadly suitable habitat is mapped in the Project area and a recent record occurs within 50 km (~37 km SE).	**Unlikely to Occur.** Field survey confirmed two species of Ancillary Habitat Trees including *Melaleuca quinquenerva* and some *Corymbia intermedia* , however there was an absence of Locally Important Koala Trees throughout the Survey Area. Nearby mapped vegetation consists mainly of vine forest and rain forest REs, unlikely to support koala.
Spectacled Flying-fox	*Pteropus conspicillatus*	E	E	The spectacled flying-fox is associated mainly with rainforests, with most colonial camps occurring in or near (within several kilometres) of rainforests. However, it forages widely away from such camps across a broad range of vegetation types including mangroves, eucalypt forests, Melaleuca forests, gardens and orchards. Individuals may disperse widely from camps to feed, and may move frequently between camps. Individuals are known to fly up to 50 km in a single night to feed, and longer-distance movements are predicted (TSSC 2019). Diet includes fruits of many tree species, pollen, nectar and leaves. Telemetry data suggest that much of the foraging is undertaken in open forests (on mass flowering events) rather than on the dispersed fruit and flower resources in rainforests (TSSC 2019).	PMST	**Potential to Occur**. Broadly suitable habitat is mapped in the Project area and a recent record occurs within 50 km (7 km E).	**Potential to Occur**. While the species was not recorded during field survey, suitable foraging habitat in the form of *Melaleuca* forests were recorded within the Survey Area.
Grey-headed Flying-fox	*Pteropus poliocephalus*	V	C	The Grey-headed Flying-fox occurs in a range of habitats including subtropical and temperate rainforests, dry and wet sclerophyll forests, Banksia woodland, heaths and Melaleuca swamps (NPWS 2001).	PMST	**Unlikely to Occur**. While broadly suitable foraging habitat is mapped within the Project area, no records of the species occur within 50 km.	**Unlikely to Occur.** The species was not recorded during field surveys. Additionally, the Survey Area is outside of the current modelled BatMap range (Australian Bat Society 2024).
Large-eared Horseshoe Bat, Greater Large-eared Horseshoe Bat	*Rhinolophus robertsi*	V	V	The greater large-eared horseshoe bat is a poorly-known and generally uncommon species, which probably occurs in low densities even within core habitats. It occurs in rainforests, riparian forests, eucalypt open forests and woodlands. It has a slow fluttery flight, and its diet mostly comprises moths and beetles, but also includes grasshoppers, crickets and lacewings. At night it forages mainly in open forest and wattle-dominated ridges in rainforest. In open forest and woodland, it prefers to forage amongst the thicker vegetation in gullies and along creeks, though they have been observed at the edge of grassy clearings in rainforest and road edges. It usually flies within the lower half of the canopy between one and eight metres, using gaps such as tracks within rainforest, but has also been observed regularly at canopy height (around 25 m). While the species has been observed on occasions foraging in rainforest clearings and around a light near a patch of rainforest, it is thought to prefer to remain within canopy, and the loss of native vegetation remnants and understorey would likely limit their local distribution.	PMST	**Unlikely to Occur**. Mapped vegetation in the adjacent property includes some potentially suitable vine forest RE and some less ideal *Melaleuca* forest, however there are no records of the species within 50 km of the Project area.	**Unlikely to Occur**. Field surveys did not record any rainforest or vine forest within the Survey Area, however there was *Melaleuca* forest present. The species was not recorded either visually nor via ultrasonic recording.
Bare-rumped Sheath-tailed Bat, Bare-rumped Sheathtail Bat	*Saccolaimus saccolaimus nudicluniatus*	V	E	In Australia, the bare-rumped sheathtail bat has been recorded mostly in eucalypt forests and woodlands, generally in near-coastal areas. In Queensland, it is known to be associated with coastal lowland rainforests, and more open forests dominated by Eucalyptus or Corymbia species interspersed with coastal lowland rainforest. The small number of roosts recorded in Australia have all been found in deep tree hollows of the following species: poplar gum (Eucalyptus platyphylla), Darwin woollybutt (E. miniata), Darwin stringybark (E. tetrodonta) and weeping paperbark (Melaleuca leucadendra syn. leucodendron). Hollows in these tree species have also been used as breeding roosts (TSSC, 2016).	PMST	**Unlikely to Occur**. While broadly suitable habitat is mapped within the Project area, no records of the species have been recorded within 50 km (ALA, 2024). Suitable tree species for roosts are not likely to occur in the Project area.	**Unlikely to Occur**. Field surveys did not record suitable hollow bearing trees in the Survey Area. The species was not recorded either visually nor via ultrasonic recording.
Water Mouse, False Water Rat, Yirrkoo	*Xeromys myoides*	V	V	The water mouse occurs in three regions of coastal Australia: NT, central-south QLD, and south-eastern QLD. Although they have been documented in three distinct regions, they all require similar habitat including mangroves and the associated saltmarsh, clay pans, heathlands, and freshwater wetlands. The main habitat difference at each location is the littoral, supralittoral and terrestrial vegetation which differs in structure and composition (DoE, 2024zj). The water mouse may nest or forage in the following Queensland Regional Ecosystems: 8.1.1, 11.1.1, 11.1.2, 11.1.4, 12.1.1, 12.1.2, 12.1.3, 12.2.5, 12.2.7, 12.2.11, 12.2.12 and 12.2.14.	PMST	**Unlikely to Occur**. Suitable habitat is not mapped in the Project area, nor are there any records within 50 km.	**Unlikely to Occur.** Field survey did not record any observations of the species nor any habitat.
Reptile Species							
Salt-water Crocodile, Estuarine Crocodile	*Crocodylus porosus*	Mi, Ma	V	It may be found in brackish water around coastal areas and rivers, often amongst mangrove forest, as well as occurring further out to sea, and also occurs in freshwater rivers, lakes, swamps and marshes, up to 150 kilometres inland (DoE 2024). In Queensland the Salt-water Crocodile inhabits reef, coastal and inland waterways from Gladstone on the east coast, throughout the Cape York Peninsula and west to the Queensland-Northern Territory border. A seven-year survey recorded 6444 sightings of the species in the waterways of the Southern Gulf Plains, Northern Gulf Plains, north-west and north-east Cape York Peninsula, Lakefield National Park, East Coast Plains, the Burdekin River catchment and the Fitzroy River catchment (DoE 2024).	PMST	**Potential to Occur**. Potentially suitable habitat is mapped within the Project area and a record exists within 50 km (9.62 km NW)	**Unlikely to Occur**. Field survey did not record suitable river, lake, swamp or marsh habitat within the Survey Area.
Atherton Delma, Legless Lizard	*Delma mitella*	V	NT	The Atherton Delma is known from the eastern side of the Atherton Tablelands in north-eastern Queensland. The two original specimens were collected near Herberton and Koombooloomba Road, near Ravenshoe. The Atherton Delma is known only from tall open forests and rainforest interfaces in the Herberton, Ravenshoe and Paluma districts. This species occurs within the Wet Tropics (Queensland) Natural Resource Management Region (DEWHA 2008).	PMST	**Potential to Occur**. Potentially suitable habitat is mapped within the Project area and a record exists within 50 km (approx 32 km SW)	**Unlikely to Occur**. Field survey did not record any suitable tall open forests or rainforest interfaces in the Survey Area.
Yakka Skink	*Egernia rugosa*	V	V	Endemic to Queensland where its distribution is highly fragmented. Often associated with partly-buried rocks, logs or tree stumps, root cavities and abandoned animal burrows. It is also known to excavate deep burrow systems. The Yakka Skink can persist in cleared habitats if shelter sites such as raked log piles, deep gullies, tunnel erosion/sinkholes and rabbit warrens are available (DEHP 2017).	PMST	**Unlikely to Occur**. While broadly suitable habitat is mapped within the Project area, there are no records of the species within 50 km.	**Unlikely to Occur**. Field survey did not record any observations of this species.
Amphibian Species							
Australian Lace-lid, Lace-eyed Tree Frog, Day's Big-eyed Treefrog	*Litoria dayi*	V	V	Litoria dayi is a rainforest species, endemic to the Wet Tropics Bioregion. It is associated with rainforests and rainforest margins. In montane areas, the species prefers fast-flowing rocky streams although they also frequent slower watercourses where ample vegetation exists along the margins. At low elevations, the lace-eyed tree frog favours rock soaks, narrow ephemeral streams and rock outcrops in larger watercourses. It may also be found on rocks, boulders and vegetation in or adjacent to streams (DoE 2024).	PMST	**Potential to Occur**. Broadly suitable habitat is mapped in the Project area and there are recent records within 50 km (8.37 km E).	**Unlikely to Occur**. Field survey recorded an absence of rainforest within the Survey Area, as well as an absence of stream and rock habitat suitable for this species.

Mountain Mist Frog, Nyakala Frog	*Litoria nyakalensis*	CE	CR	The Mountain Mistfrog is a rainforest specialist, endemic to the Wet Tropics Bioregion. It is found in upland rainforest and wet sclerophyll forest along fast-flowing streams where there is white water from riffles and cascades. It is usually found perched on rocks or overhanging vegetation adjacent to the water. The tadpoles are restricted to fast-flowing waters where they cling to rocks in riffles and torrents and in highly oxygenated pools below waterfalls. Tadpoles also burrow into loose sand under rocks which may help them withstand the violent floods that often occur in rainforest streams (DoE 2024).	PMST	**Unlikely to Occur**. Suitable fast flowing water habitat for this species is unlikely to be present in the Project area.	**Unlikely to Occur**. Field survey recorded an absence of rainforest/wet schlerophyll forest within the Survey Area, as well as an absence of fast flowing stream and rock habitat suitable for this species.
Magnificent Brood Frog	*Pseudophryne covacevichae*	V	V	The Magnificent Brood Frog appears to be restricted to specific habitats with all records being from the rhyolites of the Glen Gorden Volcanics. The species has been found around seepage areas in open eucalypt forests with an understorey comprised of Themeda triandra, Xanthorrhoea sp., Gahnia sp., Lophostemon suaveolens, Allocasuarina littoralis and A. torulosa. In areas where cattle grazing has reduced ground cover the species has also been located in leaf-litter build up in first order streams. The non breeding habitat for this species is unknown (DoE 2024).	PMST	**Unlikely to Occur**. Habitat is not likely to be present in the Project area and no recent records exist nearby.	**Unlikely to Occur**. Field survey recorded an absence of rhyolites and no suitable ground cover species within open eucalypt forests.
Fish Species							
Cairns Rainbowfish, Northern Soft-spined Sunfish	*Cairnsichthys rhombosomoides*	E	E	The habitat of the Cairns rainbowfish consists of small, permanent streams, with a granite boulder, sand, or alluvium dominated substrate, located at the base of mountain ranges or hills in high rainfall areas. The species is most common in the portion of streams situated between the base of steep mountain ranges and deeper, slower flowing, downstream sections. Such downstream sections often coincide with the regular presence of large predatory species such as Lutjanus argentimaculatus (mangrove jack) and interspecific competition from Melanotaenia splendida (eastern rainbowfish). The Cairns rainbowfish prefers shaded sections with moderate to swift flow rates and abundant cover in the form of woody debris, undercut banks, and instream vegetation such as tree roots. The species is typically found in flowing, clear-water habitats, with the loss of permanent stream flow considered to negatively affect subpopulations, leading to possible extirpation at fragmented sites. However, stream flow is not essential for short-term survival of the species, with individuals found in non-flowing anabranch habitats. Water quality values recorded across this habitat include temperatures between 15–29°C, pH values between 4.5–8.4, low water conductivity (< 65 µScm-1), and moderate to high dissolved oxygen (> 4.9 mgL-1) (DCCEEW 2023).	PMST	**Potential to Occur.** Broadly suitable habitat is mapped within the Project area and a recent record exists within 50 km (16 km NE).	**Unlikely to Occur.** The field survey confirmed no suitable flowing, clear-water habitat in the Project area. Streams within the Study area did not contain permanent water and at most are reduced to scarce, very small pools during drier periods.
Lake Eacham Rainbowfish	*Melanotaenia eachamensis*	E	-	The Lake Eacham Rainbowfish is a schooling species that prefers shallow waters with slow to moderate flow. It usually occurs among, or directly adjacent to, aquatic vegetation, submerged terrestrial vegetation and root masses in areas with streamside riparian vegetation or grasses (including the invasive Para Grass (Brachiara mutica)). It is usually close to the riverbed in specific locations with rock and cobble substrates. The species occurs in small streams, especially smaller tributaries, and lakes, including crater lakes (Euramoo and Bromfield Swamp) and artifical lakes (Lake Tinaroo and Koombooloomba Dam). In Lake Eacham, the species was found in clear, shallow water along the shoreline. It was particularly abundant around docks, submerged logs and branches, and among aquatic vegetation. The water temperature of the lake ranges from 23-27 °C and the pH was 7.0. In aquaria, this species tolerates water temperatures of 22-27°C and a pH of 6.8-7.0. A pH of 8.0 is still suitable for this species (DoE 2024).	PMST	**Potential to Occur.** Broadly suitable habitat is mapped within the Project area and a recent record exists within 50 km (39 km SE).	**Unlikely to Occur.** The field survey confirmed no suitable streams, tributaries or lakes with slow to moderate flow, nor any rocky or suitable substrates within the Project area. The Project area is also outside of the modelled distribution for this species (DoE 2024)
Opal Cling Goby	*Stiphodon semoni*	CE	-	In Australia, adult Opal Cling Gobies are found in pristine rainforest streams that have significant flow and direct access to marine habitats.	PMST	**Unlikely to Occur**. Habitat for this species is unlikely to be present in the Project Area and no recent, nearby records exist.	**Unlikely to Occur.** Field survey confirmed no rainforest nor pristine streams nor streams with any water flow within the Project area.
Plant Species							
Red Silky Oak, Queensland Waratah, Tree Waratah	*Alloxylon flammeum*	V	V	Red Silky Oak occurs in the Atherton Tablelands, north-east Queensland, from Danbulla to Upper Barron River. Red Silky Oak grows in rainforest on basalt and complex notophyll vine forests on metamorphics, and on humus-rich gravelly loam from granite, at altitudes of 700–820 m above sea level. In some locations it appears to prefer hillsides, and has been recorded in grassland that was formerly rainforest and in a remnant of closed-forest in paddock cleared for grazing, now a rural residential block. Associated species include Aleurites rockinghamensis, Argyrodendron spp., Calamus caryotoides, Cryptocarya onoprienkoana, Dendrocnide photinophylla, Ficus spp., Flindersia brayleyana, Franciscodendron laurifolium, Geissois biagiana, Hodgkinsonia frutescens, and Toona ciliata (DEWHA 2008).	PMST	**Potential to Occur.** Broadly suitable habitat is mapped within the Study area and a recent record exists within 50 km (41 km SE).	**Unlikely to Occur**. Field survey confirmed no rainforest or vine forest habitat suitable for Alloxylon flammeum in the Project area. Additionally, the Project area is outside of the modelled distribution for the species (DoE 2025) and below the usual altitudinal range.
-	*Aponogeton bullosus*	E	E	Aponogeton bullosus is a fully aquatic plant, growing on granite sand in cool rapidly flowing freshwater rivers and mountain streams. The species grows in both sunny and shady positions (Stephens 2009).	PMST	**Potential to Occur.** There is broadly suitable habitat mapped within the Project area and a recent record exists within 50 km (13km SE).	**Unlikely to Occur**. This species requires fast flowing, cool rivers and streams. Field survey confirmed these habitat features do not occurin the Project area.
an aquatic herb	*Aponogeton prolifer*	E	E	Aponogeton prolifer is an aquatic herb known only from creeks running through rainforest margins in the Innisfail region, northern Queensland, where 12 plants were seen in 1994. It occurs in narrow, shallow and heavily shaded coastal streams and creeks in rainforest (Stephens 2011). Aponogeton prolifer is not known to occur in protected estate or remnant vegetation as defined under the Vegetation Management Act 1999 (Queensland). This species occurs within the Wet Tropics (Queensland) Natural Resource Management Region (DEWHA 2008). Aponogeton prolifer is an extremely rare species now known only from the Innisfail region of Northern Queensland.	PMST	**Potential to Occur.** There is broadly suitable habitat mapped within the Study area and a recent record exists within 50 km (45km E).	**Unlikely to Occur**. Field survey confirmed no rainforest habitat with creeks or rivers suitable for this species within the Project area.
Hairy-joint Grass	*Arthraxon hispidus*	V	V	In NSW and QLD, this species is found in or on the edges of rainforest and in wet eucalypt forest, often near creeks or swamps, as well as woodland. In the SE QLD Bioregion, A. hispidus has also been recorded growing around freshwater springs on coastal foreshore dunes, in shaded small gullies, on creek banks, and on sandy alluvium in creek beds in open forests, and with bog mosses in mound springs (Wearne, 2011a)	PMST	**Unlikely to Occur**. While broadly suitable habitat is mapped in the Study area, no recent or historical records exist within 50 km.	**Unlikely to Occur**. While broadly suitable forest and woodland habitat occurs in the Project area and neighbouring Powerlink property, field survey did not record any evidence of the species.

-	*Asplenium pellucidum*	V	V	Asplenum pellucidum, a lithophytic or epiphytic (CSIRO 2020), occurs in rainforest and preferred habitat includes mossy branches and rocks especially near waterfalls (DEWHA 2008, Wearne 2012).	PMST	**Potential to Occur.** There is broadly suitable habitat mapped within the Study area and a recent record exists within 50 km (41.07 km NW), however preferred waterfall habitat is very unlikely to be present.	**Unlikely to Occur.** Field survey confirmed no suitable rainforest or waterfall habitat occurs in the Project area.
Miniature Moss-orchid, Hoop Pine Orchid	*Bulbophyllum globuliforme*	V	NT	Bulbophyllum globuliforme occurs in notophyll vine forest and some microphyll vine forest with Araucaria cunninghamii (hoop pine) emergents. In Queensland, it appears to grow solely on the scaly bark of the branches and upper trunk of older hoop pine trees with other epiphytes such as the vulnerable Bulbophyllum weinthalii. It occurs between altitudes of 500 to 900 m. It is suspected that hoop pines need to be at least 100 years old before they are suitable as habitat for this orchid. This orchid appears to favour the underside of tree limbs (Booth 2012).	PMST	**Unlikely to Occur**. No suitable habitat is mapped in the Study area, nor are there any records within 50 km. Additional, the Study area is over 60 km north of the modelled distribution for the species.	**Unlikely to Occur.** Field survey confirmed no suitable rainforest, vine forest or hoop pine habitat occurs in the Project area.
-	*Canarium acutifolium*	V	V	Canarium acutifolium occurs in north-east Australia and Malaysia. In Australia, it occurs between Mossman and Tully in Queensland. Collections have been made in mesophyll vine forest along rivers and creeks at altitudes of 5 to 200 m (DEWHA 2008). Almost confined to creek and river banks in lowland rain forest (CSIRO 2020).	PMST	**Potential to Occur.** There is broadly suitable habitat mapped within the Study area and a recent record exists within 50 km (45km E).	**Unlikely to Occur**. Field survey confirmed no rainforest habitat with creek or river banks suitable for this species within the Project area.
-	*Carronia pedicellata*	E	E	Carronia pedicellata is endemic to north-east Queensland. It was initially known only from three small remnant rainforest patches on freehold land in the Babinda area. The species is now known to be more widespread from Bellenden Ker to Mission Beach with disjunct populations in the Noah and Cooper Creek catchments near Cape Tribulation. Carronia pedicellata grows in complex mesophyll or notophyll vine forest of deep soils derived from basalt, granite or metamorphic substrates at altitudes from near sea level to 520 m (DEWHA 2008). Grows in well developed lowland rain forest (CSIRO 2020). The distribution of this species overlaps with the "Mabi Forest (Complex Notophyll Vine Forest 5b)" EPBC Act-listed threatened ecological community (DEWHA 2008).	PMST	**Potential to Occur.** There is broadly suitable habitat mapped within the Study area and a recent record exists within 50 km (45km E).	**Unlikely to Occur**. Field survey confirmed no vine forest or rainforest habitat suitable for this species within the Project area.
-	*Cheilocostus potierae*	-	E	Endemic to Queensland, occurs in CYP and NEQ with collections from some of the Torres Strait Islands and the Tully and Daintree areas. Altitudinal range very small, being found only slightly above sea level. Usually grows in disturbed areas of lowland rain forest (CSIRO 2020).	WildNet	**Likely to Occur.** There is broadly suitable habitat mapped within the Study area and a recent record exists within 5 km (4.17 km NW).	**Unlikely to Occur**. Field survey confirmed no lowland rainforest habitat suitable for this species within the Project area.
-	*Chingia australis*	E	E	Habitat for this species is broadly defined as terrestrial on disturbed banks in lower montane mesic vine forest (CSIRO 2020). C. australis occurs in rainforest on steep creek banks and ridge slopes. It is an early successional gap specialist, reliant upon exposure of mineral soil (lacking organic matter). It may be somewhat shade-intolerant, often inhabiting naturally well-lit sites such as swampy ground in lowland forest or creek banks. Presence in such locations may be attributed to its high moisture requirements. Like all ferns, C. australis has a two-phase lifecycle involving a stage that is entirely dependent on the presence of water. Some populations are riparian (growing in or very close to water courses), all are dependant on surrounding rainforest habitat and the moist microclimate it provides. Populations are ephemeral (short-lived), responding to the kind of disturbance processes that typically remove topsoil, such as landslips, flood scouring, tree-falls and road cuttings (Herbert 2006).	PMST	**Unlikely to Occur**. While an historical record exists within 50 km (28.42 km), no suitable rainforest or montain vine forest on steep creek banks and ridge slopes is mapped in the Study area.	**Unlikely to Occur**. Field survey confirmed no suitable rainforest or montain vine forest on steep creek banks and ridge slopes occurs in the Project area.
-	*Coleus gratus*	V	V	This species grows in an altitudinal range from 100-600 m, in rocky areas, usually in open forest but sometimes in similar situations in rain forest (CSIRO 2020). Coleus gratus is known from only four locations, from south of Cairns and east of the Great Dividing Range in north Queensland. Microhabitat requirements include rock outcrops of granite or basalt in either wet Eucalypt forest or vine forest (DEWHA 2008).	PMST	**Unlikely to Occur**. No records within 50 km and no suitable rocky outcrop habitat in eucalypt forest or vine forest is mapped in the Study area.	**Unlikely to Occur**. Field survey confirmed no suitable rocky outcrop habitat in eucalypt forest or vine forest occurs in the Project area.
-	*Corunastylis tecta*	E	E	Corunastylis tecta is known only from a small area south of Cardwell in north-eastern Queensland. It is found between Sunday Creek and Five Mile Creek, a distance of approximately 25 km. It grows in Melaleuca viridiflora wetland with a dense understorey of sedges, on poorly drained coastal sands (DEWHA 2008).	PMST	**Unlikely to Occur**. While broadly suitable habitat is mapped within the Study area, and an historical record exists within 50 km (42.81 km SE, 1997). The Project area is well outside of the known distribution of the species which is a 25 km stretch of watercourses, south of Cardwell (DEWHA 2008).	**Unlikely to Occur**. Field survey confirmed no Melaleuca viridiflora dominant wetland and the Project area is outside of the known distribution of this species.
Thin Feather Orchid	*Dendrobium callitrophilum*	V	V	Dendrobium callitrophilum is endemic to north-east Queensland where it occurs on the Evelyn, Mt Windsor, Atherton and Carbine Tablelands and some of the higher mountains between the Daintree and Bloomfield Rivers. Dendrobium callitrophilum grows at altitudes of 760–1500 m above sea level, in or close to rainforest. It favours Stringybark Cypress Pine (Callitris macleayana) but also grows on various shrubby myrtles such as Austromyrtus (DEWHA 2008)	PMST	**Unlikely to Occur**. While an historical record exists within 50 km (36.85 km NW, 1981), the Study area is outside of the altitudinal range of the species.	**Unlikely to Occur.** Field survey confirmed neither suitable host trees nor suitable montane rainforest habitat are present in the Project area.
Dark-stemmed Antler Orchid, Mangrove Orchid	*Dendrobium mirbelianum*	E	E	Dendrobium mirbelianum is known from the Daintree area to Innisfail and Moa Island, north of Cape York Peninsula, north Queensland. Dendrobium mirbelianum is locally common within its restricted range. It grows mainly on trees in mangroves and coastal swamps in humid locations and has also been recorded growing on rocks. Dendrobium mirbelianum grows at altitudes of 2–150 m above sea level	PMST	**Unlikely to Occur**. While broadly suitable habitat is mapped within the Study area, the Study area is approximately 50 km south of the known distribution of the species.	**Unlikely to Occur**. Field survey confirmed some broadly suitable swampy forest in the neighbouring Powerlink property, however the Project area remains approximately 50 km outside of the known distribution of this species.
an orchid	*Dendrobium nindii*	E	E	Dendrobium nindii is a lowland species of the hot, humid swamps. It has been found high in the canopy of mangroves, in the full sun. It also grows on palms (Bostock 2009). Dendrobium nindii is known from the McIlwraith Range on Cape York Peninsula, south to Innisfail, Queensland and is also known to occur in New Guinea. Dendrobium nindii occurs up to 400 m above sea level, growing on trees (including mangroves and palms) in near-coastal swamps, coastal rainforest, mangroves, and low altitude gorges and streams. It has been recorded in rainforest on conglomerate and granite (DEWHA 2008).	PMST	**Unlikely to Occur**. While broadly suitable near-coastal swamp habitat is mapped within the Study area, the Study area is approximately 50 km south of the known distribution of the species.	**Unlikely to Occur**. Field survey confirmed some broadly suitable swamp habitat with palm species in the neighbouring Powerlink property, however the Project area remains approximately 50 km outside of the known distribution of this species.
bluegrass	*Dichanthium setosum*	V	C	Dichanthium setosum has been reported from inland NSW to QLD. There are also reports from WA and TAS. The species is associated with heavy basaltic black soils and red-brown loams with clay subsoils (predominantly cracking clays or alluvium, often in gilgai). It is often found in moderately disturbed areas such as cleared woodland, grassy roadside remnants and highly disturbed pasture. The species may tolerate or benefit from disturbance, otherwise, disturbance is indicative of threatening processes in its habitat (Booth, 2012b).	PMST	**Unlikely to Occur**. No suitable habitat is mapped in the Study area, nor are there any records within 50 km.	**Unlikely to Occur**. Field survey confirmed no suitable habitat occurs within the Project area.

-	*Dioclea hexandra*	-	E	Dioclea hexandra grows in lowland rainforest, tropical rainforest and complex mesophyll rainforest on krasnozem soil, with granite rocks, along river and creek banks.	WildNet	**Potential to Occur.** There is broadly suitable habitat mapped within the Study area and a recent record exists within 50 km (7.75 km SE).	**Unlikely to Occur**. Field survey confirmed no suitable rainforest habitat nor granite rock along river and creek banks occurs in the Project area.
-	*Diplazium cordifolium*	V	V	Habitat for this species is broadly defined as terrestrial in high rainfall complex mesophyll vine forest at low altitude (CSIRO 2020). Diplazium cordifolium is known from north-east Queensland. This species is found around Cairns, Herberton, and Wooroonooran, and mostly occurs on private land. The species is found in rainforest, along creek banks. It is usually found below 80-100 m altitude, although one population in Palmerston valley grows at 475 m altitude (DEWHA 2008).	PMST	**Potential to Occur.** There is broadly suitable habitat mapped within the Study area and an historical record exists within 50 km (45.16 km NW).	**Unlikely to Occur**. Field survey confirmed no suitable rainforest habitat occurs in the Project area.
-	*Diplazium pallidum*	E	E	Habitat for this species is broadly defined as terrestrial, usually on hillslopes in moderately low altitude rainforest (CSIRO 2020). Diplazium pallidum occurs in the Wet Tropics of north-east Queensland. This species grows in lowland rainforest, particularly near streams, but is not found growing in creeks. It is found on basalt soils and is known from approximately five populations, with a geographic range in Australia of less than 100 km (DEWHA 2008).	PMST	**Unlikely to Occur**. While broadly suitable near-coastal swamp habitat is mapped within the Study area, the Project area is approximately 20 km south of the modelled distribution of the species.	**Unlikely to Occur**. Field survey confirmed no suitable rainforest habitat occurs in the Project area.
a sedge	*Eleocharis retroflexa*	V	V	Eleocharis retroflexa is known from Queensland and the Northern Territory. In Queensland it is known from the Eubenangee Swamp, north of Garradunga and Blackfellows Creek near Cairns. In the Northern Territory it is known from two swamps on the Wingate Mountains plateau and sandstone plateau in Nitmiluk National Park. It grows in shallow water on the margins of seasonal swamps (DEWHA 2008). This species has been reported growing on plateaus, in shallow water on the margins of seasonal swamps on laterite, or clay loam substrates. One collection is from a sandy drainage depression. Associated species included Melaleuca viridiflora, Eucalyptus phoenicea, Corymbia oocarpa, Capillipedium parviflorum, Sorghum plumosum, Heteropogon triticeus and sedges, mostly common, widespread species (DEPWS 2021).	PMST, WildNet	**Potential to Occur.** There is broadly suitable habitat mapped within the Study area and an historical record exists within 50 km (4 km N 1992).	**Unlikely to Occur**. Though there is some broadly suitable habitat in the neighbouring Powerlink property, field survey confirmed no suitable habitat occurs within the Project area.
a fern	*Lastreopsis walleri*	V	V	Habitat for this species is broadly defined as terrestrial in mid-montane to upper-montane rainforest (ATH 2022). Lastreopsis walleri is endemic to a few scattered locations on the Atherton Tablelands in north-east Queensland. The species grows in rainforest and shaded places in open forest.	PMST	**Unlikely to Occur**. There are no records within 50 km of the Study area and the Study area is outside of the altitudinal range of the species.	**Unlikely to Occur**. Field survey confirmed there is no suitable mid-montane to upper-montane habitat for this species.
-	*Leichhardtia araujacea*	CE	CR	Leichhardtia araujacea is endemic to northeast Queensland where it has been recorded from Binirr National Park (CYPAL) south to the Stone River, west of Ingham. A 2019 record of the species was the first collection of Leichhardtia araujacea since 1893, and until the recent record, the species was thought to be extinct. The 2019 observation is from a Blepharocarya involucrigera gallery forest; these are invariably associated with permanent water, albeit often by tapping underground springs or aquifers. Blepharocarya dominated communities are widespread; however, they are often linear in distribution following water courses or otherwise just around a water source. Leichhardtia araujacea belongs to a group of species (L. glandulifera, L. racemosa, L. paludicola) that are patchily distributed in Australia, often in spring fed rainforest systems from northern New South Wales through eastern Queensland and across into the Northern Territory (Forster 2019).	PMST	**Unlikely to Occur**. While there is potential for broadly suitable Gallery rainforest in the Study area, the only record of this species in the last 125 years is from north of Cooktown (over 300 km North of the Study area).	**Unlikely to Occur**. Field surveys confirmed there is no suitable rainforest or permanent water in the Project area, nor was *Blepharocarya involucrigera* recorded in the vegetation in the Project area or neighbouring Powerlink properties.
-	*Lindsaea pulchella var. blanda*	V	-	Lindsaea pulchella var. blanda is known in Australia from a single specimen collected at 'Rockingham, 4000 ft alt.' in 1926, which is held in the USA National Herbarium. It also occurs in Malaysia, the Philippines and Solomon Islands where it is described as epiphytic, often among mosses, on trees and tree-ferns, very rarely terrestrial, from 1500 up to 2570 m (DEWHA 2008) in rainforest (Field and Renner 2019). This is a very poorly known taxon in Australia with only one record from an uncertain locality, but possibly in the Rockingham Bay Range, Queensland. This species occurs within the Wet Tropics (Queensland) Natural Resource Management Region (DEWHA 2008).	PMST	**Unlikely to Occur**. Suitable habitat for this species is not well defined. Additionally, the only record in Australia (uncertain location in 1926) indicates an elevation above 1000 m, while more reliable records in the asia pacific are indicative of elevations from 1500-2570 m. The Study area is likely to be well outside of the species altitudinal range.	**Unlikely to Occur**. Field survey confirmed there is no suitable rainforest habitat in the Project area.
Ant Plant	*Myrmecodia beccarii*	V	V	Myrmecodia beccarii is known from the coastal woodlands between Cooktown and Ingham in Queensland (DEWHA 2008). Paperbark swamps, mangroves and rainforest of North Queensland provide the host trees for epiphytic ant-plants. However, Myrmecodia beccarii does not occur in rainforest; it is found in lowland woodland dominated by paperbarks, usually broad-leafed tea tree (Melaleuca viridiflora, an endangered ecological community under the EPBC Act) and mangroves (Cape York NRM 2021). This species is known from 10 locations. This species occurs within the Wet Tropics and Cape York (Queensland) Natural Resource Management Regions (DEWHA 2008).	PMST	**Potential to Occur**. Suitable habitat for the species is mapped in the Study area and a recent record is "location generalised" to within 50 km (11.71 km NE 2022) of the Study area.	**Potential to Occur**. Field survey confirmed mangrove and *Melalueca viridiflora* dominant communities do not occur in the Project area. However there are some areas with suitable (though quite young) host trees (*M. viridiflora, M. quinquenervia, Lophostemon suaveolens*) at the eastern edge of the Project area and in the neighbouring Powerlink property.
-	*Pararistolochia praevenosa*	-	NT	The species occurs in north east Queensland and in south eastern Queensland and north eastern New South Wales but not in coastal central Queensland. Altitudinal range in north east Queensland from 600-700 m. Pararistolochia praevenosa grows in upland rain forest on basaltic and metamorphic rocks. The species is a food plant for the larval stages of the Richmond birdwing butterfly (CSIRO 2020).	WildNet	**Unlikely to Occur.** While broadly suitable habitat is mapped within the Study area, the location is outside of the altitudinal range for north east Queensland.	**Unlikely to Occur**. Field survey confirmed that suitable rainforest habitat and altitudinal range is not present in the Project area.
Lesser Swamp-orchid	*Phaius australis*	E	E	Phaius australis grows in areas where soils are almost always damp, but not flooded for lengthy periods. Sands are generally the underlying soil type and they are usually found in coastal habitats in between swamps and forests or in suitable areas further inland. This includes swampy sclerophyll forest dominated by melaleucas, swampy forest that often have sclerophyll emergents, or fringing open forest and melaleuca swamp forest associated with rainforest species. This species has also been recorded in wallum sedgeland, rainforest and closed forest where they often grow in deep shade but can also occur in full sun. This species occurs at higher altitudes in northern Queensland. (Bostock 2009).	PMST	**Potential to Occur**. Broadly suitable habitat is mapped within the Study area and a recent record exists within 50 km (26.58 km E 2012).	**Potential to Occur**. Field survey confirmed suitable habitat is mostly absent from the Project area. However there are some areas with suitable *Melaleuca* woodland and forest (though none dominated by *M. viridiflora*) at the eastern edge of the Project area and in the neighbouring Powerlink property.

-	*Phaius pictus*	V	V	Phiaus pictus occurs in north east Queensland, sporadically from the McIlwraith Range, Bloomfield River to Kirrama Range (DEWHA 2008). The species occurs in humid rainforests and is considered highly localised (ANBG 2024), restricted to rainforests from 0–600 m altitude, and usually occurs in sheltered humid sites close to streams and seepage among forest litter on boulders (DEWHA 2008).	PMST	**Unlikely to Occur**. While there is a historical record within 50 km (36.43 km NW 2003), suitable habitat close to streams and seepage on boulders is unlikely to be present in the Study area.	**Unlikely to Occur**. Field surveys confirmed there is no suitable rainforest habitat in the Project area, nor are there suitable streams or seepage on boulders.
Native Moth Orchid	*Phalaenopsis rosenstromii*	E	E	The Native Moth Orchid occurs in north-east Queensland, being found sporadically from the Iron Range in the north and as far south as the Paluma Ranges. Phalaenopsis rosenstromii is found in humid rainforest areas, close to waterfalls or streams, in deep gorges, sheltered slopes or gullies in notophyll vine thickets, deciduous vine thickets and in open forest. The Native Moth Orchid grows in shaded or partially shaded positions, on trees and less commonly on rocks. The species is found at altitudes from 200–500 m above sea level (DoE 2025).	PMST	**Unlikely to Occur**. There are no records within 50 km of the Study area and the Study area is outside of the altitudinal range of the species.	**Unlikely to Occur**. Field survey confirmed that suitable rainforest habitat and altitudinal range is not present in the Project area.
Water Tassel-fern, Tea Leaf Tassel, Tea-leaf Tassel-fern	*Phlegmariurus delbrueckii*	V	V	Habitat for this epiphyte species is broadly defined as the canopy in montane rainforest (ATH 2022). The species can grow on rocks or rainforest trees, but grows above 800 m elevation. It is endemic to north-eastern Queensland, occurring from the Windsor Tableland to just south of Tully River (DEWHA 2008).	PMST	**Unlikely to Occur**. While there is a historical record within 50 km (22.39 km N 1985) of the Study area, the Study area is outside of the altitudinal range for the species.	**Unlikely to Occur.** Field survey confirmed that suitable montane rainforest habitat does not occur in the Project area.
Rat's Tail Tassel-fern	*Phlegmariurus filiformis*	E	CR	Phlegmariurus filiformis occurs in rainforest on basalt soils, at altitudes up to 1200m above sea level. It has been recorded growing on slopes along creeks (Bostock 2009). In Australia the species is restricted to mountaintops in the Wet Tropics, north east Queensland. Sparsely distributed on mountaintops in the Pacific and Australia.	PMST	**Unlikely to Occur**. While there is a historical record within 50 km (28.07 km N 2002) of the Study area, there is no mountaintop rainforest habitat .	**Unlikely to Occur**. Field survey confirmed that suitable mountaintop rainforest habitat does not occur in the Project area.
-	*Phlegmariurus lockyeri*	V	V	Phlegmariurus lockyeri grows on trees and granite boulders, in rainforest above 1000m above sea level (Bostock 2009). It is endemic to north-eastern Queensland, between Windsor Tableland and the Lamb Range, with an outlier on Bell Peak North in the Malbon Thompson Range, south-south-east of Cairns (DEWHA 2008).	PMST	**Unlikely to Occur**. There are no records within 50 km of the Study area and the Study area is outside of the altitudinal range of the species.	**Unlikely to Occur**. Field survey confirmed that suitable rainforest habitat and altitudinal range is not present in the Project area.
Layered tassel fern	*Phlegmariurus phlegmarioides*	-	V	Phlegmariurus phlegmarioides is an epiphitic found in rainforest from the Iron Range in Cape York to Hinchenbrook Island NE Qld, usually at low altitudes (ATH 2022).	WildNet	**Unlikely to Occur**. While broadly suitable habitat is mapped in the Study area, no recent or historical records exist within 50 km.	**Unlikely to Occur**. Field survey confirmed no rainforest habitat in the Project area.
Rock Tassel-fern, Water Tassel-fern	*Phlegmariurus squarrosus*	CE	CR	Phlegmariurus squarrosus occurs on rocks, particularly around waterfalls, or on tree trunks in lowland swamps and low to mid-altitude rainforest (DoE 2014).	PMST	**Unlikely to Occur**. While broadly suitable habitat is mapped in the Study area, no recent or historical records exist within 50 km.	**Unlikely to Occur**. Field survey confirmed no suitable habitat in the Project area, through there is some broadly suitable lowland swampy habitat in the neighbouring Powerlink property.
Square Tassel Fern	*Phlegmariurus tetrastichoides*	V	V	The square tassel-fern is endemic to north-east Queensland and occurs from Mount Finnigan south to the Clarke Range, west of Mackay. It is most prevalent on the Evelyn, Atherton and Mount Carbine Tablelands but extends to lower altitudes along the North Johnstone River and Mossman Gorge. The Square Tassel-fern occurs in upland notophyll vineforest. It is an epiphyte on rainforest trees, occurring in north-eastern Queensland, from the Daintree, south to Hinchinbrook Island, and west of Mackay, from sea level to 1100 m altitude (DoE 2025).	PMST	**Potential to Occur**. Broadly suitable habitat is mapped within the Study area and there is an historical record within 50 km (32.84 km N 2003).	**Unlikely to Occur**. Field survey confirmed no suitable rainforest or vine forest habitat in the Project area.
-	*Plesioneuron tuberculatum*	E	E	Plesioneuron tuberculatum occurs in the wet tropics of north east Queensland in the Johnstone and Russell River valleys on creek banks in high rainfall lowland vine forest (ATH 2022) and rainforest (DEWHA 2008).	PMST	**Unlikely to Occur**. While there is broadly suitable habitat mapped within the Study area, there are no records within 50 km.	**Unlikely to Occur**. Field survey confirmed no suitable vine forest or rainforest occurs in the Project area.
Middle Filmy Fern	*Polyphlebium endlicherianum*	E	V	The middle filmy fern grows on damp rocks and tree trunks, in tropical rainforest, often near streams or beside waterfalls. Sites are moist and shaded. In Queensland, herbarium collections have been made on a rock wall in a very dark situation; on a damp rock in a dried stream bed; and in closed forest on granite sands (DoE 2024).	PMST	**Potential to Occur**. There is an historical record within 50 km of the Study area (42.16 km NW 2003), and broadly suitable habitat is mapped in the Study area.	**Unlikely to Occur**. Field survey confirmed no suitable rainforest, stream or waterfall habitat in the Project area.
-	*Polyscias bellendenkerensis*	V	V	Endemic to north east Queensland, Polyscias bellendenkerensis known only from collections made on the Bellenden Ker Range, Mt Bartle Frere, the headwaters of Douglas Creek on the Daintree River catchment and the Mt Pieter Botte area at elevations of 750 m or more. Grows only in mountain rain forest (CSIRO 2020; DEWHA 2008).	PMST	**Unlikely to Occur**. There are no records within 50 km of the Study area and the Study area is outside of the altitudinal range of the species.	**Unlikely to Occur**. Field survey confirmed that suitable rainforest habitat and altitudinal range is not present in the Project area.
-	*Prostanthera clotteniana*	CE	E	Prostanthera clotteniana grows in low eucalypt woodland with a shrubby understorey, on steep rocky slopes and hill tops (Holland 2009).	PMST	**Unlikely to Occur**. While a recent record occurs within 50 km (47.83 km NW 2018), suitable rocky slope and heath habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey confirmed that suitable rocky slope and heath habitat is not present in the Project area.
-	*Rhodamnia sessiliflora*	-	E	Endemic to north east Queensland, Rhodamnia sessiliflora is widespread throughout the area with an altitudinal range from near sea level to 1000 m. The species grows in lowland and upland rain forest on a variety of sites, also found in drier rain forest often associated with Kauri Pine (Agathis robusta) (CSIRO 2020).	WildNet	**Potential to Occur**. There is a recent record within 50 km of the Study area (5.65 km NW 2021), and broadly suitable habitat is mapped in the Study area.	**Unlikely to Occur**. Field survey confirmed that suitable rainforest habitat is not present in the Project area.
-	*Ristantia gouldii*	V	V	Ristantia gouldii occurs in complex notophyll vineforest and rainforest along creeks dominated by Xanthostemon chrysanthus, Phyllanthus hypospodius and Schistocarpaea sp., and grows on sandy loam with granite substrate (DEWHA 2008). Altitudinal range from 450-800 m (CSIRO 2020).	PMST	**Unlikely to Occur**. There are no records <50 years old within 50 km of the Study area and the Study area is outside of the altitudinal range of the species.	**Unlikely to Occur**. Field survey confirmed that neither suitable notophyll vine forest nor rainforest habitat is present in the Project area.
-	*Steganthera australiana*	-	NT	Steganthera australiana occurs in north east Queensland with an altitudinal range from near sea level to 1000 m. The species grows as an understory plant in lowland and upland rain forest (CSIRO 2020).	WildNet	**Potential to Occur**. There is a recent record within 50 km of the Study area (5.79 km SW 2008), and broadly suitable habitat is mapped in the Study area.	**Unlikely to Occur**. Field survey confirmed that suitable rainforest habitat is not present in the Project area.

Smooth-bark Rose Apple, Red Lilly Pilly	*Syzygium hodgkinsoniae*	V	V	The smooth-bark rose apple grows in riverine subtropical or gallery rainforest on deep rich alluvial and basalt soils at altitudes of up to 300 m above sea level. The species is considered a rheophyte (adapted to growing along or sometimes within fast-flowing streams) (DoE 2024).	PMST	**Unlikely to Occur**. While there is broadly suitable habitat mapped within the Study area, there are no records within 50 km.	**Unlikely to Occur**. Field survey confirmed that suitable rainforest habitat is not present in the Project area.
-	*Tephrosia leveillei*	V	-	Little is known about the species, including the population sizes, however there are 6 known Tephrosia leveillei (Tephrosia flagellaris under the NC Act Qld) collections from north-east Queensland over a range of 400 km. Habitats where Tephrosia leveillei has been recorded include (DoE 2025): • Cullen's Ironbark (Eucalyptus cullenii) woodland on alluvial plains • Gum-topped Bloodwood (Corymbia erythrophloia) and Cooktown Ironwood (Erythrophleum chlorostachys) woodland with Bushman's Clothes-peg (Grevillea glauca) • Eucalyptus spp. and Corymbia spp. tall open forest over dense Bunch Spear-grass (Heteropogon contortus) on red sand • along the railway track in Ravenswood	PMST	**Unlikely to Occur**. Suitable habitat is not mapped within the Study area, there are no records within 50 km.	**Unlikely to Occur**. Field survey confirmed that suitable habitat is not present in the Project area.
-	*Tomophyllum walleri*	V	V	Tomophyllum walleri is endemic to north-east Queensland, where it is sporadically recorded at high elevations in the wet tropics. The species grows as an epiphyte on tree trunks or canopy branches or as a lithophyte on granite or rhyolite in complex notophyll vine forest or in low windswept rainforest above an altitude of 1000 m (DEWHA 2008).	PMST	**Unlikely to Occur**. The Study area is outside of the altitudinal range of this species.	**Unlikely to Occur**. Field survey confirmed that suitable rainforest and rhyolite habitat is not present in the Project area.
-	*Triplarina nitchaga*	V	V	Triplarina nitchaga is known from two small populations near Ravenshoe in Queensland. At Nitchaga Creek, it grows on granite outcrops near the stream, in open forest dominated by Syncarpia glomulifera, Eucalyptus resinifera, and Leptospermum brachyandrum. At Arthurs Seat, it grows on a rhyolite hillside and dry gully, in open forest dominated by Corymbia citriodora, E. acmenoides, E. abergiana, Homoranthus porteri, and Labichea nitida (DEWHA 2008).	PMST	**Unlikely to Occur**. While a recent record occurs within 50 km (39.03 km NW 2023), suitable rocky outcrop and rhyolite habitat is not mapped within the Study area.	**Unlikely to Occur**. Field survey confirmed that suitable rocky outcrop and rhyolite habitat is not present in the Project area.
Dwarf Butterfly Orchid, Cooktown Orchid	*Vappodes lithocola*	E	-	Vappodes lithocola is highly localised, occurring in the coastal ranges between Daintree and Cairns, Queensland. It is confined to the Macalister Range between the Barron and Mossman Rivers and a record exists from Hartley Creek near Cairns. Vappodes lithocola grows in rainforest areas on rocks, boulders and cliff faces on ridges and slopes at altitudes of 300–800 m above sea level. Plants are often exposed to the sun and can withstand long periods of hot, dry conditions (DEWHA 2008).	PMST	**Unlikely to Occur**. This Study area is outside of both the altitudinal range and known distribution of this species.	**Unlikely to Occur**. Field survey confirmed that suitable rainforest habitat is not present in the Project area.
Velvet Jewel Orchid	*Zeuxine polygonoides*	V	-	The Velvet Jewel Orchid is confined to north-east Queensland where it occurs from near Kuranda to the Cardwell Range, Cardwell. There are also locations reported as far north as the Daintree River and south to the Paluma Range. Zeuxine polygonoides (Rhomboda polygonoides under the NC Act Qld) grows in moist shady sites in rainforests (mesophyll vine forests and simple notophyll vine forests) in leaf litter on the ground or on large boulders adjacent to streams. Altitudinal range is 450–820 m above sea level. The Velvet Jewel Orchid is found mostly from moist, cloudy or very wet rainfall zones on metamorphic substrates, granite or rhyolite. The species can be found in humus on flat topped rocks in association with Anoectochilus yatesiae, Goodyera viridiflora and Liparis simmondsii. The Velvet Jewel Orchid is found in the following Regional Ecosystems: • 7.11.1a: mesophyll vine forest in very high rainfall lowlands and foothills on metamorphics • 7.12.16a: simple notophyll vine forest (often with Bull Kauri (Agathis microstachya)) in cloudy wet to moist uplands on granite and rhyolite.	PMST	**Potential to Occur**. There is a record within 50 km of the Study area (28.89 km SW 2003), and broadly suitable habitat is mapped in the Study area.	**Unlikely to Occur**. Field survey confirmed that suitable rainforest habitat is not present in the Project area.