



Double Jump Road Residential Estate Development

Compiled Controlled Action Referral

EPBC Referral 2024-09825

9 April 2026

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28 South Environmental Pty Ltd

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Document History and Status

Revision	Date	Description	By	Review
1.0	9 September 2026	For Issue	A. Dickinson	A. Dickinson

Approval for Issue

Name	Position	Date
Andrew Dickinson	Technical Director Ecology	9 September 2026

Table of Contents

1. Introduction	1
2. Purpose of this Document.....	2

Table of Attachments

Appendix 1 – EPBC Act Business Portal CAR Application Extract

Appendix 2 – CAR Attachments

Attachment 1 – Ecological Assessment Report

Attachment 2 Figure 1 - Site Locality

Attachment 3 Figure 2 – Site Context

Attachment 4 Figure 3, RCC Zoning

Attachment 5 Figure 4 - Regulated Vegetation

Attachment 6 Figure 5 – Tree Retention and Clearance

Attachment 7 Figure 6 – Koala Records within 2km

Attachment 8 Figure 7 – Grey-headed Flying-fox Records and Camps within 2km

Attachment 9 EAR Attachment 2b RVMR Lot 1 on RP86773

Attachment 10 EAR Attachment 2a RVMR Lot 1 on RP165178

Attachment 11 EAR Attachment 2b RVMR Lot 2 on RP86773

Attachment 12 EAR Attachment 2c RVMR Lot 5 on SP293881

Attachment 13 EAR Attachment 2d RVMR Lot 23 on SP325035

Attachment 14 EAR Attachment 3 PMST

Attachment 15 EAR Attachment 4 WildNet Species List

Attachment 16 EAR Attachment 5 BAAM Ecological Assessment

Attachment 17 RCC Catchment Mapping

1. Introduction

Sutgold Pty Ltd (*the Applicant*) is seeking approval to carry out the Double Jump Road Residential Estate Development (EPBC 2024/09825) on land described as Lot 1 on RP86773, Lot 2 on RP86773, Lot 5 on SP293881, Lot 23 on SP325035 and Lot 2 on RP165178, 50 Double Jump Road, Victoria Point, Queensland. The proposed action involves development of a master planned residential community, including housing, retail facilities, parks, conservation areas, and associated infrastructure and internal roads.

On 14 June 2024, a delegate of the National Environmental Protection Agency decided that the Double Jump Road Residential Estate Development, Victoria Point, Queensland was a controlled action under the Environment Protection and Biodiversity Conservation Act 1999 (**EPBC Act**) with a Preliminary Documentation level of assessment.

The controlling provision is 'Listed threatened species and ecological communities' (Part 3, Sections 18 and 18A), specifically the endangered Koala (*Phascolarctos cinereus* (combined populations of QLD, NSW and the ACT)) and the vulnerable Grey-headed Flying-fox (*Pteropus poliocephalus*).

2. Purpose of this Document

On 8 August 2026, a delegate of the National Environmental Protection Agency instructed the Applicant to publish the Preliminary Documentation Report in full and call for Public Consultation and comment. The instruction to publish mandated that the Controlled Action Referral Material loaded onto the Agency's website needed to also be published and supplied for comment as a companion document. This document is a compilation of that material.

The EPBC Act Business Portal extract is presented as **Appendix 1**. Attachments to the CAR are presented as **Appendix 2**.

Appendix 1 – EPBC Act
Business Portal CAR
Application Extract

Double Jump Road Residential Estate Development

Application Number: **02272**

Commencement Date:
23/02/2024

Status: **Reopened**

1. About the project

1.1 Project details

1.1.1 Project title *

Double Jump Road Residential Estate Development

1.1.2 Project industry type *

Residential Development

1.1.3 Project industry sub-type

—

1.1.4 Estimated start date *

01/08/2025

1.1.4 Estimated end date *

31/12/2070

1.2 Proposed Action details

1.2.1 Provide an overview of the proposed action, including all proposed activities. *

Sutgold Pty. Ltd. (the **proponent**), proposes to develop a master planned residential community development (the **Proposed Action**) to be located at Double Jump Road, Victoria Point in the Redlands City Council (**RCC**). The Proposed Action extends across 38.1 hectares (**ha**) of four larger land parcels (Lot 1 on RP86773 (**Lot 1**), Lot 2 on RP86773 (**Lot 2**), Lot 5 on SP293881 (**Lot 5**), Lot 23 on SP325035 (**Lot**

23) and Lot 2 on RP165178 (**Lot 2**)), herein referred to as 'the **Site**'. The Proposed Action and extent can be seen in **Attachment 2: Figure 1 - Locality** and **Attachment 9: EAR Attachment 1 - Development plan**.

The Proposed Action involves the establishment of:

- 294 single dwelling residential lots (12.15 ha),
- Two medium density residential lots (2.76 ha)
- Three conservation areas (combined 10.10 ha), which will be rehabilitated, being: Conservation Area 1, Conservation Area 2 (East West Conservation Corridor) and Conservation Area 3.
- Two local parks (1.81 ha)
- A local small business and retail centre (0.92 ha)
- Multi-function spine (0.93 ha) – pedestrian, cycle way and stormwater infrastructure
- Connecting roads throughout development (8.18 ha).

The distribution of these areas across the Site is shown in **Attachment 3: Figure 2 - Site Context**.

For the purpose of the Proposed Action, the project area is 38.1 ha, including a disturbance footprint of 28.1 hectares, a retention area of 7.4 ha and avoidance of 2.6 hectares.

The Proposed Action will require permanent clearing of vegetation for the construction and post-construction use of infrastructure and residential allotments. It is expected that all land within the permanent development footprint will be cleared and subject to civil earth works to establish the necessary landform.

The Conservation Areas 1-3 will be rehabilitated to achieve High Value Bushland Habitat status. This rehabilitation will create an east-west corridor across the north of the development, providing connection for fauna movement, and will contain an ephemeral overland flow path to Little Eprapah Creek. The two proposed local parks adjoin Conservation Areas and complement the primary habitat function of these areas (**Attachment 9: EAR Attachment 1 - Development plan**). The specifics around the three conservation areas are:

- Conservation Zone 1: Is a Retention Area and primary ecological corridor along Moogurrapum Creek and contains riparian habitats and wetlands and connects bushland habitats to the north and south of the study area providing primary landscape habitat linkages. It maintains and enhances insitu riparian and habitat and linkages to broader ecological movement corridor network. This area is largely vegetated with remnant vegetation though there are patches of woody weeds and cleared areas. In lightly disturbed areas with regeneration potential, reliance should be placed on natural regeneration techniques to reinstate the pre-clear regional ecosystems, in cleared and heavily disturbed areas, full plant out is required. Supplementary planting will establish an overall plant density (canopy, midstorey and groundcover) of 1 plant/m² with species composition to reflect RE 12.9-10.4. A fauna underpass is to be constructed on Double Jump Road at the crossing of Moogurrapum Creek. Any development based disturbance in this area will be reinstated.
- Conservation Zone 2: Is a Retention Area and secondary ecological linkage which provides east to west linkage between relict bushland areas affording Koala (*Phascolarctos cinereus*) and Grey-headed Flying-fox (*Pteropus poliocephalus*) habitat to the west of the Site and Moogurrapum Creek. The area will also feature a 2.4 x 3.0m underpass beneath an internal road and exclusion / directional fencing to facilitate faunal movement between Conservation Area 1 and Conservation Area 2. The area presently consists of isolated canopy trees, copses of canopy trees with understorey in various stages of regeneration and managed grassy understorey. In cleared and heavily disturbed areas, supplementary planting is required to establish an overall plant density (canopy, midstorey and groundcover) of 1 plant/m² with species composition to reflect RE2.9-10.4.
- Conservation Zone 3: is an avoidance area and a multi function spine situated along an ephemeral overland flow path. The majority of this area will be subjected to ground disturbance during civil earthworks. The purpose of the corridor is to facilitate a mixed use corridor featuring canopy tree retention and reinstatement area, pedestrian and cycle corridor and stormwater quality and quantity

management functions. Supplementary planting is required to establish a species composition reflective of RE12.9-10.4.

Whereas Conservation Areas 1 and 2, can be considered to be 'Retention Areas', Conservation Area 3 is an 'Avoidance Area'.

The three Conservation Areas will be transferred to Redland City Council (Council) Ownership at plan sealing (which occurs at the point of operational work to bring effect to the development has been completed). They will have a complimentary designation (zoning) under the planning scheme of 'Conservation' and be assimilated as part of Council's green open space network however there will not be a conservation agreement or covenant placed over the areas. The purpose of Council's Conservation Zone is to provide for the protection of land which supports significant biological diversity and ecological functions.

In addition to the designated Conservation Areas, individual trees will be retained within the development footprint, except where their removal is required to achieve the development intent and to deliver a safe space to live, work and play (see **Attachment 9: EAR Attachment 1 - Development plan** and **Attachment 6: Figure 5 - Tree retention and clearance**).

The construction phase of the Proposed Action will entail the following steps (**Attachment 1: Ecological Assessment Report, Section 1.3.2, page 8**):

- Clear and grub of vegetated components of the development footprint
- Civil groundworks to establish final land form
- Installation of erosion and sediment controls
- Installation of essential services and utilities, such as sewerage, stormwater, electricity, gas and communications
- Construction of roads and pavements, including installation of longitudinal and cross-drainage structures
- Subdivision of land into individual lots according to the approved design plan, including boundary markers and individual lot access
- Installation of landscaping features, community amenities (such as parks and recreational areas) and signage to enhance the appeal and functionality of the subdivision
- Construction of residential properties.

Direct impacts to Matters of national Environmental Significance (**MNES**) as a consequence of the Proposed Action are expected to arise from vegetation clearing and civil earthworks. This development is expected to result in the clearing of 1,316 native trees, 1,054 of which are non-juvenile koala habitat trees (**NJKHTs**) (**Attachment 6: Figure 5 - Tree retention and clearance**).

In addition, the Proposed Action may result in indirect impacts to MNES, as follows (**Attachment 1: Ecological Assessment Report, Section 4.0, page 21**):

- Disturbance to fauna during construction due to noise and vibration from construction vehicles, plant and machinery.
- Increased potential for road strike once internal roads are operational.
- Increased potential for interaction between native fauna and domestic animals, e.g. cats and dogs, due to residential occupancy of the Site.

1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

No

1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? *

Commonwealth

The Proposed Action is referred as it is considered a controlled action requiring approval from the Minister under the *Environment Protection and Biodiversity Conservation Act 1999*. This viewpoint is based on the potential for significant impacts to habitat for threatened species, being MNES, that are known or expected to occur on and adjacent to the Site.

State

Potential impacts to Matters of State Environmental Significance are regulated under the State planning framework, and affiliated environmental legislation and instruments. This includes:

- the *Planning Act 2016 (Qld) (Planning Act)* – The Planning Act is Queensland’s overarching planning legislation, and establishes the planning approval framework under which development approval for the proposed action is intended to be sought;
- the *State Planning Policy 2017 (SPP)* – The SPP is a statutory instrument made by the State under the Planning Act. It sets out overarching policies regarding a broad range of matters of interest to the State, including ecological matters. The SPP will be relevant in the assessment of the development application, to be made under the Planning Act, for the proposed action;
- the *Vegetation Management Act 1999 (Qld) (VMA)* – The VMA operates in tandem with the *Planning Act*, by establishing a system for identifying and classifying protected categories of vegetation. The VMA is primarily given effect through the Planning Act, which identifies circumstances in which clearing of vegetation protected by the VMA is prohibited, requires approval, or may occur “as of right”. Therefore, to the extent that the proposed action involves clearing of native vegetation, that clearing will be regulated by the VMA, through the Planning Act. Importantly the proposed action does not propose the clearing of Regulated Vegetation to Site that will be protected, enhanced and maintained through the future environmental management area in the north east corner of the Site;
- the *Nature Conservation Act 1992 (Qld) (NCA)* – The NCA establishes a specific framework, including standalone approval processes, for the protection of particular areas, flora and fauna. To the extent that the proposed action may involve any matters protected under the NCA, all necessary approvals will be obtained in accordance with the NCA;
- the *Fisheries Act 1994 (Qld) (Fisheries Act)* – The Planning Act includes particular approval requirements for certain works in fish habitat areas, subject to exemptions set out under the Fisheries Act. A ‘low’ waterway for waterway barrier works is mapped centrally in the Site. To the extent that the proposed action may involve such regulated works, the exemptions in the Fisheries Act may be relevant or the applicant will undertake works in compliance with Accepted Development Requirements for waterway barrier works; and
- the *Environmental Offsets Act 2015 (Qld) (Offsets Act)* – The Offsets Act establishes a uniform State-wide framework for the imposition of conditions requiring environmental offsets. To the extent that the development approval for the proposed action requires such offsets in relation to Matters of State Environmental Significance, or Matters of Local Environmental Significance, those offsets will be given effect through conditions imposed in accordance with the Offsets Act.

Local

The Site’s land use planning intent is governed by RCC’s *Redland City Plan 2018* (‘the **City Plan**’) (**Attachment 4: Figure 3 - RCC Zoning**)

The southwest Victoria Point local plan area was included in the Emerging Community zone of the City Plan and the Urban Footprint of the South East Queensland Regional Plan, "ShapingSEQ 2023" (Queensland Government, 2023), recognising its suitability for development as a new community following detailed local planning. The purpose of this designation is to ensure the development of the new community delivers a well-planned, attractive and walkable urban community with a range of infrastructure networks to service the new and wider community into the future.

The Site is situated in the southwest Victoria Point local plan area and is consequently zoned as Emerging Community.

1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. *

The Proposed Action was made available for public notification as part of the assessment process for development approval for reconfiguring a lot (Application No. RAL18/0127). Public notification occurred via:

- Publication of notice in the Redland City Bulletin.
- Notice placed on the premises, in the way prescribed under the Development Assessment Rules.
- Notification of owners of all lots adjoining the premises subject to the application.

Public notification occurred from 27 June 2019 to 18 July 2019 (RCC, 2021). No formal public consultation documentation / reporting was produced and all formal responses were provided by submitters to Redland City Council under advertising and public notification requirements of the *Planning Act (Qld) 2016*.

The proponent is committed to public consultation with cultural heritage / traditional owner entity for the area as part of the proponent's broader commitment to inform the community of the project particulars and anticipated pathway towards delivering the proposed development. The cultural heritage / traditional owner entity for the area is the Quandamooka Yoolooburrabee Aboriginal Corporation. The Proponent is committed to consulting with the local Aboriginal Party and undertaking the appropriate cultural heritage assessment to address requirements of the *Aboriginal Cultural Heritage Act 2003*. The land subject to the Proposed Action is held in freehold title and accordingly Native Title has been extinguished.

The Proponent has made initial contact with the relevant cultural heritage body for the area, being the Quandamooka Yoolooburrabee Aboriginal Corporation. Should the project be considered a Controlled Action, further consultation will be undertaken by Dr Serena Love of 4 Corners Heritage.

1.3.1 Identity: Referring party

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☒

Confirm that you have read and understand this Privacy Notice *

1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN

31195566910

Organisation name

The Trustee for 28 South Environmental Trust

Organisation address

4151 QLD

Referring party details

Name

Mitch Taylor

Job title

Director

Phone

0488 204 523

Email

EPBC@28south.com.au

Address

U11/24 Martin St, Fortitude Valley, QLD 4006

1.3.2 Identity: Person proposing to take the action

1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? *

No

1.3.2.2 Is Person proposing to take the action an organisation or business? *

Yes

Person proposing to take the action organisation details

ABN/ACN	083212006
Organisation name	SUTGOLD PTY. LTD.
Organisation address	4157 QLD

Person proposing to take the action details

Name	Vaughn Bowden
Job title	Executive Development Manager
Phone	0421755074
Email	vaughn@fiteni.co
Address	80 Old Cleveland Road, Capalaba, 4157, QLD

1.3.2.14 Are you proposing the action as part of a Joint Venture? *

No

1.3.2.15 Are you proposing the action as part of a Trust? *

No

1.3.2.17 Describe the Person proposing the action’s history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. *

With over 26 years residential development experience in South East Queensland, Sutgold Pty Ltd (Proponent) and its related entities (Fiteni Homes, Fiteni Developments and Edgarange Pty Ltd) have an established reputation for the delivery of residential development in the Redlands / Moreton Bay region area of South East Queensland. There have been no proceedings against Sutgold Pty. Ltd. or any of the executive officers of the company under Commonwealth or State law in relation to environmental matters, or the conservation and sustainable use of natural resources. The executive officers are committed to environmental stewardship and achieving balanced environmental outcomes in an environmentally responsible manner.

Fiteni Homes (ABN 59010272849), Fiteni Developments (ABN 59010272849) are brand names, registered as business names that do not trade in their own right. Fiteni Homes and Fiteni Developments are registered as trading names for Edgarange PTY LTD (ABN 59010272849). The trading businesses that sit behind the Fiteni brands are:

- Edgarange PTY LTD - which owns undeveloped and developed land and sells developed land parcels and completed spec homes to customers.
- Sutgold PTY LTD has three main purposes:
 - runs the day-to-day Fiteni business - employs staff, runs administration, etc.
 - builds and sells custom homes for clients
 - has a development agreement with Edgarange PTY LTD to manage the development of land.

1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

With over 26 years residential development experience in South East Queensland, Sutgold Pty Ltd (Proponent) and its related entities (Fiteni Homes, Fiteni Developments and Edgarange Pty Ltd) have an established reputation for the delivery of residential development in the Redlands / Moreton Bay region area of South East Queensland.

The Proponent does not have a corporate environmental policy or planning framework documentation; however it takes its environmental responsibility seriously, and relies upon experienced consultancy team to advise on compliance with environmental planning legislation relevant to its projects, contemporary environmental management solutions and ecologically sustainable development.

Over the last five years, Sutgold Pty. Ltd. In response to requirements to mitigate the effects of projects on natural values has been responsible for revegetating over 16 ha of land, the majority of which has been in environmentally sensitive areas. More than 80,000 plants have been planted and established, promoting new green spaces for habitat enhancement and protection in local communities.

1.3.3 Identity: Proposed designated proponent

1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? *

Yes

Proposed designated proponent organisation details

ABN/ACN

083212006

Organisation name

SUTGOLD PTY. LTD.

Organisation address

4157 QLD

Proposed designated proponent details

Name

Vaughn Bowden

Job title

Executive Development Manager

Phone

0421755074

Email

vaughn@fiteni.co

Address

80 Old Cleveland Road, Capalaba, 4157, QLD

1.3.4 Identity: Summary of allocation

✔

Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

ABN/ACN

31195566910

Organisation name

The Trustee for 28 South Environmental Trust

Organisation address

4151 QLD

Representative's name

Mitch Taylor

Representative's job title

Director

Phone

0488 204 523

Email

EPBC@28south.com.au

Address

U11/24 Martin St, Fortitude Valley, QLD 4006

☒

Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	083212006
Organisation name	SUTGOLD PTY. LTD.
Organisation address	4157 QLD
Representative's name	Vaughn Bowden
Representative's job title	Executive Development Manager
Phone	0421755074
Email	vaughn@fiteni.co
Address	80 Old Cleveland Road, Capalaba, 4157, QLD

☒

Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? *

No

1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? *

No

1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?

No

1.4.7 Has the department issued you with a credit note? *

No

1.4.9 Would you like to add a purchase order number to your invoice? *

No

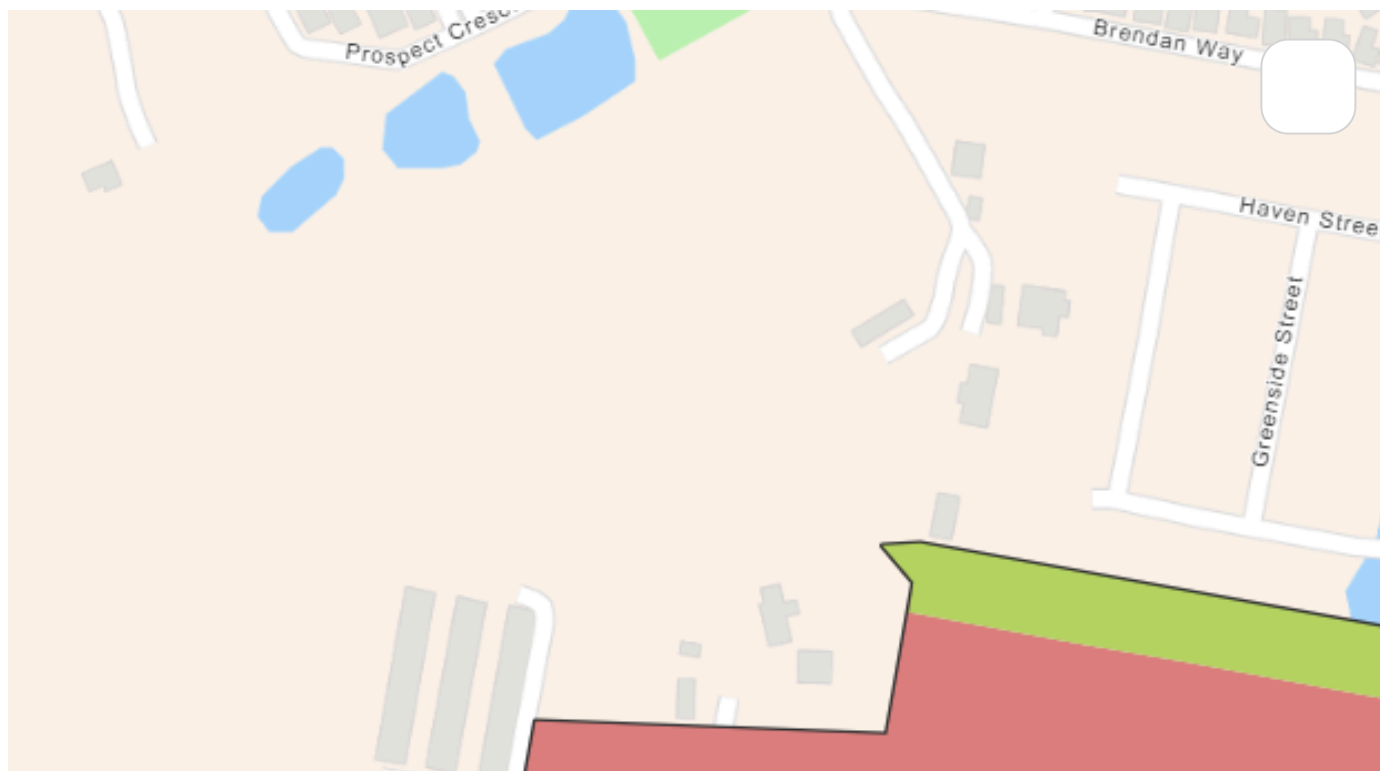
1.4 Payment details: Payment allocation

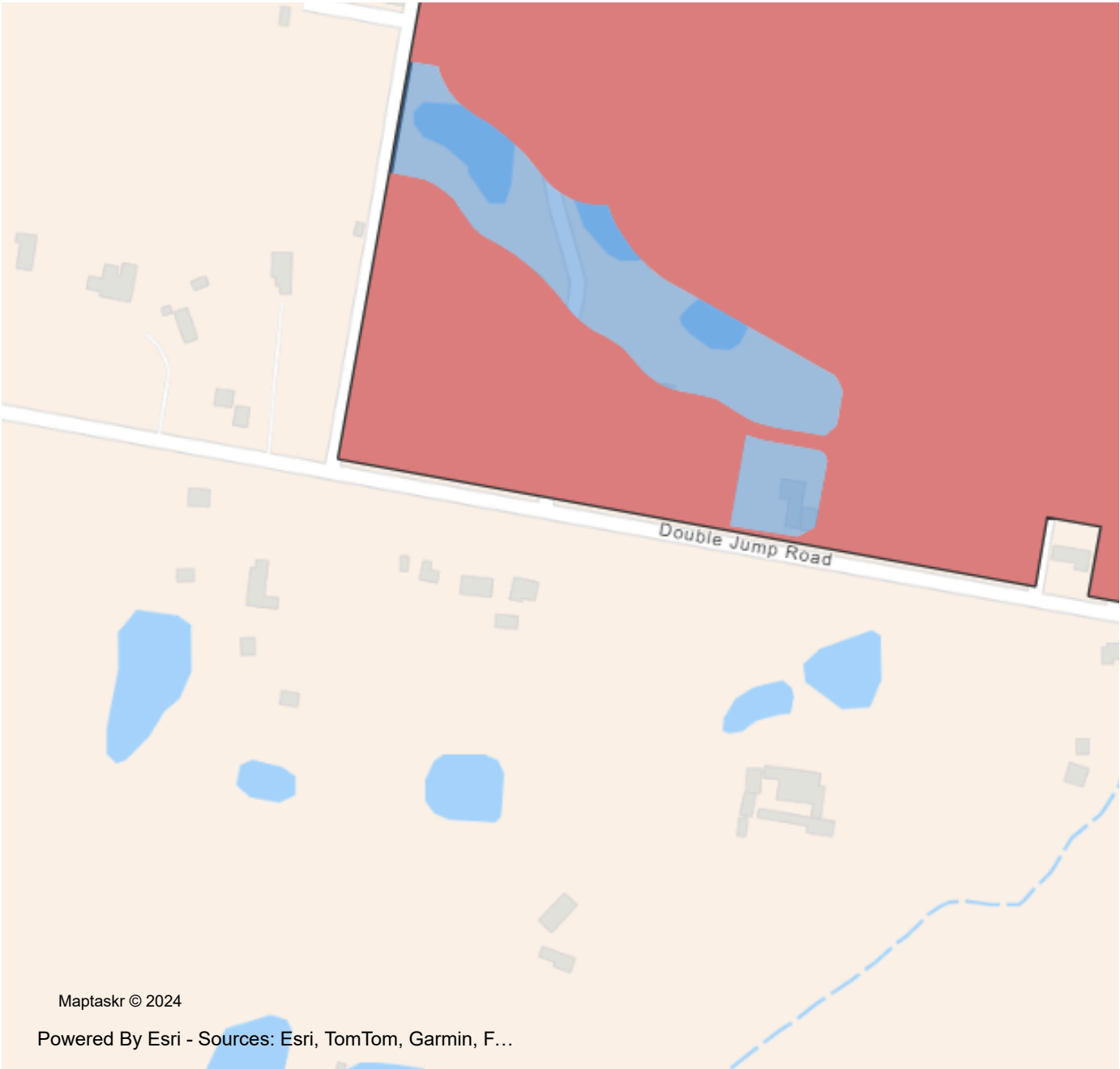
1.4.11 Who would you like to allocate as the entity responsible for payment? *

Person proposing to take the action

2. Location

2.1 Project footprint





Project Area: 38.18 Ha **Disturbance Footprint:** 28.15 Ha **Avoidance Area:** 2.62 Ha **Retention Area:** 7.40 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

50 Double Jump Road, Victoria Point, QLD, 4165

2.2.2 Where is the primary jurisdiction of the proposed action? *

Queensland

2.2.3 Is there a secondary jurisdiction for this proposed action? *

No

2.2.5 What is the tenure of the action area relevant to the project area? *

All five of the land parcels that make up the Site of the Proposed Action are held in freehold, being:

- Lot 1 on RP86773
- Lot 2 on RP86773
- Lot 5 on SP293881
- Lot 23 on SP325035
- Lot 2 on RP165178.

Lot 5 has two easements that extend through it. These easements provide security of access to Lots 3 & 4 on SP293881. These easements will be extinguished as part of the development process, with access to these two lots provided by internal roads incorporated into the development plan (**Attachment 9: EAR Attachment 1 - Development plan**).

Lot 23 has one easement, for drainage purposes, that extends along the boundary with Lot 22 on SP325035.

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area's environment.

Historical aerial imagery shows that the Site has been extensively cleared and modified for over 70 years, as shown in historic imagery (**Attachment 1: Ecological Assessment Report, Section 2.1, page 9**). Now there are low density trees throughout the site, scattered amongst open paddock with a medium density conservation area running north to south down the eastern side of the Site, associated with a riparian corridor of a Moogurrapum Creek tributary.

The Site's land use planning intent is governed by RCC's City Plan. Following the commencement of the City Plan, Council commenced the preparation of a local plan for a future urban community in southwest Victoria Point. The local plan area is approximately 175 ha and is situated between Bunker Road and Brendan Way in the north, Clay Gully Road and Cleveland-Redland Bay Road in the east, Double Jump Road in the south and Little Eprapah Creek in the west. (**Attachment 1: Ecological Assessment Report, Section 1.2.3, page 6**)

The Site is predominantly rural residential and highly modified and cleared with many parcels of land surrounding the Site currently under construction for master planned community and residential estates. Regional ecosystems (REs) mapped on the Site include Category B (Least Concern) for 0.9 ha and Category X across all lots with a total of 37 ha (**Attachment 10: EAR Attachment 2a to Attachment 13: EAR Attachment 2d, Regulated Vegetation Management Map**).

Queensland Herbarium pre-clear RE mapping shows that the Site historically would have accommodated three vegetation communities, across three different landzones. The three pre-clear REs are introduced below:

- **RE 12.9-10.4:** *Eucalyptus racemosa* subsp. *racemosa* woodland to open forest. Other species can include *Angophora leiocarpa*, *Eucalyptus seeana*, *E. siderophloia*, *Corymbia intermedia*, *E. tindaliae*, with *Lophostemon suaveolens*, *Melaleuca quinquenervia*, *E. tereticornis* common on lower slopes. Occurs on Cainozoic and Mesozoic sediments +/- remnant Tertiary surfaces. Not a Wetland.
- **RE 12.12.14:** *Melaleuca quinquenervia* +/- *Eucalyptus tereticornis*, *Lophostemon suaveolens*, *Corymbia intermedia* open forest to woodland with a grassy ground layer dominated by species such as *Imperata cylindrica*. *Eucalyptus tereticornis* may be present as an emergent layer. *Eucalyptus seeana* may also occur in this ecosystem to the south and east of Brisbane. Occurs on Quaternary floodplains and fringing drainage lines in coastal areas. Palustrine.
- **RE 12.3.6:** Woodland to open forest characterised by *Eucalyptus racemosa* subsp. *racemosa*, *Angophora woodsiana*, *Corymbia gummifera*, *Syncarpia* spp., *Eucalyptus helidonica* or *E. acmenoides* and *Lophostemon confertus*. Other canopy species include *Corymbia trachyphloia* subsp. *trachyphloia*, *E. carnea*, *E. tindaliae*, *E. exserta*, *E. resinifera* and *E. microcorys*. Usually occurs on rocky near coastal areas on Mesozoic to Proterozoic igneous rocks. Not a Wetland.

The Queensland Government's Vegetation Management Regional Ecosystem Map shows the riparian corridor associated with the unnamed tributary of Moogurrapum Creek on Lot 23 as being Category B (remnant vegetation) that is least concern under the *Vegetation Management Act 1999* (Qld) (**Attachment 13: EAR Attachment 2d - Regulated Vegetation Management Map**). This vegetation community is mapped as being RE 12.3.6.

The remainder of the Site is mapped as Category X vegetation, being areas that are not generally regulated by Queensland's vegetation management laws (**Attachment 10: EAR Attachment 2a to Attachment 12: EAR Attachment 2d, Regulated Vegetation Management Map**).

Vegetation surveys of the Site determined that the remnant vegetation associated with the tributary of Moogurrapum Creek, mapped under the State's RE mapping as 12.3.6 (**Attachment 13: EAR Attachment 2d - Regulated Vegetation Management Map** and **Attachment 5: Figure 4 - Regulated vegetation**), is better described as RE 12.3.11, being *Eucalyptus tereticornis* +/- *Eucalyptus siderophloia*, *Corymbia intermedia* open forest on alluvial plains usually near coast.

The balance of the Site was confirmed to be consistent with the Category X mapping, comprising mown pastures of grass and weeds and occasional regrowth vegetation.

Weeds of national significance (**WONS**) were recorded within or immediately adjoining the Site, but mainly within vegetation associated with the tributary of Moogurrapum Creek. WONS recorded include:

- Asparagus fern (*Asparagus aethiopicus*);
- Cats Claw Creeper (*Dolichandra unguis-cati*);
- Fire Weed (*Senecio madagascariensis*);
- Madeira Vine (*Anredera cordifolia*); and
- Lantana (*Lantana camara*).

The vegetated portions of the Site are providing suitable foraging, roosting and breeding resources for avian species. Within the development footprint patches of regrowth vegetation are mostly devoid of native mid and ground storey species and support few values for native fauna.

The mown grasses provide food resources for wallabies that would utilise adjacent densely vegetated areas for daytime shelter.

There are patches of native vegetation in association with existing dams that are intermittent along the drainage line across Lot 5 on SP293881 and Lot 2 on RP86773. These areas contain occasional large trees and regrowth dominated by Broad-leaved and Black wattle (*Acacia leiocalyx*). These dams provide aquatic habitats of varying degrees, from large permanent deep impoundage areas through to relatively small shallow water storages that provide permanent water sources for native species. introduced Mosquito

fish (*Gambusia holbrooki*). Eastern Water dragon (*Intellagama lesueurii*) was also recorded in association with the dams, and there is high potential for native turtles and native eels to be present within the larger dams (**Attachment 16: EAR Attachment 5 - BAAM Ecology Assessment**).

3.1.2 Describe any existing or proposed uses for the project area.

The Proposed Action is bound by Double Jump Road to the south, situated within a pocket of larger rural and rural residential allotments. There are low density residential areas that occur to the north of the Site, which continue further northeast towards the centre of Victoria Point. Similar sized rural and rural residential properties exist to the east, south and west of the Site. The Site's more immediate setting, and its boundaries and features are shown in **Attachment 3: Figure 2 - Site context**.

The Proposed Action entails the planned, logical and sequential expansion of existing urban areas into adjoining (cleared) farmland, and accords with broader planning direction established by the RCC City Plan (RCC, 2018), as described below.

City Plan

The Site is situated in the southwest Victoria Point local plan area and is consequently zoned as Emerging Community (**Attachment 4: Figure 3 - RCC Zoning**), recognising its suitability for development as a new community following detailed local planning. The purpose of this designation is to ensure the development of the new community delivers a well-planned, attractive and walkable urban community with a range of infrastructure networks to service the new and wider community into the future.

SEQ Regional Plan

The Site is located in the Regional Plan's *Urban Footprint*. This designation identifies land that can meet the region's urban development needs to 2031 and 2046. As stated by the Regional Plan, approximately 19,800 additional dwellings will be required to meet RCC's expected population growth and demographic change to 2031. The population projection by ShapingSEQ for 2046 is an increase of 49,800 (Queensland Government, 2023). This is mainly achieved through infill and redevelopment in existing urban areas, the development of broad hectare land such as the VPLDA is essential for delivery of RCC's dwelling targets. The Proposed Action accords with the Regional Plan's vision for the Site (as expressed through VPLDA). The Proposed Action is also consistent with the Site's land use planning intent.

It is noted that Victoria Point has been identified as a Local Development Area for residential growth at a regional level since 2009. The Site and surrounds were identified in the *South East Queensland Regional Plan 2009 – 2031* (repealed SEQRP).

Traffic

The movement network associated with the proposed reconfiguration has been based on an appropriately connected road layout. The subdivision will be accessed externally via Double Jump Road and future connection from the north. The development will also have a high level of internal accessibility and provides for orderly development through the provision of connections to future urban development on adjoining sites. Initial construction traffic during civil engineering and bulk earthworks staging will be from Double Jump Road. Once civil engineering is completed and the internal road network established, construction materials for dwellings will be distributed along the internal road network. Key road infrastructure and traffic features are:

- Double Jump Road a two lane sub-arterial road of rural standard with a pavement width of 7 to 8 metres will be upgraded for the developments frontage to account for safety and expected traffic increases, including intersection development to facilitate access to the site of the Proposed Action.
- The development proposed a collector street running North/South from Double Jump Road to the land to the North and running East-West through the proposed development to service future bus route catchments.

- The multi-function spine running East-West through the development site will provide ecological, drainage, active and passive recreation functions.
- The development will minimise external traffic impacts and supports orderly cost-effective development within an identified growth area.
- The development is consistent with good road, public transport and active transport planning, supporting the development of an integrated transport network.
- The movement network associated with the proposed reconfiguration has been based on an appropriately connected road layout. The subdivision will be accessed externally via Double Jump Road and future connection from the North. The development will also have a high level of internal accessibility and provides for orderly development through the provision of connections to future urban development on adjoining sites.
- The proposed development is a master planned community that has been designed to achieve an attractive walkable community with integrated and accessible open space networks. Internal accessibility for cyclists and pedestrians is provided via the proposed East/West multi-purpose spine, pedestrian access through-ways with proximity to the open space. This offers a network of path connections within the Structure Plan area and beyond, that is legible, safe, attractive and connected.
- Where cul-de-sacs are proposed, they are typically short in length and connect directly with esplanade roads within a short travel distance. Good connectivity for vehicle movements is provided, whilst encouraging a lower speed, safe, legible and active transport network, consistent with good neighbourhood planning outcomes.
- The provision of cul-de-sacs, in conjunction with appropriate pedestrian connectivity, will assist in traffic safety by avoiding unnecessary through traffic on lower order streets. This results in a better sense of place and use of the cul-de-sac environment for neighbourhood residents, contributing to a sense of community and encouraging greater interaction between residents.

The internal road network is displayed in 'Att-9_EAR Attachment 1 - Development plan' The movement network associated with the proposed reconfiguration has been based on an appropriately connected road layout. The subdivision will be accessed externally via Double Jump Road and future connection from the north. The development will also have a high level of internal accessibility and provides for orderly development through the provision of connections to future urban development on adjoining sites. Initial construction traffic during civil engineering and bulk earthworks staging will be from Double Jump Road. Once civil engineering is completed and the internal road network established, construction materials for dwellings will be distributed along the internal road network. Key road infrastructure and traffic features are:

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- The multi-function spine running East-West through the development site will provide ecological, drainage, active and passive recreation functions.
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- The proposed development is a master-planned community that has been designed to achieve an attractive walkable community with integrated and accessible open space networks. Internal accessibility for cyclists and pedestrians is provided via the proposed East/West multi-purpose spine, pedestrian access through-ways with proximity to the open space. This offers a network of path connections within the Structure Plan area and beyond, that is legible, safe, attractive and connected.
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The internal road network is displayed in 'Att-9_EAR Attachment 1 - Development plan'

3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

The Site is generally cleared and modified due to past farming and agricultural practices, commencing prior to the 1940s (**Attachment 1: Ecological Assessment Report, Section 2.1, page 9**). The most prominent natural feature that occurs within the Proposed Action footprint is the unnamed tributary of Moogurrapum Creek, and the associated riparian corridor (**Attachment 3: Figure 2 - Site context** and **Attachment 5: Figure 4 - Regulated vegetation**).

Moreton Bay Marine Park, situated 2 kilometres to the east of the Site and 3.5 kilometres downstream of the Site along Moogurrapum Creek, boasts an array of outstanding natural values. Its diverse ecosystems support a rich tapestry of marine life, making it a haven for biodiversity. The park encompasses a mosaic of habitats, including seagrass meadows, mangrove forests, coral reefs, and sandy beaches. These habitats provide critical breeding, feeding, and nursery grounds for an extensive range of species, including iconic marine mammals like dugongs and humpback whales, as well as numerous fish, crustaceans, and seabirds.

One notable natural value of Moreton Bay Marine Park lies in its role as a vital migratory pathway and habitat for endangered species. Each year, migratory birds from as far as Siberia and Alaska travel thousands of kilometres to rest and feed in the bay's intertidal mudflats and wetlands. These migratory stopovers are crucial for the survival of many bird species, highlighting the park's significance as part of the East Asian-Australasian Flyway. All waters within Moreton Bay, coastal estuaries hydrologically reporting to it and coastal wetlands are within the Moreton Bay RAMSAR Wetland. At its closest point, the RAMSAR Wetland is 1.5 kilometres downstream of the Proposed Action along Moogurrapum Creek.

The international importance of wetland areas within Moreton Bay was recognised with parts of the Bay and surrounds being designated as a Ramsar site in 1993. Covering more than 120,000 hectares, the Moreton Bay Ramsar site is extremely varied, ranging from perched freshwater lakes and sedge swamps on the offshore sand islands, to intertidal mudflats, marshes, sandflats, coral reefs, seagrass beds and mangroves next to the Bay's islands and the mainland. This variety enhances the Bay's biological diversity with an overlap of wildlife species normally considered tropical or temperate. The bay provides essential habitat for the endangered loggerhead and green turtles, which nest on nearby islands and forage in its waters.

Furthermore, Moreton Bay Marine Park is renowned for its cultural and recreational values, attracting visitors from around the world. Traditional owners, including Gubbi Gubbi, Jagera, Turrbal, Yugambeh and Quandamooka peoples, have deep cultural connections to the bay, which holds significant spiritual and historical importance. The relevant indigenous stakeholders are the Quandamooka people. The park offers a plethora of recreational activities, such as boating, fishing, diving, and wildlife watching, allowing people to connect with nature and appreciate its beauty.

3.1.4 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

Topographically, the Site slopes downwards in a west (40 m AHD) to east (10 m AHD) direction, at an average gradient of 4% (**Attachment 3: Figure 2 - Site context**).

3.2 Flora and fauna

3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

Various flora and fauna surveys have been conducted across the Site since September 2015, conducted by BAAM Ecological Consultants (**Attachment 16: EAR Attachment 5 - BAAM Ecology Report**) and 28 South Environmental (including affiliates) (**Attachment 1: Ecological Assessment Report, Section 2.2.2, page 14 and Section 2.3.2, page 15**). Surveys have been conducted for a variety of purposes across this period and, in some instances, included land beyond the bounds of the Site as it is currently nominated. Such surveys have included:

Flora:

- Designation of plant communities (generally based on Queensland herbarium requirements)
- Identification of flora species
- General “ground truthing” of vegetation communities
- Full tree survey, using differential GPS to <1 m accuracy (2020-2021).

Fauna:

- 2015-2018:
 - Diurnal searches (general)

- General and targeted spotlighting (two nights)
- Bird survey (four mornings, 1.5 hours per day)
- Elliot traps (four nights)
- Targeted feed tree search
- Targeted ground search
- Electronic bait detectors
- Opportunistic records.
- 2020-2021:
 - Diurnal searches (general)
 - GPS location of non-juvenile koala habitat trees (**NJKHT**)
 - Opportunistic records
- 2023:
 - Diurnal searches (general)
 - General and targeted spotlighting
 - Camera trapping
 - Opportunistic records.

Flora and communities

The Site, at least for the last 30 years has been used for rural activity, principally poultry production and horse agistment and regular slashing has resulted in the suppression of much of the woody vegetation regrowth. Remnant native vegetation on the site (0.9 hectares) comprises less than 3% of the total Site area being RE12.3.6 in the vicinity of Moogurrapum Creek with woody native regrowth accounting for a further 3-4% of the total Site area.

The vast bulk (93% - 36 hectares) of the Site comprises isolated paddock trees over a maintained grassy understorey +/- woody native regrowth, woody weeds and a predominantly exotic grassy understory. Copses of native and cultivated ornamental trees occur around dwellings and along some fencelines. Consistent with the use of much of the Site for horse agistment, grasses are predominantly exotic and include Signal Grass (*Urochloa decumbens*)*, Whisky Grass (*Andropogon virginicus*)*, Paspalum (*Paspalum dilatatum*), Rhodes grass (*Chloris gayana*), Digit Grass (*Paspalum digitatum*), Panic grass, Whorled Pigeon Grass (*Setaria sphacelata*)* Blady Grass (*Imperata cylindrica*)* and the exotic twiners Phasey Bean (*Macroptilium lathyroides*)*, Glycine (*Neonotonia wightii*)* and Silverleaf Desmodium (*Desmodium uncinatum*)*.

Isolated canopy trees, representative of pre-clear regional ecosystems include Scribbly Gum (*Eucalyptus racemosa*), Pink Bloodwood (*Corymbia intermedia*), Northern Grey Ironbark (*Eucalyptus siderophloia*), Queensland Blue Gum (*Eucalyptus tereticornis*), Swamp Mahogany (*Lophostemon suaveolens*) and occasionally Brown Bloodwood (*Corymbia trachyphloia*), Narrow Leaved Redgum (*Eucalyptus seeana*), Red Stringybark (*Eucalyptus resinifera*), Smudgee (*Angophora woodsiana*), Broad-leaved White Mahogany (*Eucalyptus carnea*), Tallowwood (*Eucalyptus microcorys*), Broad-leaved Paperbark (*Melaleuca quinquenervia*), Swamp Messmate (*Eucalyptus robusta*) and Brush Box (*Lophostemon confertus*).

None of the species recorded on-site are considered conservation dependent at a Local, State or Commonwealth levels.

Prominent weeds found through include Alexandra Palm (*Archontophoenix alexandrae*)#, Cocos Palm (*Syagrus romanzoffiana*)*, Slash Pine (*Pinus elliottii*)* and occasionally Camphor Laurel (*Cinnamomum camphora*)*, Umbrella Tree (*Schefflera actinophylla*)#, Cadaghi (*Corymbia torelliana*)#, African Tulip Tree (*Spathodea campanulata*)*, Ficus elastica (Indian rubber tree)^*, Coral Tree (*Erythrina crista-gali*)*, Weeping Fig (*Ficus benjamina*) and Racehorse Tree (*Tipuana tipu*)*.

Other prominent weeds include Lantana (*Lantana camara*)*, a Devil's Fig (*Solanum torvum*)*, Fishbone fern (*Nephrolepis cordifolia*)*, Polka Dot Plant (*Hypoestes phyllostachya*)*, Ochna (*Ochna serrulata*)*, Madeira Vine (*Anredera cordifolia*)*, Fireweed (*Senecio madagascariensis*) and Blue Billygoat Weed (*Ageratum*

houstonianum)*. Madeira Vine, Arrowhead Vine (*Syngonium podophyllum*)*, Devils Ivy (*Epipremnum aureum*)*, Monstera (*Monstera deliciosa*)*, Dragon fruit (*Hylocereus* sp)*, Golden Cane Palm (*Dypsis lutescens*)*, Golden Bamboo (*Phyllostachys aerea*)*, Asparagus fern (*Asparagus aethiopicus*)*, Cats Claw Creeper (*Dolichandra unguis-cati*)*, Dracena (*Dracena fragrans*)*, Lantana* and Blue Billygoat Weed are problematic weeds of lower lying areas especially along the Moogurrapum Creek corridor.

Notes:

* exotic – naturalised species or used as garden ornamental planting; free-living

native species endemic to northern Queensland

^ cultivated endemic species or endemic species not known from former pre-clear RE

^* cultivated exotic species

Significance

One objective of the surveys was to establish the likelihood of occurrence of threatened species, as identified through search of the Protected Matters Search Tool (**Attachment 14: EAR Attachment 3 - PMST**) and the Queensland Government's WildNet database (**Attachment 15: EAR Attachment 4 - WildNet Species List**).

No EPBC Act listed flora species were recorded during the surveys and, based on the habitat present, none are considered likely to occur (**Attachment 1: Ecological Assessment Report, Section 3.1.3, page 19**).

Weeds of National Significance

Weeds of national significance (**WONS**) were recorded within or immediately adjoining the Site, but mainly within vegetation associated with the tributary of Moogurrapum Creek (**Attachment 1: Ecological Assessment Report, Section 3.1.4, page 19**). WONS recorded include:

- Asparagus fern (*Asparagus aethiopicus*);
- Cats Claw Creeper (*Dolichandra unguis-cati*);
- Fire Weed (*Senecio madagascariensis*)
- Madeira Vine (*Anredera cordifolia*); and
- Lantana (*Lantana camara*).

Habitats and Fauna

The Site of the Proposed Action contains three habitat types , each with varying degrees of habitat quality:

- Modified open woodland with a grassy understory occupying ~94% of the Site area. Canopy trees consist of relict mature and overmature specimens, many predating clearing. A large number of these, mainly Scribbly Gum (*Eucalyptus racemosa*) are hollow-bearing. The spatial arrangement of these is such that they lack ecological context and are utilised by Brushtail Possum (*Trichosurus vulpecula*), parrots and barn owls (*Tyto alba*). Some of the copses of trees along the northern boundary of the Site (within Conservation Area 2) have been shown to be utilised by Squirrel Glider (*Petaurus norfolcensis*). This is a degraded habitat with limited habitat niches and subsequently having lower abundance and faunal array. Owing to historic land use practices, the canopy has been substantially thinned, native shrub and groundlayer species have been removed and replaced by predominantly grassy undertorey; the habitat lacks an abundance of woody debris and leaf litter, which are important microhabitat values for small ground dwelling mammals and reptiles. Species recorded are gregarious species typical of modified peri-urban habitats.
- Regrowth woodland occupying ~3% of the site area. These areas adjoin waterways (within Conservation Area 1) and consist of a sparse canopy of eucalypt species often with a dense understorey of wattles (*Acacia* spp) and or whipstick Black She-oak (*Allocasuarina littoralis*), which resulted from intense fire events in the recent past. This degraded habitat also has few niches and lower habitat diversity has a limited faunal array.

Riparian open forest on alluvium occupying ~3% of the site area. This area occupies the Moogurrapum Creek riparian corridor. The habitat here is represented by the densest and most diverse (both structurally and floristically) vegetation on the Site. It is entirely contained within Conservation Area 1. It affords habitat for a range of forest dependent fauna including birds, reptiles and mammals. Both Swamp Wallaby (*Wallabia bicolor*), Red-necked Wallaby (*Notamacropus rufogriseus*) were observed associated with this habitat.

Faunal significance

Fauna surveys conducted by 28 South Environmental and BAAM (2018-2023) have established that two threatened species are known to utilise the Site, being koala and grey-headed flying fox (**Attachment 16: EAR Attachment 5 - BAAM Ecology Report**).

Evidence (scats and scratches) was recorded during surveys of koala utilisation of trees on the Site. Additionally, a koala was sighted during surveys on Lot 22 RP86773, which immediately adjoins the Site to the east, along the Moogurrapum Creek tributary (**Attachment 7: Figure 6 - Koala records within 2km of Site**).

Tree survey across the Site has determined there to be 1,054 NJKHTs within the development footprint for the Proposed Action (**Attachment 6: Figure 5 - Tree retention and clearance**).

No flying-fox camps are located on or peripheral to the Site. The closest recognised flying-fox camp (unspecified species) is 1.1 km north-east from the Site, located in Peppercorn Crescent, Victoria Park (**Attachment 8: Figure 7 - Grey-headed flying fox records and monitoring camps within 10km of Site**). However, trees located on Site include flowering Eucalypts and Melaleuca sp. that are recognised as being food sources for grey-headed flying fox.

One other MNES threatened species, the white-throated needletail, is likely to occur in proximity to the Site. This species is likely to utilise the air space above the Site, primarily in summer preceding rainfall and storm events, but is not expected to be reliant on on-ground habitat values. Consequently, it is not expected to be impacted by the Proposed Action (**Attachment 1: Ecological Assessment Report, Section 3.2.3, page 20**).

3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

Vegetation surveys of the Site determined that the remnant vegetation associated with the tributary of Moogurrapum Creek, mapped under the State's RE mapping as 12.3.6 (**Attachment 5: Figure 4 - Regulated vegetation**), is better described as RE 12.3.11, being *Eucalyptus tereticornis* +/- *Eucalyptus siderophloia*, *Corymbia intermedia* open forest on alluvial plains usually near coast.

The balance of the Site was confirmed to be consistent with the Category X mapping, comprising mown pastures of grass and weeds and occasional regrowth vegetation. Trees located within the Category X area are shown in **Attachment 6: Figure 5 - Tree retention and clearance**.

Soils across the Site have been mapped at 1:100,000 scale as part of The Soil Landscapes of Brisbane and South-eastern Environs (Beckmann, Hubble & Thompson, 1987). Soils of the Site are identified as part of the Woodridge soil landscape, which is representative of low hills of sandstones and shales. This landscape is dominated by red-yellow podzolic soils, with lithosols, gleyed podzolic soils and lateritic podzolic soils.

3.3 Heritage

3.3.1 Describe any Commonwealth heritage places overseas or other places recognised as having heritage values that apply to the project area.

There are no known Commonwealth Heritage places or other places recognised as having heritage in proximity to the Proposed Action.

3.3.2 Describe any Indigenous heritage values that apply to the project area.

There are no known Indigenous heritage values known to apply to the project area.

The Proponent is committed to consulting with the local Aboriginal Party and undertaking the appropriate cultural heritage assessment to address requirements of the *Aboriginal Cultural Heritage Act 2003* (Qld) and as part of the proponent’s broader commitment to inform the community of the project particulars and anticipated pathway towards delivering the proposed development.

3.4 Hydrology

3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. *

Broader Locality.

Hydrologically the location of the proposed action overlies two catchments being Moogurrapum Creek (**Att-17_Redland City Council Catchment Mapping - Plate 1**) and Eprapah Creek (**Att-17_Redland City Council Catchment Mapping - Plate 2**) occupying approximately 90% and 10% of the Site area, respectively. No hydrological investigation documents are available for location of the Proposed Action, however the following material on catchment areas of the Redlands (sourced from Redland City Council (RCC)) provides an outline of the catchment and waterway conditions of both catchments.

Moogurrapum Creek

Catchment description

Moogurrapum Creek catchment (**Att-18_Catchments of the Redlands Area - Moogurrapum Creek**) covers an area of 14 square kilometres and is dominated by rural non-urban and commercial land use to the west of the Cleveland Redland Bay Road. It also has closed and capped landfill sites, with one now being used as a waste transfer station.

East of the road the dominant land use is urban residential, bushland, waterway corridors and open space users. Many rural non-urban properties around Redland Bay are serviced by septic/on-site wastewater systems.

Natural features in the catchment on public land include conservation areas, bushland refuges and Moogurrapum Creek corridor.

Waterway description

Moogurrapum Creek rises in the Days Road Conservation Area and smaller tributaries drain rural land either side of German Church and Giles Road. The main channel flows through urban Redland Bay, into Victoria Point and flows out to Moreton Bay. Receiving waters form part of central and southern Moreton Bay Marine Park habitat protection zone (RAMSAR Wetland). The creek is 31.5 kilometres in length.

Many farm dams and agricultural activities present in the rural areas are potential point sources of nutrients. Landfill leachate generated from the closed Redland Bay landfill site is collected in sumps and ponds and disposed outside the Redland Water catchment. Significant fish species present include Empire Gudgeon, Fire-tailed Gudgeon and Crimson-spotted rainbowfish. None are State or Commonwealth conservation dependent species.

Eprapah Creek

Catchment description

Eprapah Creek catchment (**Att-19_Catchments of the Redlands Area - Eprapah Creek**) is about 39 square kilometres in size, covering the western edges of Victoria Point and Redland Bay and the majority of Mount Cotton. West Mount Cotton Road forms part of the western catchment boundary. The western portion of the catchment is dominated by rural non-urban land use and bushland, while the eastern portion is urban residential and some park residential.

Major natural features on public land included Point Halloran, Eprapah estuary, Sandy Creek and Eastern Escarpment Conservation Area. The catchment also has many smaller parcels of bushland refuges and Eprapah Creek corridor conservation land.

Victoria Point Wastewater Treatment Plant is located within Eprapah catchment and discharges wastewater to the upper estuary of Eprapah Creek.

Waterway description

Eprapah Creek is made up of a main channel and two smaller tributary channels - Little Eprapah and Sandy Creeks. Eprapah Creek is about 52 kilometres long. The creek starts at the Mount Cotton hills west of Mount Cotton Road, flows through cleared rural blocks and east towards the lower, urbanised reaches of

Victoria Point. Eprapah Creek flows into a designated High Ecological Value area in western Moreton Bay with associated water quality objectives to be achieved.

Wetlands of state significance are located around the mouth of Eprapah Creek and foreshore area, for example Egret Colony Wetland. Fish species here include Empire Gudgeon and Fire-tail Gudgeon. It is also home to the locally rare and potentially threatened Ornate Rainbowfish. The Ornate Rainbowfish is a State Conservation Dependent Species.

A high level of intact riparian vegetation cover remains around Eprapah Creek estuary. There are many farm dams in this catchment and the creeks regularly experience elevated levels of nutrients and sediments and excess algal growth.

Site

A chain of dams occurs at intervals along a drainage line that extends across Lot 5 on SP293881 and Lot 2 on RP86773. These dams provide aquatic habitats of varying degrees, from large permanent deep impoundage areas through to relatively small shallow water storages that provide permanent water sources (**Att-1: Ecological Assessment Report, Section 3.2.1, page 19**).

An unnamed tributary of Moogurrapum Creek is aligned along the eastern boundary of the Site, flowing in a south-west to north-east direction. This water feature is recognised as a drainage feature for the purpose of the *Water Act 2000* (Qld). This tributary flows into Moogurrapum Creek proper approximately 1 km downstream of the Site (direct distance) (**Att-2: Figure 1 - Locality**).

The Moreton Bay Ramsar wetland extends inland from the coastline, up Moogurrapum Creek. The Site is located approximately 850 m, direct line distance, from the most inland point of the Moreton Bay Ramsar wetland.

Direct and Indirect Impacts on Places of Significance

Stormwater runoff from the Site flows through Moogurrapum Creek and to a lesser extent Eprapah Creek into the Moreton Bay Marine Park (and RAMSAR Wetland).

A Construction Environmental Management Program containing an Erosion and Sediment Control Plan prepared by a Certified Professional in Erosion and Sediment Control (CPESC) is a requirement of Operational Work Approvals which will be obtained prior to the commencement of work.

An Erosion and Sediment Control Plan (ESCP) is a comprehensive strategy designed to minimize the negative impact of soil erosion and sedimentation on the environment during construction or land development activities. It typically includes a set of measures and practices aimed at preventing soil erosion, controlling sediment runoff, and preserving water quality by implementing measures to mitigate the loss of topsoil and the pollution of water bodies caused by sediment-laden runoff. Additionally, it often incorporates monitoring and maintenance procedures to ensure the effectiveness of erosion control measures throughout the project's duration. Ultimately, an ESCP serves as a proactive approach to sustainable land management, safeguarding both natural resources and surrounding ecosystems from the adverse effects of soil erosion and sedimentation.

Post construction, stormwater will be collected and diverted through stabilised catchments and other water sensitive urban design (WSUD) devices to modulate quantity (flatten peak flows by increasing the length of time of discharge into natural catchments) and quality (through passive and active measures, to facilitate a water quality discharge that adheres to Queensland Residential Stormwater Discharge requirements).

RCC catchment condition reporting has identified that farm dams and agricultural activities present in the rural areas are point sources of nutrients. Conversion of the Site to a residential development resulting in the removal of horses and poultry (which are significant nutrient contributors) from the catchment, whilst also better managing the quality and quantity of stormwater runoff is likely to result in improvement to the status quo by reducing nutrient, sediment and coliform discharges associated with the present landuses with

the location of the Proposed Action. Therefore it is not believed that there will be a significant or indirect impact on RAMSAR wetland arising from the development and indeed, it is anticipated that nutrient, sediment and coliform levels will decrease.

4. Impacts and mitigation

4.1 Impact details

Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	No	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

There are no World Heritage properties proximal to the Site.

4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

There are no National Heritage Places proximal to the Site.

4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Ramsar wetland
No	No	Moreton Bay

4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.3.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Moreton Bay Ramsar wetland extends inland from the coastline, up Moogurrapum Creek. The Site is located approximately 850 m, direct line distance, from the most inland point of the Moreton Bay Ramsar wetland (**Attachment 2: Figure 1 - Locality**).

The Proposed Action does not involve bulk discharge of wastewater. Additionally, stormwater interception and passive treatment, including capture of gross pollutants, will be incorporated into the detailed design for the development.

Given the separation distance and the design objectives for the development, the Proposed Action is not expected to result in:

- Destruction or substantial modification of the wetland;
- Substantial or measurable change in the hydrological regime of the wetland;
- Impact to the habitat or lifecycle of native species that occupy the wetland;
- Substantial and measurable change in the water quality of the wetland
- Invasive species that is harmful to the ecological character of the wetland.

Consequently, the Proposed Action is not expected to result in a significant impact to the Moreton Bay Ramsar wetland, per the Significant impact guidelines 1.1 (DoE, 2013).

4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Threatened species

Direct impact	Indirect impact	Species
No	No	Acronychia littoralis
No	No	Anthochaera phrygia
No	No	Argynnis hyperbius inconstans
No	No	Arthraxon hispidus
No	No	Baloghia marmorata
No	No	Bosistoia transversa
No	No	Botaurus poiciloptilus
No	No	Calidris acuminata
No	No	Calidris canutus
No	No	Calidris ferruginea
No	No	Calyptorhynchus lathami lathami
No	No	Chalinolobus dwyeri
No	No	Charadrius leschenaultii
No	No	Climacteris picumnus victoriae
No	No	Coeranoscincus reticulatus
No	No	Corchorus cunninghamii
No	No	Cryptocarya foetida
No	No	Cryptostylis hunteriana
No	No	Cyclopsitta diophthalma coxeni
No	No	Dasyurus maculatus maculatus (SE mainland population)
No	No	Delma torquata
No	No	Endiandra floydii

Direct impact	Indirect impact	Species
No	No	Erythrorhynchus radiatus
No	No	Falco hypoleucos
No	No	Gallinago hardwickii
No	No	Geophaps scripta scripta
No	No	Grantiella picta
No	No	Hemiaspis damelii
No	No	Hirundapus caudacutus
No	No	Lathamus discolor
No	No	Limnodromus semipalmatus
No	No	Limosa lapponica baueri
No	No	Litoria olongburensis
No	No	Macadamia integrifolia
No	No	Macadamia tetraphylla
No	No	Macroderma gigas
No	No	Notelaea lloydii
No	No	Numenius madagascariensis
No	No	Pachyptila turtur subantarctica
No	No	Petauroides volans
No	No	Petaurus australis australis
No	No	Phaius australis
Yes	Yes	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)
No	No	Planchonella eerwah
No	No	Potorous tridactylus tridactylus
Yes	Yes	Pteropus poliocephalus
No	No	Rhodamnia rubescens
No	No	Rhodomyrtus psidioides

Direct impact	Indirect impact	Species
No	No	Rostratula australis
No	No	Samadera bidwillii
No	No	Stagonopleura guttata
No	No	Sternula nereis nereis
No	No	Thesium australe
No	No	Tringa nebularia
No	No	Turnix melanogaster
No	No	Xeromys myoides

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community
No	No	Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland
No	No	Lowland Rainforest of Subtropical Australia
No	No	Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions

4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Fauna surveys were conducted by 28 South Environmental and BAAM between 2018 and 2023. One objective of the surveys was to establish the likelihood of occurrence of threatened species, as identified by site survey of habitat and through Commonwealth and State database searches (Protected Matters Search Tool (**Attachment 14: EAR Attachment 3 - PMST**) and the Queensland Government's WildNet database (**Attachment 15: EAR Attachment 4 - WildNet Species List**)).

The surveys have established that two threatened species are known to utilise the Site, being Koala (*Phascolarctos cinereus*) and Grey-headed Flying Fox (*Pteropus poliocephalus*) (**Attachment 1: Ecological Assessment Report, Section 3.2.3, page 20**).

Evidence (scats and scratches) was recorded during surveys of koala utilisation of trees on the Site. Additionally, a koala was sighted during surveys on Lot 22 RP86773, which immediately adjoins the Site to the east, along the Moogurrapum Creek tributary (**Attachment 7: Figure 6 - Koala records within 2km of Site**).

No flying-fox camps are located on or peripheral to the Site. The closest recognised flying-fox camp (unspecified species) is 1.1 km north-east from the Site, located in Peppercorn Crescent, Victoria Park (**Attachment 8: Figure 7 - Grey-headed flying fox records and monitoring camps within 10km of Site**). However, trees located on Site include flowering Eucalypts and Melaleuca sp. that are recognised as being food sources for grey-headed flying fox.

Both species would be directly affected by the loss of potential foraging habitat and dispersal habitat (Koala (*Phascolarctos cinereus*) only. Indirect impacts to both species could arise through unmitigated effects associated with lighting, noise, domestic pets and physical impediments associated with internal roads.

Direct impacts to MNES as a consequence of the Proposed Action are expected to arise from vegetation clearing and civil earthworks. This development is expected to result in the clearing of 1,316 native trees, 1,054 of which are tree species that are regarded as habitat trees for koalas and feed trees for grey-headed flying fox (**Attachment 6: Figure 5 - Tree retention and clearance**), which equates to approximately 4.2 ha of koala habitat when applying the Queensland Government's rule of 40 m² per tree (DES, 2023).

In addition, the Proposed Action may result in indirect impacts to MNES, as follows:

- Disturbance to fauna during construction due to noise and vibration from construction vehicles, plant and machinery.
- Increased potential for road strike once internal roads are operational.
- Increased potential for interaction between native fauna and domestic animals, e.g. cats and dogs, due to residential occupancy of the Site.

4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?

*

Yes

4.1.4.5 Describe why you consider this to be a Significant Impact. *

The proposed action will have various impacts to protected matters however these impacts have been avoided, as far as possible, then minimised through retaining areas with highest ecological significance for future environmental management and ecological corridors. Despite these efforts, the proposed action is likely to have a significant impact on threatened species.

Direct Impact

- ***Phascolarctos cinereus* (combined populations of Qld, NSW and the ACT) - Koala**

Being an endangered species, the Department specifies that all habitat is habitat critical to the survival of koala and that even small areas of habitat loss (as little as 1 ha) can have a significant impact (DCCEEW, 2023). The Proposed Action is expected to result in the clearance of approximately 1,054 NJKHTs, equating to 4.2 ha of habitat loss (DES, 2023). On this basis, the Proposed Action will adversely affect habitat critical to the survival of the species. This clearing will also result in a reduction in the occupancy area for the regional koala population. However, this impact is expected to be overcome in the longer term with the establishment and rehabilitation of the three Conservation Areas (10.2 ha).

We believe the potential direct impact does constitute a Significant Impact on Koala (**Attachment 1: Ecological Assessment Report, Section 6.1, page 26**).

- ***Pteropus poliocephalus* - Grey-headed flying fox**

The Proposed Action will result in the clearing of approximately 1,054 NJKHTs, which are tree species that would also be regarded as feed trees for grey-headed flying fox and equates to approximately 4.2 ha of habitat.

Spring foraging resources are considered to be critical to the survival of the species (DoE, 2024). Trees that will be cleared for the Proposed Action include Spring flowering species (e.g. *E. tereticornis*, *C. intermedia*). Therefore, the 4.2 ha (equivalent area) that will be cleared for the Proposed Action aligns with the definition of 'habitat critical to the survival of the species'. However, this impact is expected to be overcome in the longer term with the establishment and rehabilitation of the three Conservation Areas (10.2 ha).

We believe the potential direct impact does constitute a Significant Impact on grey-headed flying fox (**Attachment 1: Ecological Assessment Report, Section 6.2, page 28**).

4.1.4.7 Do you think your proposed action is a controlled action? *

Yes

4.1.4.8 Please elaborate why you think your proposed action is a controlled action. *

As outlined above, in Section 4.1.4.5, the Proposed Action has potential to result in a Significant Impact to koala (*Phascolarctos cinereus*) and grey-headed flying fox (*Pteropus poliocephalus*) on the basis that it will result in the clearing of the equivalent of 4.2 ha of habitat for these species.

4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Site location

The Proposed Action has been sited on land which has, for the most part, been previously subject to significant historical disturbance in the form of clearing, occupation and use for rural residential purposes.

The Site is within the Urban Footprint area, as identified by ShapingSEQ 2023. The plan specifies that '*The priority for developing land in the Urban Footprint is to accommodate urban growth.*'; however, it also states that '*remnant vegetation will continue to be protected and managed under relevant state legislation, including the Vegetation Management Act 1999*'. This intent is achieved by the Proposed Action, which has been configured to retain and enhance the remnant vegetation (ground-truthed as RE 12.3.11) that is associated with the riparian corridor of the Moogurrapum Creek tributary.

The intended use of the Site for residential purposes is consistent with the nature of surrounding development, such as that which has occurred immediately to the north (Brendan Way and Clay Gully Road), to the east (corner of Double Jump Road and Cleveland-Redland Bay Rd) and the west (Wollemi Avenue, off Bunker Road) of the Site.

Refer to **Attachment 1: Ecological Assessment Report, Section 5.2.1, page 23.**

Avoidance through design

The proposed development plan has been designed and orientated to avoid disturbance to the only remnant vegetation mapped within the bounds of the Site, that which is associated with the Moogurrapum Creek tributary riparian area. This remnant vegetation will not only be avoided, but will be designated as one of the three Conservation Areas as part of the development and will be subject to further improvement, through rehabilitation, as a component of this conservation.

Avoidance of this vegetation in the east of the Site also ensures retention of continued connectivity opportunity for fauna movement through the broader landscape.

Refer to **Attachment 1: Ecological Assessment Report, Section 5.2.2, page 23.**

Impact minimisation

The Proposed Action has taken into consideration the Site's ecological, environmental and landscape character when considering impact avoidance and mitigation. While largely reliant on avoidance, impacts from the Proposed Action can be further mitigated and minimised.

The following mitigation measures will be implemented to ensure that impacts to MNES and their habitat that cannot be avoided are minimised to the greatest extent possible:

- Development and implementation of a Construction Environmental Management Plan (**CEMP**) to outline relevant environmental requirements for undertaking the works;
- Hours of work will be limited to Monday to Saturday between 6:30 am to 6:30 pm, excluding public holidays, thereby avoiding potential nighttime disturbance from noise, vibration and lighting.
- An Erosion and Sediment Control Plan will be developed, certified by a Registered professional Engineer Queensland (**RPEQ**) or an accredited professional in erosion and sediment control, and implemented.
- Implementation of weed management and controls across the Site and reestablishment of native grasses;
- The extent of permissible clearing will be clearly demarcated by an ecologist prior to the commencement of construction works to prevent clearing in excess of the approved footprint of works.
- Felled trees will be mulched on-site for use in rehabilitation works. Other habitat features (e.g. boulders, logs etc.) will be retained and reinstated across the disturbed footprint as part of Site rehabilitation works.
- A licensed Wildlife Spotter/Catcher under the *Nature Conservation Act 1992* is to undertake a survey of the site to identify any fauna or habitat features (e.g. nests, tree hollows) and certify that any necessary fauna protection measures or relocation procedures have been implemented.

Indirect impacts to both species could arise through unmitigated effects associated with lighting and noise (both species), and interaction with domestic pets (cats and dogs due to residential occupancy), and physical impediments associated with internal roads in the form of barriers to movement and vehicle strike (Koala (*Phascolarctos cinereus*)). Mitigatory measures proposed to address indirect effects on Koala (*Phascolarctos cinereus*) include, an extensive program of forage tree planting within retention and avoidance areas, establishment of exclusion and guide fencing to keep Koala (*Phascolarctos cinereus*) out

of residential areas and exclude domestic pets from habitat areas, fauna underpasses on internal roads where roads bisect habitat (such as between Conservation Areas 1 and 2). Measures to benefit both species include dense plantings along habitat edges to reduce light influx, directional and low lux lighting along esplanade roads and paths adjoining conservation areas to direct light away from habitat, a planting palette within residential areas that does not include species that are forage resources to either, planting winter-spring flowering Queensland Blue Gum (*Eucalyptus tereticornis*) and Pink Bloodwood (*Corymbia intermedia*), both favoured resource for both species, as canopy tree components of Conservation Area rehabilitation.

IR Refer to **Attachment 1: Ecological Assessment Report, Section 5.3, page 24.**

4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

On-site compensation

The three Conservation Areas, totalling 102,299 m² (10.2 ha), have been designated in the proposed development plan (**Attachment 9: EAR Attachment 1: Development plan**). The intended purpose of these Conservation Areas is to provide a long-term ecological benefit to the Site, relative to present day condition. Once rehabilitated, these areas will provide for continued fauna movement connectivity 1) along the Moogurrapum Creek tributary riparian corridor; and 2) in a north-west direction and east-west direction, connecting bushland south of Bunker Road to the Moogurrapum Creek tributary riparian corridor.

Minor earthworks will occur in the northern and eastern Conservation Areas during Site establishment, for the purpose of installing utilities and stormwater infrastructure. However, this earthworks will be orientated to avoid the need for tree clearance.

More extensive earthworks will be required within the western Conservation Area to achieve the necessary development land-form.

Regardless, all three Conservation Areas will be subject to rehabilitation through weed control and a combination of broad re-planting (in largely cleared areas) or selective in-fill planting (where remnant vegetation is retained). In cleared and heavily disturbed areas, supplementary planting will be conducted to establish an overall plant density (canopy, mid-storey and groundcover) of 1 plant/m², with a species palette consistent with the corresponding pre-clear RE.

Furth on-site compensation for habitat loss will be provided through the two local parks. These parks will be required to maintain a core recreational function, so will not be rehabilitated and preserved to the same extent as the Conservation Areas; however, native trees will be incorporated into the landscape design to provide an aesthetic connection to the natural environment, as well as provide shading opportunities for park users.

Refer to **Attachment 1: Ecological Assessment Report, Section 5.4, page 24.**

Off-site offsets

Offsets for impacts to Migratory Species and Threatened Species would be delivered in accordance with the EPBC Act Environmental Offsets Policy, with an Offset Strategy to be developed through the assessment process for the Proposed Action should the proposed action be assessed as a controlled action.

4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species
No	No	Actitis hypoleucos
No	No	Apus pacificus
No	No	Calidris acuminata
No	No	Calidris canutus
No	No	Calidris ferruginea
No	No	Calidris melanotos
No	No	Charadrius leschenaultii
No	No	Cuculus optatus
No	No	Gallinago hardwickii
No	No	Hirundapus caudacutus
No	No	Limnodromus semipalmatus
No	No	Limosa lapponica
No	No	Monarcha melanopsis
No	No	Myiagra cyanoleuca
No	No	Numenius madagascariensis
No	No	Pandion haliaetus
No	No	Rhipidura rufifrons
No	No	Symposiachrus trivirgatus
No	No	Tringa nebularia

4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.5.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

Fauna surveys conducted by 28 South Environmental and BAAM (2018-2023) have assessed the likelihood of threatened species occurring on, or proximal to the Site. Only one migratory species, the white-throated needletail (*Hirundapus caudacutus*), is considered likely to occur in proximity to the Site. This species is likely to utilise the air space above the Site, primarily in summer preceding rainfall and storm events, but is not expected to be reliant on on-ground habitat values. Consequently, it is not expected to be impacted by the Proposed Action (**Attachment 1: Ecological Assessment Report, Section 3.2.3, page 20** and **Attachment 16: EAR Attachment 5 - BAAM Ecology Assessment**).

4.1.6 Nuclear

4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Proposed Action does not involve nuclear activities.

4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no Commonwealth Marine Areas proximal to the Site.

4.1.8 Great Barrier Reef

4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Proposed Action is not proximal to the Great Barrier Reef.

4.1.9 Water resource in relation to large coal mining development or coal seam gas

4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.9.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Proposed Action will not impact a water resource, nor is it a large coal mining development or coal seam gas project.

4.1.10 Commonwealth Land

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Proposed Action is not located on, or proximal to, Commonwealth land.

4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Proposed Action is not located on, or proximal to, Commonwealth Heritage Places overseas.

4.1.12 Commonwealth or Commonwealth Agency

4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? *

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

- Threatened Species and Ecological Communities (S18)

Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

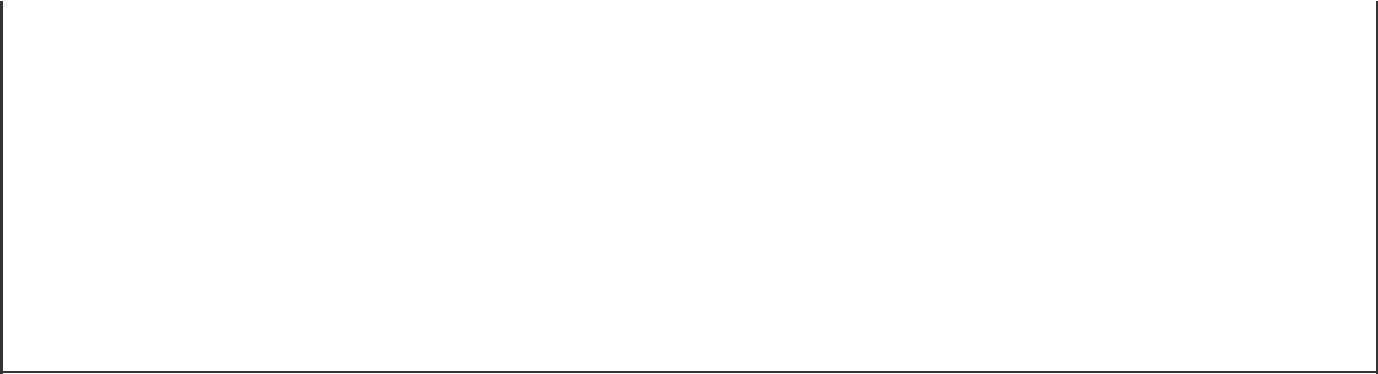
4.3 Alternatives

4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? *

No

4.3.8 Describe why alternatives for your proposed action were not possible. *

The Site is situated within one of only two Emerging Community areas within the Redlands LGA that have been identified, through the City Plan, to support future residential development (**Attachment 1: Ecological Assessment Report, Section 1.2.3, page 6** and **Attachment 4: Figure 3 - RCC Zoning**). Consequently, the Proposed Action is compatible with the identified development intent for this area and no alternative sites have been considered for this development.



5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	19/03/2024	No	High
#2.	Document	Att-2_Figure 1 - Locality.pdf Figure 1 - Locality	08/03/2024	No	High
#3.	Document	Att-3_Figure 2 - Site Context.pdf Figure 2 - Site context	08/03/2024	No	High
#4.	Document	Att-6_Figure 5 - Tree Retention and Clearance.pdf Figure 5 - Tree retention and clearance	08/03/2024	No	Medium
#5.	Document	Att-9_EAR Attachment 1 - Development Plan.pdf Development Plan	14/10/2024	No	High

1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-4_Figure 3 - RCC Zoning.pdf Attachment 4: Figure 3 - RCC Zoning	08/03/2024	No	High
#2.	Link	ShapingSEQ: South East Queensland Regional Plan 2023 https://planning.statedevelopment.qld.gov.au/__d..			High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Link				

2.2.5 Tenure of the action area relevant to the project area

Type	Name	Date	Sensitivity	Confidence
#1.	DocumentAtt-9_EAR Attachment 1 - Development plan.pdf EAR Attachment 1 - Development plan	07/03/2024	No	High

3.1.1 Current condition of the project area's environment

Type	Name	Date	Sensitivity	Confidence
#1.	DocumentAtt-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	18/03/2024	No	High
#2.	DocumentAtt-10_EAR Attachment 2a - Regulated Vegetation Management Report (Lot 1 on RP86773).pdf EAR Attachment 2a - Regulated Vegetation Management Map (Lot 1 on RP86773)	08/03/2024	No	High
#3.	DocumentAtt-11_EAR Attachment 2b - Regulated Vegetation Management Report (Lot 2 on RP86773).pdf EAR Attachment 2b - Regulated Vegetation Management Map (Lot 2 on RP86773)	08/03/2024	No	High
#4.	DocumentAtt-12_EAR Attachment 2c - Regulated Vegetation Management Report (Lot 5 on SP293881).pdf EAR Attachment 2c - Regulated Vegetation Management Map (Lot 5 on RP293881)	08/03/2024	No	High
#5.	DocumentAtt-13_EAR Attachment 2d - Regulated Vegetation Management Map (Lot 23 on SP325035).pdf EAR Attachment 2d - Regulated Vegetation Management Map (Lot 23 on SP325035)	08/03/2024	No	High
#6.	DocumentAtt-16_EAR Attachment 5 - BAAM Ecology Assessment.pdf EAR Attachment 5 - BAAM Ecology Assessment	04/10/2018	No	High
#7.	DocumentAtt-5_Figure 4 - Regulated Vegetation.pdf Attachment 5: Figure 4 - Regulated vegetation	08/03/2024	No	High

3.1.2 Existing or proposed uses for the project area

Type	Name	Date	Sensitivity	Confidence
#1.	DocumentAtt-3_Figure 2 - Site Context.pdf Figure 2 - Site context	07/03/2024	No	High
#2.	DocumentAtt-4_Figure 3 - RCC Zoning.pdf Attachment 4: Figure 3 - RCC Zoning	07/03/2024	No	High

#3.	Document	Att-9_EAR Attachment 1 - Development Plan.pdf Development Plan	13/10/2021	High
#4.	Document	Att-9_EAR Attachment 1 - Development Plan.pdf Development Plan	13/10/2021	High
#5.	Link	Redland City Plan 2018 https://pdonline.redland.qld.gov.au/pages/plan/b..		High
#6.	Link	ShapingSEQ: South East Queensland Regional Plan 2023 https://planning.statedevelopment.qld.gov.au/__d..		High

3.1.3 Natural features, important or unique values that applies to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	18/03/2024	No	High
#2.	Document	Att-3_Figure 2 - Site Context.pdf Figure 2 - Site context	07/03/2024	No	High
#3.	Document	Att-5_Figure 4 - Regulated Vegetation.pdf Attachment 5: Figure 4 - Regulated vegetation	07/03/2024	No	High

3.1.4 Gradient relevant to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-3_Figure 2 - Site Context.pdf Figure 2 - Site context	07/03/2024	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	18/03/2024	No	High
#2.	Document	Att-14_EAR Attachment 3 - PMST.pdf Attachment 14: EAR Attach ment 3 - PMST	08/03/2024	No	High
#3.	Document	Att-15_EAR Attachment 4 - WildNet Species List.pdf Attachment 15: EAR Attachment 4 - WildNet Species List	08/03/2024	No	High
#4.	Document	Att-16_EAR Attachment 5 - BAAM Ecology Assessment.pdf EAR Attachment 5 - BAAM Ecology Assessment	03/10/2018	No	High
#5.	Document	Att-6_Figure 5 - Tree Retention and Clearance.pdf Figure 5 - Tree retention and clearance	07/03/2024	No	High

#6.	Document	Att-7_Figure 6 - Koala records within 2km of Site.pdf Attachment 7: Figure 6 - Koala records within 2km of Site	08/03/2024	No	High
#7.	Document	Att-8_Figure 7 - Grey-headed flying fox records and monitoring camps within 10km of Site.pdf Attachment 8: Figure 7 - Grey-headed flying fox records and monitoring camps within 10km of Site	08/03/2024	No	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-5_Figure 4 - Regulated Vegetation.pdf Attachment 5: Figure 4 - Regulated vegetation	07/03/2024	No	High
#2.	Document	Att-6_Figure 5 - Tree Retention and Clearance.pdf Figure 5 - Tree retention and clearance	07/03/2024	No	Medium
#3.	Link	The Soil Landscapes of Brisbane and South-eastern Environs https://www.publications.qld.gov.au/dataset/soil..	01/01/1987		Medium

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	18/03/2024	No	High
#2.	Document	Att-17 - Redland City Council Catchment Mapping.pdf Catchment mapping of Moogurrapum and Erapah Creeks	16/05/2024	No	High
#3.	Document	Att-2_Figure 1 - Locality.pdf Figure 1 - Locality	07/03/2024	No	High
#4.	Link	Att-18_Catchments of the the Redlands Area - Moogurrapum Creek https://www.redland.qld.gov.au/info/20261/waterw..			High
#5.	Link	Att-19_Catchments of the the Redlands Area - Erapah Creek https://www.redland.qld.gov.au/info/20261/waterw..			High

4.1.3.3 (Ramsar Wetland) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-2_Figure 1 - Locality.pdf Figure 1 - Locality	07/03/2024	No	High
#2.	Link				

Matters of National Environmental Significance:

High

Significant impact guidelines 1.1

<https://dcceew.gov.au/system/files/resources/42f..>

4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	18/03/2024	No	High
#2.	Document Att-14_EAR Attachment 3 - PMST.pdf Attachment 14: EAR Attachment 3 - PMST	07/03/2024	No	High
#3.	Document Att-15_EAR Attachment 4 - WildNet Species List.pdf Attachment 15: EAR Attachment 4 - WildNet Species List	07/03/2024	No	High
#4.	Document Att-6_Figure 5 - Tree Retention and Clearance.pdf Figure 5 - Tree retention and clearance	07/03/2024	No	Medium
#5.	Document Att-7_Figure 6 - Koala records within 2km of Site.pdf Attachment 7: Figure 6 - Koala records within 2km of Site	07/03/2024	No	High
#6.	Document Att-8_Figure 7 - Grey-headed flying fox records and monitoring camps within 10km of Site.pdf Attachment 8: Figure 7 - Grey-headed flying fox records and monitoring camps within 10km of Site	07/03/2024	No	High
#7.	Link Queensland Environmental Offsets Policy https://environment.des.qld.gov.au/__data/assets..			High

4.1.4.5 (Threatened Species and Ecological Communities) Why you consider the direct and/or indirect impact to be a Significant Impact

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	18/03/2024	No	High
#2.	Link Queensland Environmental Offsets Policy https://environment.des.qld.gov.au/__data/assets..			High
#3.	Link Referral guidance for the endangered koala https://www.dcceew.gov.au/environment/biodiversi..			High
#4.	Link Species Profile and Threats Database: Pteropus poliocephalus — Grey-headed Flying-fox https://www.environment.gov.au/cgi-bin/sprat/pub..			High

Type	Name	Date	Sensitivity	Confidence
#1.	DocumentAtt-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	18/03/2024	No	High

4.1.4.11 (Threatened Species and Ecological Communities) Proposed offsets relevant to avoidance or mitigation measures

Type	Name	Date	Sensitivity	Confidence
#1.	DocumentAtt-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	18/03/2024	No	High
#2.	DocumentAtt-9_EAR Attachment 1 - Development plan.pdf EAR Attachment 1 - Development plan	07/03/2024		High

4.1.5.3 (Migratory Species) Why your action is unlikely to have a direct and/or indirect impact

Type	Name	Date	Sensitivity	Confidence
#1.	DocumentAtt-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	18/03/2024	No	High
#2.	DocumentAtt-16_EAR Attachment 5 - BAAM Ecology Assessment.pdf EAR Attachment 5 - BAAM Ecology Assessment	03/10/2018	No	High

4.3.8 Why alternatives for your proposed action were not possible

Type	Name	Date	Sensitivity	Confidence
#1.	DocumentAtt-1_Ecological Assessment Report_Double Jump Road.pdf Ecological Assessment Report	18/03/2024	No	High
#2.	DocumentAtt-4_Figure 3 - RCC Zoning.pdf Attachment 4: Figure 3 - RCC Zoning	07/03/2024	No	High

5.2 Declarations

Awaiting Referring party's declaration

The Referring party is the person preparing the information in this referral.

Organisation name	The Trustee for 28 South Environmental Trust
Organisation address	4151 QLD
Representative's name	Mitch Taylor
Representative's job title	Director
Phone	0488 204 523
Email	EPBC@28south.com.au
Address	U11/24 Martin St, Fortitude Valley, QLD 4006

- ☐ Check this box to indicate you have read the referral form. *
- ☐ I would like to receive notifications and track the referral progress through the EPBC portal. *
- ☐ By checking this box, I, **Mitch Taylor of The Trustee for 28 South Environmental Trust**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *
- ☐ I would like to receive notifications and track the referral progress through the EPBC portal. *

● Awaiting Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	083212006
Organisation name	SUTGOLD PTY. LTD.
Organisation address	4157 QLD
Representative's name	Vaughn Bowden
Representative's job title	Executive Development Manager
Phone	0421755074
Email	vaughn@fiteni.co
Address	80 Old Cleveland Road, Capalaba, 4157, QLD

- ☐ Check this box to indicate you have read the referral form. *
- ☐ I would like to receive notifications and track the referral progress through the EPBC portal. *
- ☐ I, **Vaughn Bowden of SUTGOLD PTY. LTD.**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *
- ☐ I would like to receive notifications and track the referral progress through the EPBC portal. *

● Awaiting Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

- ☐ Check this box to indicate you have read the referral form. *
- ☐ I would like to receive notifications and track the referral progress through the EPBC portal. *
- ☐ I, **Vaughn Bowden of SUTGOLD PTY. LTD.**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *
- ☐ I would like to receive notifications and track the referral progress through the EPBC portal. *

Appendix 2 – CAR Attachments



Double Jump Road Residential Development

ECOLOGICAL ASSESSMENT REPORT IN SUPPORT OF A CONTROLLED ACTION REFERRAL

19 March 2024

DOCUMENT CONTROL

Project No. 2019-100

Project Double Jump Road Development

Document Controlled Action Referral Report

Client Sutgold Pty Ltd

www.28south.com.au

28 South Environmental Pty Ltd

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Name	Position	Date
Mark Barnett	Technical Director	19 March 2024

TABLE OF CONTENTS

1.	Introduction	5
1.1.	Purpose of this Report	5
1.2.	The Site.....	5
1.2.1.	Locality.....	5
1.2.2.	Setting	5
1.2.3.	Land Use Planning Context	6
1.3.	The Proposed Action.....	7
1.3.1.	Proposed Action Footprint	7
1.3.2.	Construction Approach	7
1.3.3.	Development Timeframe.....	8
2.	Methods Used to Assess the Site's Ecological Values	9
2.1.	Historic Disturbance	9
2.2.	Assessment of Flora and Vegetation Values	11
2.2.1.	Database Searches and Shortlisting for Targeted Assessment.....	11
2.2.2.	Flora and Vegetation Surveys.....	14
2.3.	Assessment of Fauna Values	14
2.3.1.	Database Searches and Shortlisting for Targeted Assessment.....	14
2.3.2.	Fauna Survey	15
2.4.	Other MNES.....	18
3.	Findings of the Site Assessment	18
3.1.	Flora Values.....	18
3.1.1.	Vegetation Communities.....	18
3.1.2.	Threatened Ecological Communities	18
3.1.3.	Threatened Species.....	19
3.1.4.	Weeds	19
3.2.	Fauna Values.....	19
3.2.1.	Habitats.....	19
3.2.2.	Connectivity	20
3.2.3.	Threatened Species.....	20
4.	Impacts of the Proposed Action	21
5.	Avoidance, Mitigation and Management Measures	21
5.1.	Ecologically Sustainable Development	21

5.1.1.	The Principles of ESD.....	21
5.1.2.	How the Proposed Action achieves the Principles of ESD	22
5.2.	Impact Avoidance.....	23
5.2.1.	Site Location	23
5.2.2.	Alternative Sites	23
5.2.3.	Avoiding Impacts Through Design	23
5.3.	Impact Minimisation Through Mitigation.....	24
5.4.	On-site Compensation	24
6.	Assessment against Significant Impact Guideline 1.1	26
6.1.	Koala.....	26
6.2.	Grey-headed flying fox.....	28
7.	Summary and Conclusion.....	31
8.	References	32

Figures

Figure 1. Locality

Figure 2. Site context

Figure 3. RCC zoning

Figure 4. Regulated vegetation

Figure 5. Tree retention and clearance

Figure 6. Koala records within 2 km of the Site

Figure 7. Grey-headed flying fox records and camps within 10 km of the Site

Attachments

Attachment 1. Development plan

Attachment 2. Regulated vegetation management mapping

Attachment 3. Protected Matters Search Tool Report

Attachment 4. WildNet Database Report

Attachment 5. BAAM Ecological Assessment Report (2018)

1. Introduction

1.1. Purpose of this Report

28 South Environmental (**28 South**) has been engaged by Sutgold Pty. Ltd. (the **Proponent**) to advise on ecological and environmental planning matters in regard to the proposed development of a reconfiguration plan on Double Jump Road, Victoria Point, South-East Queensland (the **Proposed Action**). The development plan for the Double Jump Road Development is provided in **Attachment 1**.

The purpose of this report is to support a Controlled Action Referral (**CAR**) to be submitted to the Department of Climate Change, Energy, the Environment and Water (**DCCEEW**) to assist in determining if the Proposed Action should be deemed a Controlled Action under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**).

1.2. The Site

1.2.1. Locality

The Proposed Action is located in the Redlands City local government area, with Redlands City Council (**RCC**) being the local authority. The Proposed Action's local context, boundaries and constituent properties are shown in **Attachment 1** and **Figure 2**. The project area (referred to herein as the **Site**) extends over 37.9 hectares (ha), across five land parcels (as currently recognised), being:

- Lot 1 on RP86773
- Lot 2 on RP86773
- Lot 5 on SP293881
- Lot 23 on SP325035
- Lot 2 on RP165178.

1.2.2. Setting

The Proposed Action is bound by Double Jump Road to the south, situated within a pocket of larger rural and rural residential allotments. There are low density residential areas that occur to the north of the Site, which continue further northeast towards the centre of Victoria Point. Similar sized rural and rural residential properties exist to the east, south and west of the Site. The Site's more immediate setting, and its boundaries and features are shown by **Figure 1** and **Figure 2**.

Topographically, the Site slopes downwards in a west (40 m AHD) to east (10 m AHD) direction, at an average gradient of 4% (**Figure 2**).

The eastern boundary of Lot 23 coincides with an unnamed tributary of Moogurrapum Creek which flows into Moreton Bay approximately 2.2 kilometres (km) (straight line distance) north-east of the Site (**Figure 6**).

1.2.3. Land Use Planning Context

City Plan

The Site's land use planning intent is governed by RCC's *Redland City Plan 2018* ('the **City Plan**').

Following the commencement of the City Plan, Council commenced the preparation of a local plan for a future urban community in southwest Victoria Point. The local plan area is approximately 175 hectares and is situated between Bunker Road and Brendan Way in the north, Clay Gully Road and Cleveland-Redland Bay Road in the east, Double Jump Road in the south and Little Eprapah Creek in the west.

The southwest Victoria Point local plan area was included in the Emerging Community zone of the City Plan and the Urban Footprint of the South East Queensland Regional Plan (ShapingSEQ 2023), recognising its suitability for development as a new community following detailed local planning. The purpose of this designation is to ensure the development of the new community delivers a well-planned, attractive and walkable urban community with a range of infrastructure networks to service the new and wider community into the future.

The Site is situated in the southwest Victoria Point local plan area and is consequently zoned as Emerging Community.

South East Queensland Regional Plan context

The Site is located in the Regional Plan's *Urban Footprint*. This designation identifies land that can meet the region's urban development needs to 2031 and 2046. As stated by the Regional Plan, approximately 19,800 additional dwellings will be required to meet RCC's expected population growth and demographic change to 2031. The population projection by ShapingSEQ for 2046 is an increase of 49,800. This is mainly achieved through infill and redevelopment in existing urban areas, the development of broad hectare land such as the VPLDA is essential for delivery of RCC's dwelling targets. The Proposed Action accords with the Regional Plan's vision for the Site (as expressed through VPLDA). The Proposed Action is also consistent with the Site's land use planning intent.

It is noted that Victoria Point has been identified as a Local Development Area for residential growth at a regional level since 2009. The Site and surrounds were identified in the *South East Queensland Regional Plan 2009 – 2031* (repealed SEQRP).

1.3. The Proposed Action

1.3.1. Proposed Action Footprint

The Proposed Action entails the planned, logical and sequential expansion of existing urban areas into adjoining (cleared) farmland, and accords with broader planning direction established by the City Plan.

The Proposed Action seeks to establish a residential subdivision, with provision of supporting services and functions, as follows:

- 294 single dwelling residential lots (121,460 m²),
- Two medium density residential lots (27,583 m²)
- Three conservation areas (combined 102,299 m²), which will be rehabilitated, being: Conservation Area 1, Conservation Area 2 (East West Conservation Corridor) and Conservation Area 3.
- Two local parks (18,144 m²)
- A local small business and retail centre (9,188 m²)
- Multi-function spine (9,262 m²) – pedestrian, cycle way and stormwater infrastructure
- Connecting roads throughout development (81,763 m²).

The layout of the Proposed Action is shown in **Attachment 1**.

The Conservation Areas 1-3 will be rehabilitated to achieve High Value Bushland Habitat status. This rehabilitation will create an east-west corridor across the north of the development, providing connection for fauna movement, and will contain an ephemeral overland flow path to Little Erapah Creek (**Attachment 1**).

The two proposed local parks adjoin Conservation Areas and complement the primary habitat function of these areas (**Attachment 1**).

In addition to the designated Conservation Areas, individual trees will be retained within the development footprint, except where their removal is required to achieve the development intent and to deliver a safe space to live, work and play.

1.3.2. Construction Approach

The construction phase of the Proposed Action will entail the following steps:

- Clear and grub of vegetated components of the development footprint
- Civil groundworks to establish final land form
- Installation of erosion and sediment controls

- Installation of essential services and utilities, such as sewerage, stormwater, electricity, gas and communications
- Construction of roads and pavements, including installation of longitudinal and cross-drainage structures
- Subdivision of land into individual lots according to the approved design plan, including boundary markers and individual lot access
- Installation of landscaping features, community amenities (such as parks and recreational areas) and signage to enhance the appeal and functionality of the subdivision
- Construction of residential properties.

1.3.3. Development Timeframe

The following timeframes are currently targeted for each corresponding milestone:

- All approvals in place: mid 2025
- Commencement of civil works: beginning of 2026
- Plan sealing: mid 2027
- First residential occupancy: end of 2027
- Full occupancy of development: 2031.

2. Methods Used to Assess the Site's Ecological Values

2.1. Historic Disturbance

Historical aerial imagery of the Site is provided in **Table 1** showing the sequence of clearing and development of the Site over time.

Table 1. Historic Aerials

Date (Year)	Historic Aerial	Observation
1955		The Site is largely vegetated, except for approximately 2.7 ha of clearing that has occurred for small-scale agricultural use in the south of Lot 23 on SP325035.
1970		Almost the full balance of Lot 23 has been subject to clearing, with the retention of vegetated contour banks. The western two thirds of Lot 5 on SP293881 and the southern half of Lot 2 on RP86773 have also been cleared. Thinning of vegetation appears to have occurred throughout Lot 1 on RP86773. This image shows the first evidence of on-site dams having been established on Lot 5.

Date (Year)	Historic Aerial	Observation
1987		All lots that comprise the Site have been subject disturbance. Lot 23 retains the remnant vegetation in the north-west corner, as well as along the eastern lot boundary – the riparian corridor associated with the tributary of Moogurrapum Creek. Approximately 0.3 ha of remnant vegetation remains in the south-east corner of Lot 2. Land to the north and east of the Site has been largely cleared.
1997		Since 1987, the northern-western and north-eastern corners of Lot 23 have been cleared.

Date (Year)	Historic Aerial	Observation
2023		Regrowth vegetation is apparent across the eastern portion of Lot 23. Residential subdivision and construction has commenced to the immediate north of the Site. Development has also commenced on land to the east of Lot 23, on the other side of the creek.

2.2. Assessment of Flora and Vegetation Values

2.2.1. Database Searches and Shortlisting for Targeted Assessment

2.2.1.1. Vegetation

Pre-clear Vegetation Communities

Queensland Herbarium pre-clear regional ecosystem (RE) mapping shows that the Site historically would have accommodated three vegetation communities, across three different land zones. The three pre-clear REs are introduced and described in **Table 2**.

Table 2. Pre-clear regional ecosystems

Regional Ecosystem	Description
RE 12.9-10.4	<i>Eucalyptus racemosa</i> subsp. <i>racemosa</i> woodland to open forest. Other species can include <i>Angophora leiocarpa</i> , <i>Eucalyptus seeana</i> , <i>E. siderophloia</i> , <i>Corymbia intermedia</i> , <i>E. tindaliae</i> , with <i>Lophostemon suaveolens</i> , <i>Melaleuca quinquenervia</i> , <i>E. tereticornis</i> common on lower slopes. Occurs on Cainozoic and Mesozoic sediments +/- remnant Tertiary surfaces. Not a Wetland.
RE 12.3.6	<i>Melaleuca quinquenervia</i> +/- <i>Eucalyptus tereticornis</i> , <i>Lophostemon suaveolens</i> , <i>Corymbia intermedia</i> open forest to woodland with a grassy ground layer dominated by species such as <i>Imperata cylindrica</i> . <i>Eucalyptus tereticornis</i> may be present as an emergent layer. <i>Eucalyptus</i>

Regional Ecosystem	Description
	<i>seeana</i> may also occur in this ecosystem to the south and east of Brisbane. Occurs on Quaternary floodplains and fringing drainage lines in coastal areas. Palustrine.
RE 12.12.14	Woodland to open forest characterised by <i>Eucalyptus racemosa</i> subsp. <i>racemosa</i> , <i>Angophora woodsiana</i> , <i>Corymbia gummifera</i> , <i>Syncarpia</i> spp., <i>Eucalyptus helidonica</i> or <i>E. acmenoides</i> and <i>Lophostemon confertus</i> . Other canopy species include <i>Corymbia trachyphloia</i> subsp. <i>trachyphloia</i> , <i>E. carnea</i> , <i>E. tindaliae</i> , <i>E. exserta</i> , <i>E. resinifera</i> and <i>E. microcorys</i> . Usually occurs on rocky near coastal areas on Mesozoic to Proterozoic igneous rocks. Not a Wetland.

Current Vegetation Communities

The Queensland Government's Vegetation Management Regional Ecosystem Map shows the riparian corridor associated with the unnamed tributary of Moogurrapum Creek on Lot 23 as being Category B (remnant vegetation) that is least concern under the *Vegetation Management Act 1999* (Qld) (**Attachment 2**). This vegetation community is mapped as being RE 12.3.6 (**Table 2**).

The remainder of the Site is mapped as Category X vegetation, being areas that are not generally regulated by Queensland's vegetation management laws.

Threatened Ecological Communities

The Protected Matters Search Tool (**PMST**) identified five MNES Threatened Ecological Communities (**TECs**) as potentially occurring within 2 km of the Site (**Attachment 3**). The five TECs that were listed in the PMST report are summarised in **Table 3**.

Table 3. TECs potentially within 2 km of the Site

TEC	Threatened Status	Likelihood of Occurrence
Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest of New South Wales and Southeast Queensland ecological community	Endangered	Likely to occur
Coastal Swamp Sclerophyll Forest of New South Wales and Southeast Queensland	Endangered	Likely to occur
Lowland Rainforest of Subtropical Australia	Critically Endangered	May occur
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Likely to occur
Subtropical eucalypt flood plain forest and woodland of New South Wales North Coast and Southeast Queensland Bioregions	Endangered	Likely to occur

2.2.1.2. Threatened flora

A search of the PMST illustrates the potential or likely occurrence of flora MNES within a 2 km search radius of the Site (**Attachment 3**). This desktop assessment is assisted through reference to the Queensland Department of Environment and Science (**DES**) Wildlife Online database, which provides verified records for some of the identified MNES (**Attachment 4**).

The PMST identified 18 threatened flora species as potentially occurring within 2 km of the Site. The 18 species that were listed in the PMST report are summarised in **Table 4**.

Table 4. Threatened flora potentially within 2 km of the Site

Flora Species		Threatened Status	Likelihood of Occurrence
<i>Acronychia littoralis</i>	Scented Acronychia	Endangered	May occur
<i>Arthraxon hispidus</i>	Hairy-joint Grass	Vulnerable	Likely to occur
<i>Baloghia marmorata</i>	Marbled Balogia	Vulnerable	May occur
<i>Bosistoa transversa</i>	Three-leaved Bosistoa	Vulnerable	Likely to occur
<i>Corchorus cunninghamii</i>	Native Jute	Endangered	Likely to occur
<i>Cryptocarya foetida</i>	Stinking Laurel	Vulnerable	May occur
<i>Cryptostylis hunteriana</i>	Leafless Tongue-orchid	Vulnerable	May occur
<i>Cupaniopsis shirleyana</i>	Wedge-leaf Tuckeroo	Vulnerable	May occur
<i>Endiandra floydii</i>	Floyd's Walnut	Endangered	Likely to occur
<i>Macadamia integrifolia</i>	Queensland Nut Tree	Vulnerable	Likely to occur
<i>Macadamia tetraphylla</i>	Macadamia Nut	Vulnerable	May occur
<i>Notelaea lloydii</i>	Lloyd's Olive	Vulnerable	May occur
<i>Phaius australis</i>	Lesser Swamp-orchid	Endangered	Likely to occur
<i>Planchonella eerwah</i>	Shiny-leaved Condoo	Endangered	Likely to occur

Flora Species		Threatened Status	Likelihood of Occurrence
<i>Rhodamnia rubescens</i>	Scrub Turpentine	Critically Endangered	Likely to occur
<i>Rhodomyrtus psidioides</i>	Native Guava	Critically Endangered	Likely to occur
<i>Samadera bidwillii</i>	Quassia	Vulnerable	Likely to occur
<i>Thesium australe</i>	Austral Toadflax	Vulnerable	May occur

The Queensland Government maintains Protected Plants Trigger Mapping as an indication of where threatened flora, protected under the *Nature Conservation Act 1992* (Qld), may occur. There is no Protected Plants Trigger Mapping within the Site.

2.2.2. Flora and Vegetation Surveys

Various vegetation and flora surveys have been conducted across the Site since September 2015, conducted by BAAM Ecological Consultants (**Attachment 5**) and 28 South Environmental (including affiliates). Surveys have been conducted for a variety of purposes across this period and, in some instances, included land beyond the bounds of the Site as it is currently nominated. Such surveys have included:

- Designation of plant communities (generally based on Queensland herbarium requirements)
- Identification of flora species
- General “ground truthing” of vegetation communities
- Full tree survey, using differential GPS to <1 m accuracy (2020-2021).

2.3. Assessment of Fauna Values

2.3.1. Database Searches and Shortlisting for Targeted Assessment

A search of the PMST reveals the potential or likely occurrence of fauna MNES within a 2 km search radius of the Site (**Attachment 3**).

The PMST identified 73 fauna threatened species and 64 migratory species as potentially occurring within 2 km of the Site. Subsequent review of the DES Wildlife Online database confirmed records of two MNES threatened fauna within 2 km of the Site, being:

- Koala (*Phascolarctos cinereus*) - Endangered
- White-throated needletail (*Hirundapus caudacutus*) – Vulnerable, Marine, Migratory

The DES Wildlife Online database report provides no record of grey-headed flying fox (*Pteropus poliocephalus*) within 2 km of the Site. However, RE 12.3.6 is known to include *Eucalyptus* and related genera which are considered a food source for grey-headed flying fox when in blossom.

2.3.2. Fauna Survey

Various vegetation and flora surveys have been conducted across the Site at regular intervals since September 2015, conducted by BAAM Ecological Consultants (**Attachment 5**) and 28 South Environmental (including affiliates). Surveys have been conducted for a variety of purposes across this period and, in some instances, included land beyond the bounds of the Site as it is currently nominated.

- 2015-2018:
 - Diurnal searches (general)
 - General and targeted spotlighting (two nights)
 - Bird survey (four mornings, 1.5 hours per day)
 - Elliot traps (four nights)
 - Targeted feed tree search
 - Targeted ground search
 - Electronic bait detectors
 - Opportunistic records.
- 2020-2021:
 - Diurnal searches (general)
 - GPS location of non-juvenile koala habitat trees (**NJKHT**)
 - Opportunistic records
- 2023:
 - Diurnal searches (general)
 - General and targeted spotlighting
 - Camera trapping
 - Opportunistic records.

The purpose and description of each survey technique is provided in **Table 5**.

Table 5. Field Survey Techniques

Technique	Purpose	Description
Diurnal Searches	To determine the relative value of habitats for native fauna and compile a comprehensive fauna list.	This involves intensive investigation of ground layer (under logs, rocks and leaf litter), low vegetation (under bark and in tree stumps) for amphibians, reptiles, bats and animal signs, e.g. scats, owl pellets, remains and tracks.
Spotlighting	To determine the relative value of habitats for native fauna and compile a comprehensive fauna list.	Undertaken on foot through representative habitats, at a leisurely pace using hand-held spotlights and/or head torches. This method samples nocturnal mammals (flying, arboreal and terrestrial), birds (owls and nightjars), reptiles (geckos) and frogs.
Bird Surveys	To determine the relative value of habitats for native fauna and compile a comprehensive fauna list.	Bird species are recorded via their call, or visual observation. Surveys were conducted from dawn to early morning, dusk to early evening and during the night for nocturnal species.
Elliot Traps	To determine the relative value of habitats for native fauna and compile a comprehensive fauna list.	25 baited Elliot 'A' and 2 baited Elliot 'B' traps were laid on ground transects 10 or more meters apart. Trap placement is influenced by vegetation diversity, the size and shape of habitat patches and by naturally occurring features such as logs, rock outcrops, tree bases and clumping vegetation.
Targeted Feed Tree Search	To determine the extent and distribution of utilisation of an area by glossy black-cockatoos and koala.	This involves intensive investigation of the site for isolated specimens and groves of feed trees for glossy black cockatoo and/or koala.
Targeted Ground Search	To determine the presence of significant species, including cryptic or rare species.	This involves intensive investigation of ground layer (under logs, rocks and leaf litter), low vegetation (under bark and in tree stumps), and other habitat features.
Targeted Spotlighting	To determine the presence of significant species, including cryptic or rare species such as greater glider.	Undertaken on foot through representative habitats, at a leisurely pace using hand-held spotlights and/or head torches to search for target fauna. May include intermittent nocturnal voice playback to elicit a response from target species.

Technique	Purpose	Description
Electronic Bat Detection	To determine the relative value of habitats for native fauna and compile a comprehensive fauna list, as well as the presence of significant microbat species.	Survey involves walking a predetermined transect, stopping to record calls detected, and remote/stationary detection at specific locations such as stag trees.
Opportunistic records	To supplement the systematic survey results and provide a more comprehensive listing of fauna present	Covers all other fauna observations outside of systematic and targeted survey methodologies.

2.4. Other MNES

The Moreton Bay Ramsar wetland extends inland from the coastline, up Moogurrapum Creek. The Site is located approximately 850 m, direct line distance, from the most inland point of the Moreton Bay Ramsar wetland.

The Proposed Action is not expected to result in:

- Destruction or substantial modification of the wetland;
- Substantial or measurable change in the hydrological regime of the wetland;
- Impact to the habitat or lifecycle of native species that occupy the wetland;
- Substantial and measurable change in the water quality of the wetland
- Invasive species that is harmful to the ecological character of the wetland.

Consequently, the Proposed Action is not expected to result in a significant impact to the Moreton Bay Ramsar wetland, per the Significant impact guidelines 1.1 (DoE, 2013). Therefore, the potential impacts of the Proposed Action on the Ramsar wetland are not considered any further in this Report.

There are no other MNES places, properties or areas within proximity to the Site.

3. Findings of the Site Assessment

3.1. Flora Values

3.1.1. Vegetation Communities

Vegetation surveys of the Site determined that the remnant vegetation associated with the tributary of Moogurrapum Creek, mapped under the State's RE mapping as 12.3.6 (**Attachment 2**), is better described as RE 12.3.11, being *Eucalyptus tereticornis* +/- *Eucalyptus siderophloia*, *Corymbia intermedia* open forest on alluvial plains usually near coast.

The balance of the Site was confirmed to be consistent with the Category X mapping, comprising mown pastures of grass and weeds and occasional regrowth vegetation. Trees located within the Category X area are shown on **Figure 5**.

3.1.2. Threatened Ecological Communities

The PMST search report listed that there are five TECs with potential to occur onsite. No vegetation communities with species indicative of these TECs were identified under the State vegetation mapping (refer to **Section 2.2.1.1**) and these TECs do not occur within, or in close proximity to, the Site.

3.1.3. Threatened Species

No EPBC Act listed flora species were recorded during the surveys and, based on the habitat present, none are considered likely to occur.

3.1.4. Weeds

Weeds of national significance (**WONS**) were recorded within or immediately adjoining the Site, but mainly within vegetation associated with the tributary of Moogurrapum Creek. WONS recorded include:

- Asparagus fern (*Asparagus aethiopicus*);
- Cats Claw Creeper (*Dolichandra unguis-cati*);
- Fire Weed (*Senecio madagascariensis*);
- Madeira Vine (*Anredera cordifolia*); and
- Lantana (*Lantana camara*).

3.2. Fauna Values

3.2.1. Habitats

Remnant, riparian vegetation along the eastern boundary of the Site has been ground-truthed as RE 12.3.11, which is known to provide suitable habitat for koalas and contains feed trees for grey-headed flying fox.

The vegetated portions of the Site are providing suitable foraging, roosting and breeding resources for avian species. Within the development footprint patches of regrowth vegetation are mostly devoid of native mid and ground storey species and support few values for native fauna.

The mown grasses provide food resources for wallabies that would utilise adjacent densely vegetated areas for daytime shelter.

There are patches of native vegetation in association with existing dams that are intermittent along the drainage line across Lot 5 on SP293881 and Lot 2 on RP86773. These areas contain occasional large trees and regrowth dominated by Broad-leaved and Black wattle (*Acacia leiocalyx*). These dams provide aquatic habitats of varying degrees, from large permanent deep impoundage areas through to relatively small shallow water storages that provide permanent water sources for native species. introduced Mosquito fish (*Gambusia holbrooki*). Eastern Water dragon (*Intellagama lesueurii*) was also recorded in association with the dams, and there is high potential for native turtles and native eels to be present within the larger dams (**Attachment 5**).

3.2.2. Connectivity

The habitats associated with Moogurrupum Creek, and its tributaries, provide important ecological linkages within the local landscape. This riparian area holds the greatest value as fauna habitat and supports several species associated with the more complex habitat structure that were not recorded within the more open, rural lands.

Opportunities for fauna movement within the remainder of the Site are limited due to existing rural uses and prior vegetation clearing. Scattered trees and pastures are being utilised by birds, though the species present are comprised mostly of larger, gregarious species that thrive in disturbed bushland, parks gardens and are known to move through urbanised landscapes.

Native ground-mammal species are few, with the more common occurring species being red necked wallaby and northern brown bandicoot which are well-suited to the current conditions. No koala evidence was recorded onsite although this species has been recorded immediately north and west of the site and is known to move relatively freely between isolated trees and woodland fragments, provided heavy weed infestations are not present and obstructing movement opportunities.

3.2.3. Threatened Species

Fauna surveys conducted by 28 South Environmental and BAAM (2018-2023) have established that two threatened species are known to utilise the Site, being koala and grey-headed flying fox (**Attachment 5**).

Evidence (scats and scratches) was recorded during surveys of koala utilisation of trees on the Site. Additionally, a koala was sighted during surveys on Lot 22 RP86773, which immediately adjoins the Site to the east, along the Moogurrupum Creek tributary (**Figure 6**).

Tree survey across the Site has determined there to be 1,054 NJKHTs within the development footprint for the Proposed Action (**Figure 5**).

No flying-fox camps are located on or peripheral to the Site. The closest recognised flying-fox camp (unspecified species) is 1.1 km north-east from the Site, located in Peppercorn Crescent, Victoria Park (**Figure 7**). However, trees located on Site include flowering Eucalypts and Melaleuca sp. that are recognised as being food sources for grey-headed flying fox.

One other MNES threatened species, the white-throated needletail, is likely to occur in proximity to the Site. This species is likely to utilise the air space above the Site, primarily in summer preceding rainfall and storm events, but is not expected to be reliant on on-ground habitat values. Consequently, it is not expected to be impacted by the Proposed Action.

Significant impact assessments have been conducted, in reference to the Matters of National Environmental Significance: Significant impact guidelines 1.1, for the MNES species that have potential to occur on Site, being the koala and grey-headed flying fox (**Section 6**).

4. Impacts of the Proposed Action

Direct impacts to MNES as a consequence of the Proposed Action are expected to arise from vegetation clearing and civil earthworks. This development is expected to result in the clearing of 1,316 native trees, 1,054 of which are NJKHTs (**Figure 5**).

In addition, the Proposed Action may result in indirect impacts to MNES, as follows:

- Disturbance to fauna during construction due to noise and vibration from construction vehicles, plant and machinery.
- Increased potential for road strike once internal roads are operational.
- Increased potential for interaction between native fauna and domestic animals, e.g. cats and dogs, due to residential occupancy of the Site.

5. Avoidance, Mitigation and Management Measures

The mitigation hierarchy is a tool that is used to limit the amount of damage an action, such as a development, will have on the environment. There are three steps, being 'Avoid', 'Mitigate' and 'Offset'. Each step must be followed in order and to the greatest extent possible before moving on to the next. This section provides discussion on the measures that have been adopted to avoid, in the first instance, then minimise potential impacts to MNES and their habitat.

5.1. Ecologically Sustainable Development

5.1.1. The Principles of ESD

The principles of Ecologically Sustainable Development (**ESD**), as defined by section 3A of the EPBC Act, are:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- (c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making; and
- (e) improved valuation, pricing and incentive mechanisms should be promoted.

5.1.2. How the Proposed Action achieves the Principles of ESD

5.1.2.1. Principle (a)

This Report provides detail on the short and longer term ecological effects of the Proposed Action. However, it is well documented that much of Queensland is currently experiencing a housing crisis, driven by a number of factors, including an imbalance between supply and demand; affordability issues; rental market pressures; social and demographic change; and, post-COVID supply chain disruption.

ShapingSEQ 2023 is the Queensland Government's long-term vision for added growth in the South East Queensland region. It forecasts that an additional 2.2 million people will require 900,000 new homes by 2046.

The Proposed Action includes provision of 294 single dwelling residential lots and two medium density residential lots, and will play a part in the State's attempt to overcome the growing housing crisis.

5.1.2.2. Principle (b)

This Report outlines investigations undertaken to determine the inherent environmental values of the Site and its role in the broader landscape. The investigations are comprehensive and scientifically robust, and where minor uncertainty exists the precautionary principle has been adopted.

5.1.2.3. Principle (c)

By way of intentional design, the Proposed Action has been sited on land which has, for the most part, been previously subject to significant historical disturbance in the form of clearing, occupation and use for rural residential purposes.

In conjunction with strategic orientation of the development plan, the Proposed Action relies heavily on the 'Avoid' principle of the mitigation hierarchy and represents a development outcome that, once full rehabilitation of conservation areas is achieved, will provide a better ecological outcome for the Site.

5.1.2.4. Principle (d)

The conservation of biological diversity and ecological integrity is a primary focus of the design of the Proposed Action and the assessment thereof. Ecologically conscious infrastructure design contributes to the avoidance of those identified features. Making a well-informed referral application ensures DCCEEW as a decision-maker can ensure an appropriate balance of biodiversity and ecological conservation is upheld.

5.1.2.5. Principle (e)

The costs for addressing biodiversity impacts arising from the Proposed Action are imposed solely on the Proponent.

The housing products made available through delivery of the Proposed Action will be priced according to market rates at the time of stock availability.

5.2. Impact Avoidance

5.2.1. Site Location

The Proposed Action has been sited on land which has, for the most part, been previously subject to significant historical disturbance in the form of clearing, occupation and use for rural residential purposes.

The Site is within the Urban Footprint area, as identified by ShapingSEQ 2023. The plan specifies that *'The priority for developing land in the Urban Footprint is to accommodate urban growth.'*; however, it also states that *'remnant vegetation will continue to be protected and managed under relevant state legislation, including the Vegetation Management Act 1999'*. This intent is achieved by the Proposed Action, which has been configured to retain and enhance the remnant vegetation (ground-truthed as RE 12.3.11) that is associated with the riparian corridor of the Moogurrapum Creek tributary.

The intended use of the Site for residential purposes is consistent with the nature of surrounding development, such as that which has occurred immediately to the north (Brendan Way and Clay Gully Road), to the east (corner of Double Jump Road and Cleveland-Redland Bay Rd) and the west (Wollemi Avenue, off Bunker Road) of the Site.

There have been various residential developments in vicinity of the Proposed Action that have been previously referred to the Department for assessment under the EPBC Act, each of which have been determined Not a Controlled Action:

- Clay Gully Road residential development (EPBC Referral 2017/7984); Not a Controlled Action
- Residential Estate, Bunker Road (EPBC Referral 2005/2130); Not a Controlled Action
- Residential subdivision, Redland Bay Road (EPBC Referral 2002/739); Not a Controlled Action
- Eprapah Heights Bushland Residential Development (EPBC Referral 2001/286); Not a Controlled Action.

5.2.2. Alternative Sites

The Site is situated within one of only two Emerging Community areas within the Redlands LGA that have been identified, through the City Plan, to support future residential development (**Figure 3**). Consequently, the Proposed Action is compatible with the identified development intent for this area and no alternative sites have been considered for this development.

5.2.3. Avoiding Impacts Through Design

The proposed development plan has been designed and orientated to avoid disturbance to the only remnant vegetation mapped within the bounds of the Site, that which is associated with the Moogurrapum Creek tributary

riparian area. This remnant vegetation will not only be avoided, but will be designated as one of the three Conservation Areas as part of the development and will be subject to further improvement, through rehabilitation, as a component of this conservation.

Avoidance of this vegetation in the east of the Site also ensures retention of continued connectivity opportunity for fauna movement through the broader landscape.

5.3. Impact Minimisation Through Mitigation

The Proposed Action has taken into consideration the Site's ecological, environmental and landscape character when considering impact avoidance and mitigation. While largely reliant on avoidance, impacts from the Proposed Action can be further mitigated and minimised.

The following mitigation measures will be implemented to ensure that impacts to MNES and their habitat that cannot be avoided are minimised to the greatest extent possible:

- Development and implementation of a Construction Environmental Management Plan (**CEMP**) to outline relevant environmental requirements for undertaking the works;
- Hours of work will be limited to Monday to Saturday between 6:30 am to 6:30 pm, excluding public holidays, thereby avoiding potential nighttime disturbance from noise, vibration and lighting.
- An Erosion and Sediment Control Plan will be developed, certified by a Registered professional Engineer Queensland (**RPEQ**) or an accredited professional in erosion and sediment control, and implemented.
- Implementation of weed management and controls across the Site and reestablishment of native grasses;
- The extent of permissible clearing will be clearly demarcated by an ecologist prior to the commencement of construction works to prevent clearing in excess of the approved footprint of works.
- Felled trees will be mulched on-site for use in rehabilitation works. Other habitat features (e.g. boulders, logs etc.) will be retained and reinstated across the disturbed footprint as part of Site rehabilitation works.
- A licensed Wildlife Spotter/Catcher under the *Nature Conservation Act 1992* is to undertake a survey of the site to identify any fauna or habitat features (e.g. nests, tree hollows) and certify that any necessary fauna protection measures or relocation procedures have been implemented.

5.4. On-site Compensation

The three Conservation Areas, totalling 102,299 m² (10.2 ha), have been designated in the proposed development plan (**Attachment 1**). The intended purpose of these Conservation Areas is to provide a long-term ecological benefit to the Site, relative to present day condition. Once rehabilitated, these areas will provide for continued fauna movement connectivity 1) along the Moogurrapum Creek tributary riparian corridor; and 2) in a north-west direction and east-west direction, connecting bushland south of Bunker Road to the Moogurrapum Creek tributary riparian corridor.

Minor earthworks will occur in the northern and eastern Conservation Areas during Site establishment, for the purpose of installing utilities and stormwater infrastructure. However, this earthworks will be orientated to avoid the need for tree clearance.

More extensive earthworks will be required within the western Conservation Area to achieve the necessary development land-form.

Regardless, all three Conservation Areas will be subject to rehabilitation through weed control and a combination of broad re-planting (in largely cleared areas) or selective in-fill planting (where remnant vegetation is retained). In cleared and heavily disturbed areas, supplementary planting will be conducted to establish an overall plant density (canopy, mid-storey and groundcover) of 1 plant/m², with a species palette consistent with the corresponding pre-clear RE.

Furth on-site compensation for habitat loss will be provided through the two local parks. These parks will be required to maintain a core recreational function, so will not be rehabilitated and preserved to the same extent as the Conservation Areas; however, native trees will be incorporated into the landscape design to provide an aesthetic connection to the natural environment, as well as provide shading opportunities for park users.

6. Assessment against Significant Impact Guideline 1.1

The following sections provide significant impact assessments under the MNES Significant Impact Guidelines 1.1 (DoE, 2013) for the koala and grey-headed flying fox.

6.1. Koala

Koala is an Endangered species under the EPBC Act and therefore the significance of impact on this community has been assessed against the significant impact criteria for '*Critically endangered and endangered species*' in the MNES Significant impact guidelines 1.1 (DoE, 2013). This assessment is presented in Table 6.

Table 6. Significant impact assessment for koala

Criteria	Proposed Action Response
An action is likely to have a significant impact on a critically endangered or endangered species if there is a real chance or possibility that it will:	
Lead to a long-term decrease in the size of a population	The Proposed Action will result in the clearing of approximately 1,054 NJKHTs (Figure 5), which equates to approximately 4.2 ha of koala habitat when applying the Queensland Government's rule of 40 m ² per tree (DES, 2023). Whilst the clearing of these trees will not result in a direct impact to the size of the regional koala population, it will cause a short to medium term reduction in the occupancy area for this species (see below).
Reduce the area of occupancy of the species	The Proposed Action will result in the clearing of the equivalent of approximately 4.2 ha of koala habitat trees. This clearing will result in a reduction in the occupancy area for the regional koala population. However, this reduction in area of occupancy is expected to be overcome in the longer term with the establishment and rehabilitation of the three Conservation Areas (10.2 ha). These Conservation Areas will improve upon current-day fauna connectivity, which in turn may serve to open up accessibility for koala into other vegetated areas that would otherwise remain fully or partially isolated.
Fragment an existing population into two or more populations	No koalas have been observed on Site; however, surveys did identify evidence (scats and scratches) of koala having utilised trees on Site. A koala has previously been sighted on land adjoining the Site to the east, within the Moogurrapum Creek tributary riparian corridor (Figure 6). Based on this evidence, there is likely to be occasional visitation of the Site by koala, but there is no known resident population. On this basis, the Proposed Action is not expected to result in fragmentation of an existing koala population.

Criteria	Proposed Action Response
Adversely affect habitat critical to the survival of a species	Being an endangered species, the Department specifies that all habitat is habitat critical to the survival of koala and that even small areas of habitat loss (as little as 1 ha) can have a significant impact. The Proposed Action is expected to result in the clearance of approximately 1,054 NJKHTs, equating to 4.2 ha of habitat loss (DES, 2023). On this basis, the Proposed Action will adversely affect habitat critical to the survival of the species. However, this impact is expected to be overcome in the longer term with the establishment and rehabilitation of the three Conservation Areas (10.2 ha).
Disrupt the breeding cycle of a population	Current literature does not provide distinction between breeding and non-breeding habitat for koala (Youngentob, 2021). Therefore, loss of any habitat for this species is to be regarded as habitat in which breeding could occur. However, the behavioural ecology of koala is such that this species would not seek to breed exclusively in habitat within the Site. Therefore, the Proposed Action is unlikely to disrupt the breeding cycle of a koala population.
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The Proposed Action is expected to result in the clearance of approximately 1,054 NJKHTs, equating to 4.2 ha of habitat loss (DES, 2023). On this basis, the Proposed Action will, at the time of development, result in a decrease in the availability of habitat for the species. However, given the highly fragmented and disturbed landscape in which the removal of habitat will occur, it is considered unlikely that the Proposed Action would result in a decline in the species in its own right. The removal of habitat through Site development is expected to be overcome in the longer term with the establishment and rehabilitation of the three Conservation Areas (10.2 ha).
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	The Proposed Action will ultimately result in an increased density of residential occupation within the bounds of the Site. Increased residential occupancy is likely to be coupled with a greater number of domestic animals. Dogs, in particular, are recognised as being a key threat to koala. Whilst the Proposed Action will see an increased number of domestic dogs in the area, the potential threat to koala is expected to be managed through a combination of engineered (fencing) and administrative (signage) controls.
Introduce disease that may cause the species to decline, or	The proposal is unlikely to introduce or increase the prevalence of a disease that is harmful to koala, e.g. Chlamydia.

Criteria	Proposed Action Response
Interfere with the recovery of the species.	The Proposed Action is not expected to interfere with, nor assist in the recovery of the species.
Conclusion:	
The Proposed Action is expected to result in a significant impact to koala on the basis that it will result in the clearing of the equivalent of 4.2 ha of habitat for the species. In doing so, the Proposed Action will: ▪ Adversely affect habitat critical to the survival of a species ▪ Reduce the area of occupancy of the species, at least until full rehabilitation of the Conservation Areas is achieved.	

6.2. Grey-headed flying fox

Grey-headed flying fox is a Vulnerable species under the EPBC Act and therefore the significance of impact on this community has been assessed against the significant impact criteria for 'Vulnerable species' in the MNES Significant impact guidelines 1.1 (DoE, 2013). This assessment is presented in Table 6.

Table 7. Significant impact assessment for grey-headed flying fox

Criteria	Proposed Action Response
An action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:	
Lead to a long-term decrease in the size of an important population	The Proposed Action will result in the clearing of approximately 1,054 NJKHTs, which are tree species that would also be regarded as feed trees for grey-headed flying fox and equates to approximately 4.2 ha of habitat. Whilst the clearing of these trees will not result in a direct impact to the size of the regional grey-headed flying fox population, it will cause a short to medium term reduction in the occupancy area for this species (see below).
Reduce the area of occupancy of an important population	There are no separate or distinct grey-headed flying fox populations due to the constant genetic exchange and movement between camps throughout the species' entire geographic range. This indicates that there is one single interbreeding population (Webb, 1995; DSE, 2005). Consequently, the concept of an 'important population' does not apply to this species.

Criteria	Proposed Action Response
	Roost sites are the closest surrogate to an important population for this species. There is no roost site for this species within the bounds of the Site. The Proposed Action, and resultant clearing of 4.2 ha of habitat, will result in short to medium term reduction in the occupancy area for this species. However, this impact is expected to be overcome in the longer term with the establishment and rehabilitation of the three Conservation Areas (10.2 ha).
Fragment an existing important population into two or more populations	As above, the concept of an 'important population' does not apply to this species. Regardless, the Proposed Action is not expected to result in the fragmentation of this species given that a) there is no roost site for this species within the bounds of the Site; b) the species is avian and highly mobile, meaning that removal of approximately 4.2 ha of potential feed trees is unlikely to affect the species in the context of the broader landscape.
Adversely affect habitat critical to the survival of a species	Spring foraging resources are considered to be critical to the survival of the species (DoE, 2024). Trees that will be cleared for the Proposed Action include Spring flowering species (e.g. <i>E. tereticornis</i>, <i>C. intermedia</i>). Therefore, the 4.2 ha (equivalent area) that will be cleared for the Proposed Action aligns with the definition of 'habitat critical to the survival of the species'. However, this impact is expected to be overcome in the longer term with the establishment and rehabilitation of the three Conservation Areas (10.2 ha).
Disrupt the breeding cycle of an important population	There is no roost site for this species within the bounds of the Site. The closest roost site for flying fox (unspecified species) is located 1.1 km north-east of the Site, at Peppercorn Crescent, Victoria Point (Figure 7).
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The Proposed Action is expected to result in the clearance of approximately 4.2 ha of foraging habitat for this species. On this basis, the Proposed Action will, at the time of development, result in a decrease in the availability of habitat for the species. However, given the highly fragmented and disturbed landscape in which the removal of habitat will occur, it is considered unlikely that the Proposed Action would result in a decline in the species in its own right. The removal of habitat through Site development is expected to be overcome in the longer term with the establishment and rehabilitation of the three Conservation Areas (10.2 ha).
Result in invasive species that are harmful to a vulnerable species	Invasive species are not recognised as being a key threat to this species (DoE, 2024).

Criteria	Proposed Action Response
becoming established in the vulnerable species' habitat	
Introduce disease that may cause the species to decline	The listing advice for the species Australian Bat Lyssavirus (ABL), Bat Paramyxovirus and Menangle Pig virus as being potential threats to the grey-headed flying fox, but of unknown magnitude or severity. Though it is noted that the incidence of ABL in the species is very low whilst approximately 25% of wild flying-foxes carry antibodies to Menangle Pig virus. The Proposed Action is not expected to result in the introduction or exacerbation in occurrence of any of these pathogens.
Interfere with the recovery of the species.	The Proposed Action is not expected to interfere with, nor assist in the recovery of the species.
Conclusion:	
The Proposed Action is expected to result in a significant impact to grey-headed flying fox on the basis that it will result in the clearing of the equivalent of 4.2 ha of foraging habitat for the species. In doing so, the Proposed Action will: ▪ Adversely affect habitat critical to the survival of a species.	

7. Summary and Conclusion

The purpose of this report is to support a CAR to be submitted to the DCCEEW to assist in determining if the Proposed Action should be deemed a Controlled Action under the EPBC Act.

The Proposed Action, the Double Jump Road Residential Development, is a proposed a residential subdivision, with provision of supporting services and function. The Proposed Action entails the planned, logical and sequential expansion of existing urban areas into adjoining (cleared) farmland, and accords with broader planning direction established by the City Plan.

A combination of desktop assessment and various site surveys have been conducted to determine the likelihood of MNES occurring in proximity to, and being impact by the Proposed Action. This assessment has determined that two MNES threatened species, koala (Endangered) and grey-headed flying fox (Vulnerable) are likely to utilise the Site and be impacted by its development.

Assessment of both species against the Significant impact guidelines 1.1 (DoE, 2013) are likely to be significantly impacted by the Proposed Action on the grounds that it will:

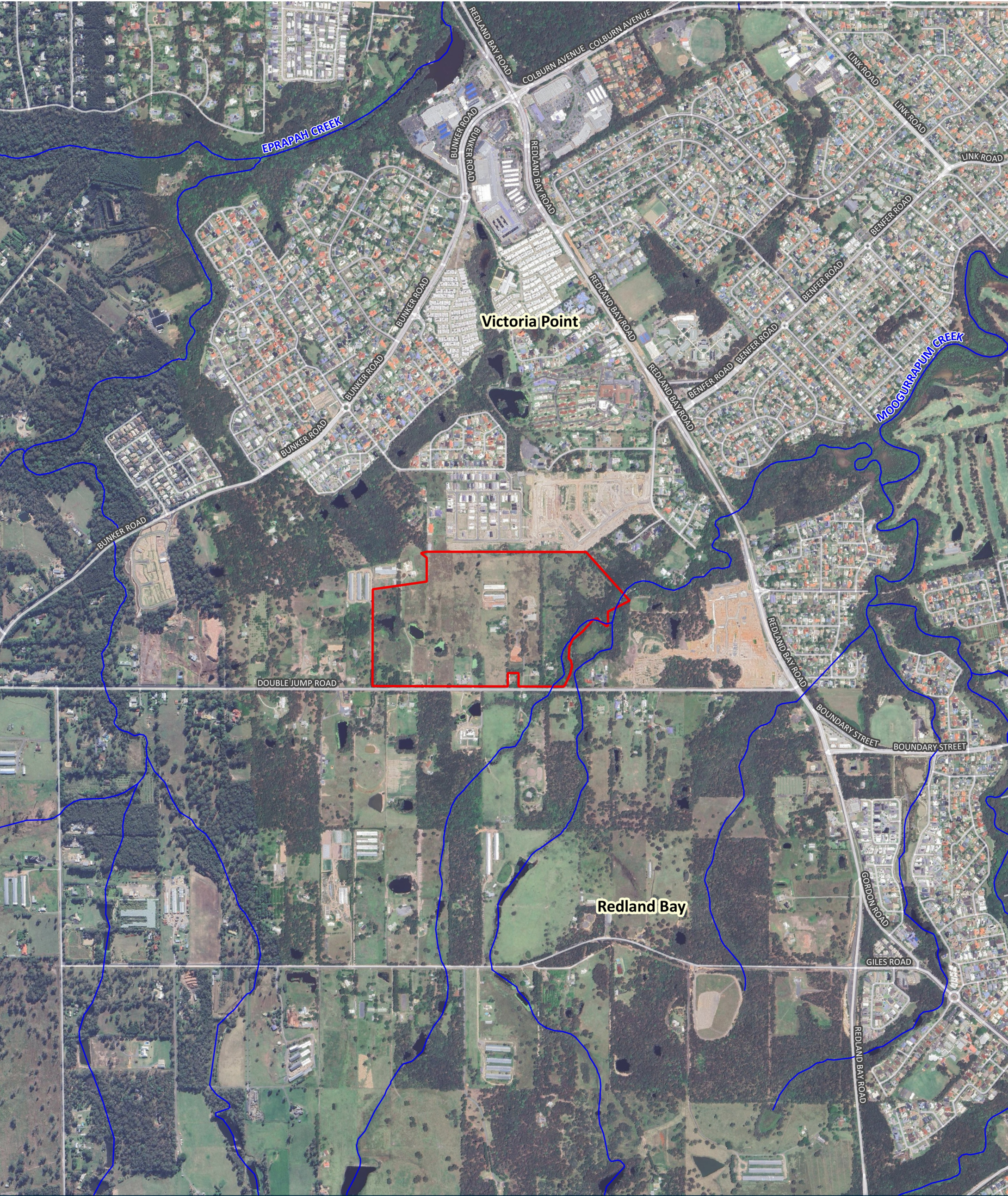
- Adversely affect habitat critical to the survival of a species (both koala and grey-headed flying fox)
- Reduce the area of occupancy of the species, at least until full rehabilitation of the Conservation Areas is achieved (koala only).

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Figures



Double Jump Road Development

Figure 1 - Locality

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\Projects\2019\2019-100e (Double Jump Road Development)

The spatial data referenced within this map has been obtained from a variety of verified and licensed sources, as follows: Relevant local government data portals, DoR's QSpatial data catalogue, 28 South Environmental, clients and associates. Aerial imagery is sourced from NearMap, Google Satellite and the DoR repositories QImagery and QGlobe.

28°S
ENVIRONMENTAL

Links to data sources can be provided upon request.

Legend

Site Boundary

Road

Waterway/overland flow path

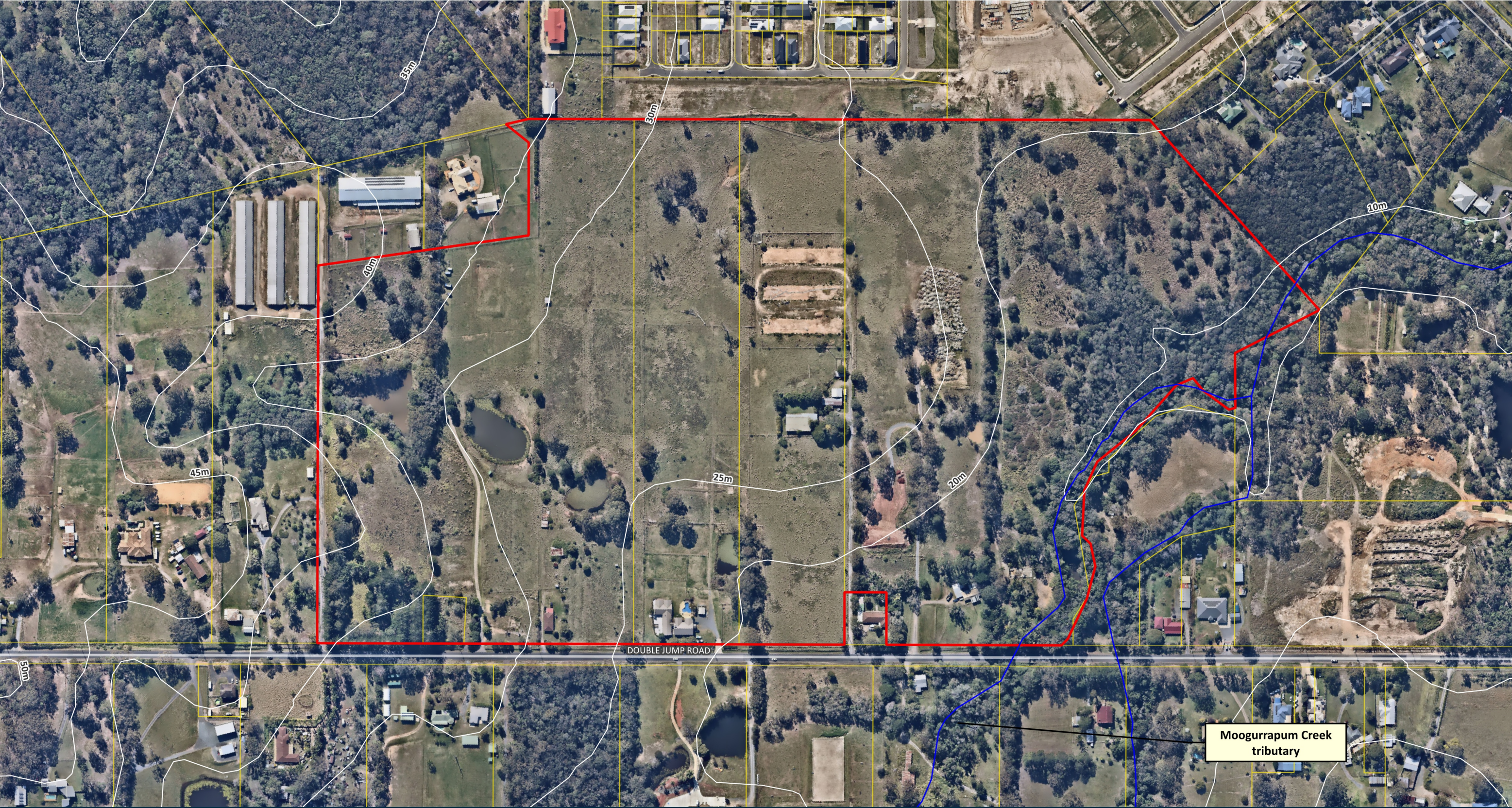
Issue Date	Dwg No.	Author
08-03-2024		MO
Approved	Revision Note	
WM		

GDA2020 MGA 56

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Double Jump Road Development

Figure 2 - Site Context

28 South Project Ref: 2019 -100e

Source: Source: C:\Users\Mitch\Dropbox\Projects\2019\2019-100e (Double Jump Road Development)

The spatial data referenced within this map has been obtained from a variety of verified and licensed sources, as follows: Relevant local government data portals, DoR's QSpatial data catalogue, 28 South Environmental, clients and associates. Aerial imagery is sourced from NearMap, Google Satellite and the DoR repositories QImagery and QGlobe.

28°S
ENVIRONMENTAL

Links to data sources can be provided upon request.

Site Boundary

Property Boundaries

Road

5m Contours

Waterway/overland flow path

Issue Date	Dwg No.	Author
08-03-2024		MO
Approved	Revision Note	
MB		

GDA2020 MGA 56

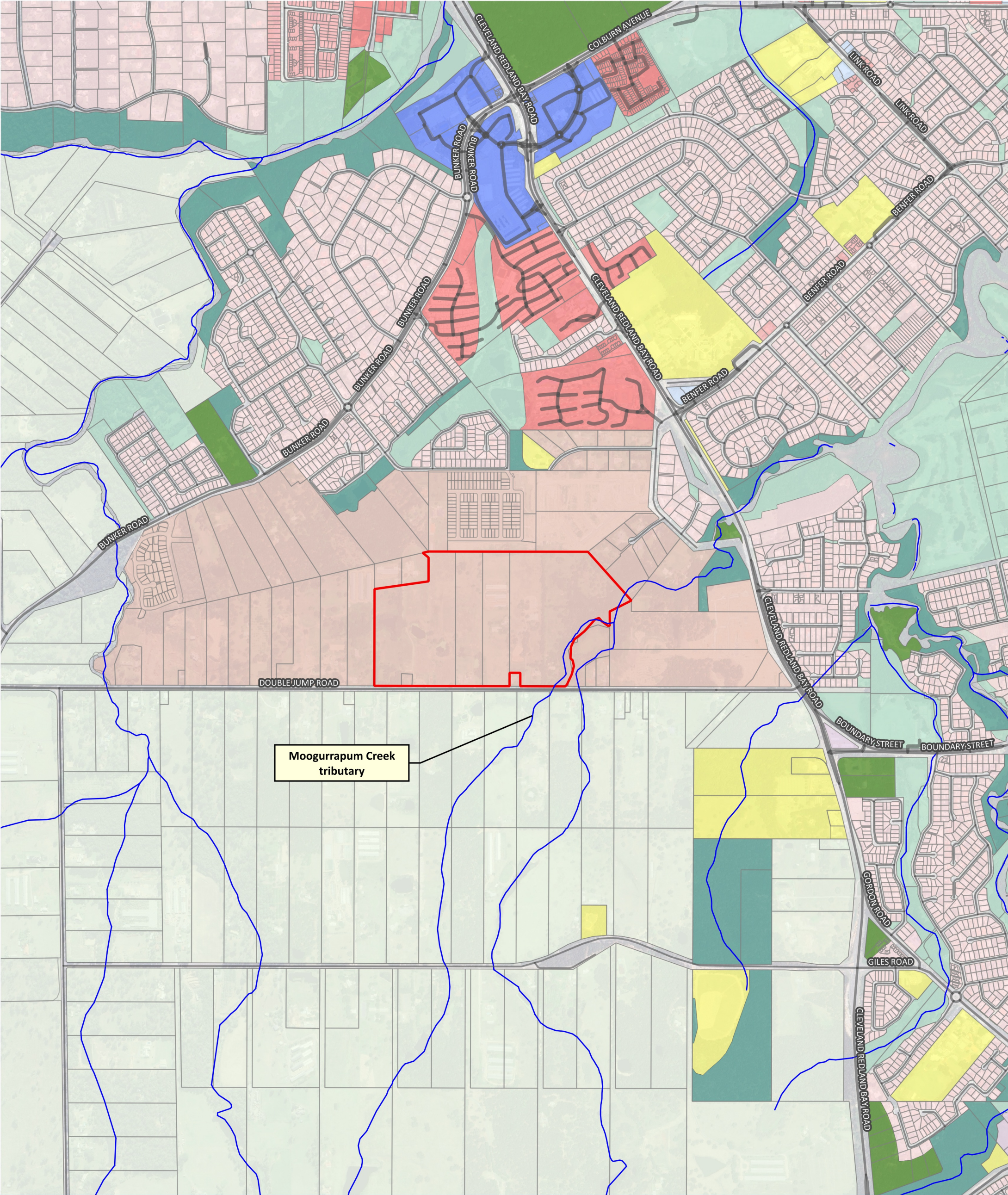
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200 m

N



Double Jump Road Development

Figure 3 - RCC Zoning

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\Projects\2019\2019-100e (Double Jump Road Development)

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28°S

ENVIRONMENTAL

Links to data sources can be provided upon request.

Site Boundary

Property Boundaries

Road

Residential Zones

Low Density Residential

Low-medium Density Residential

Medium Density Residential

Character Residential

Tourist Accommodation

Centre Zones

Principal Centre

Major Centre

District Centre

Local Centre

Neighbourhood Centre

Specialised Centre

Recreation Zones

Recreation and Open Space

Environmental Zones

Environmental Management

Conservation

Industry Zones

Low Impact Industry

Medium Impact Industry

Waterfront and Marine Industry

Other Zones

Community Facilities

Emerging Communities

Mixed Use

Rural

Precinct Boundary

Cadastral Properties

Outline of RCC

Local Authorities outside RCC

Issue Date

Dwg No.

Author

08-03-2024

MO

Approved

Revision Note

MB

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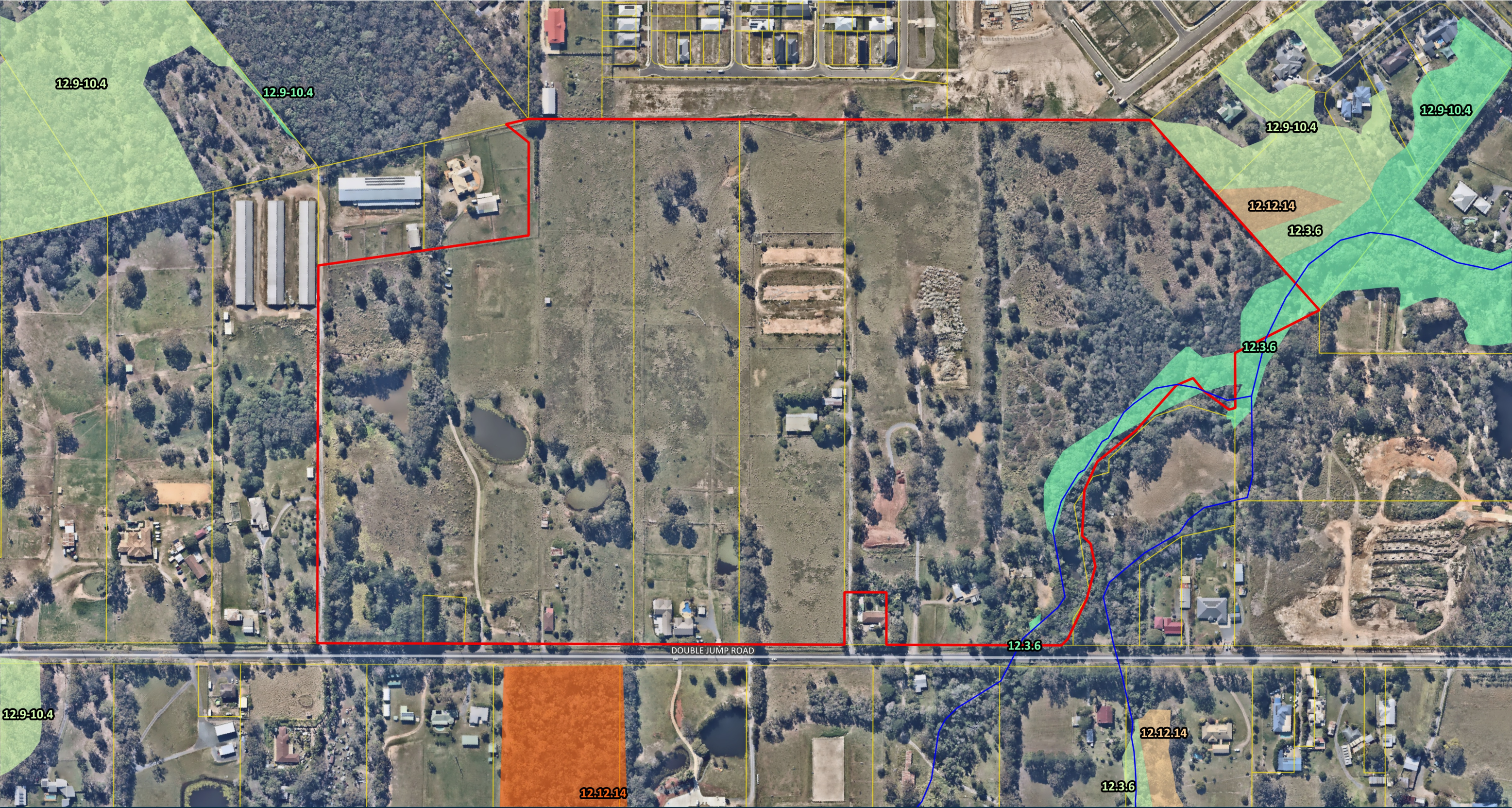
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400 m

N



Double Jump Road Development

Figure 4 - Regulated Vegetation

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\Projects\2019\2019-100e (Double Jump Road Development)

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28°S
ENVIRONMENTAL

Links to data sources can be provided upon request.

Legend

Site Boundary

Property Boundaries

Road

Waterway/overland flow path

QLD Regulated Vegetation

High Value Regrowth Least Concern

High Value Regrowth Of Concern

Remnant Least Concern

Remnant Of Concern

Issue Date

Dwg No.

Author

08-03-2024

MO

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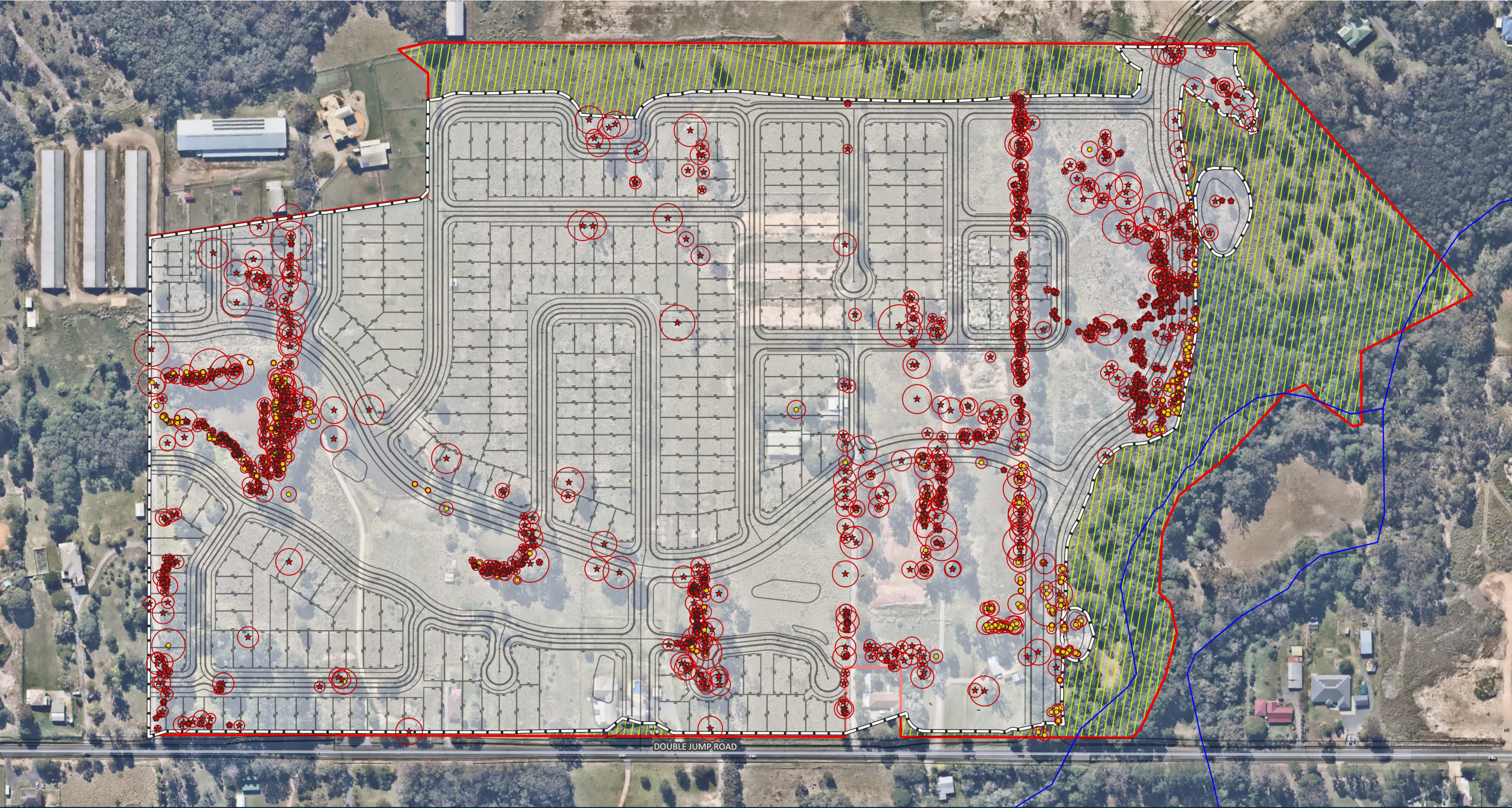
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200 m

N



Double Jump Road Development

Figure 5 - Tree Retention and Clearance

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\Projects\2019\2019-100e (Double Jump Road Development)

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28°S ENVIRONMENTAL

Links to data sources can be provided upon request.

Legend

Site Boundary

Extent of Impact

Proposed design

Road

Waterway/overland flow path

Area for conservation and rehabilitation

★

NJKHT to be removed [1054]

●

Other tree to be removed [262]

Issue Date

Dwg No.

Author

08-03-2024

MO

Approved

Revision Note

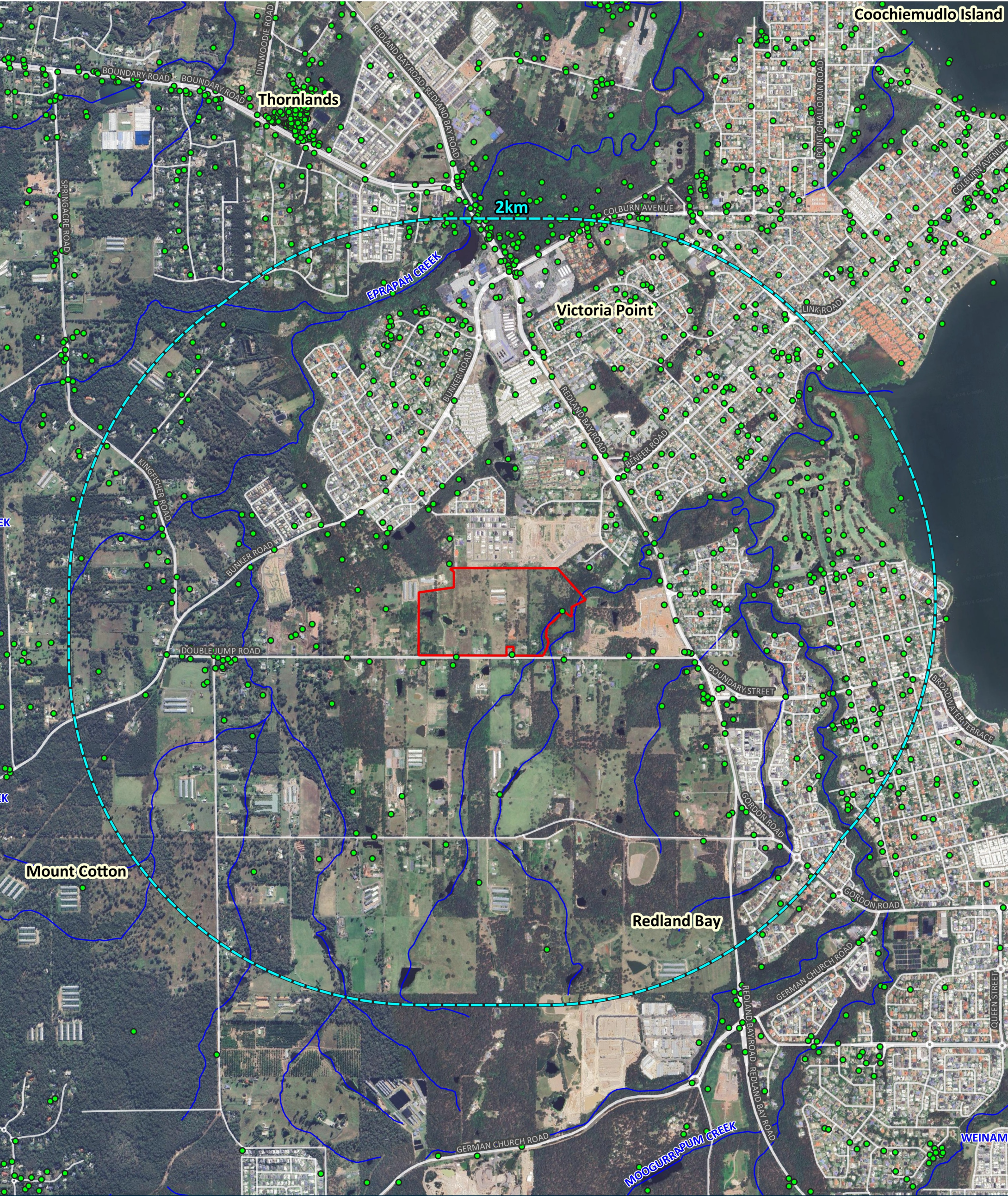
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0100200 m

N



Double Jump Road Development

Figure 6 - Koala records within 2km of Site

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\d Projects\2019\2019-100e (Double Jump Road Development)

The spatial data referenced within this map has been obtained from a variety of verified and licensed sources, as follows: Relevant local government data portals, DoR's QSpatial data catalogue, 28 South Environmental, clients and associates. Aerial imagery is sourced from NearMap, Google Satellite and the DoR repositories QImagery and QGlobe.

28°S ENVIRONMENTAL

Links to data sources can be provided upon request.

Legend

Site Boundary

Road

Waterway/overland flow path

Koala record

Issue Date

08-03-2024

Dwg No.

Author

MO

Approved

MB

Revision Note

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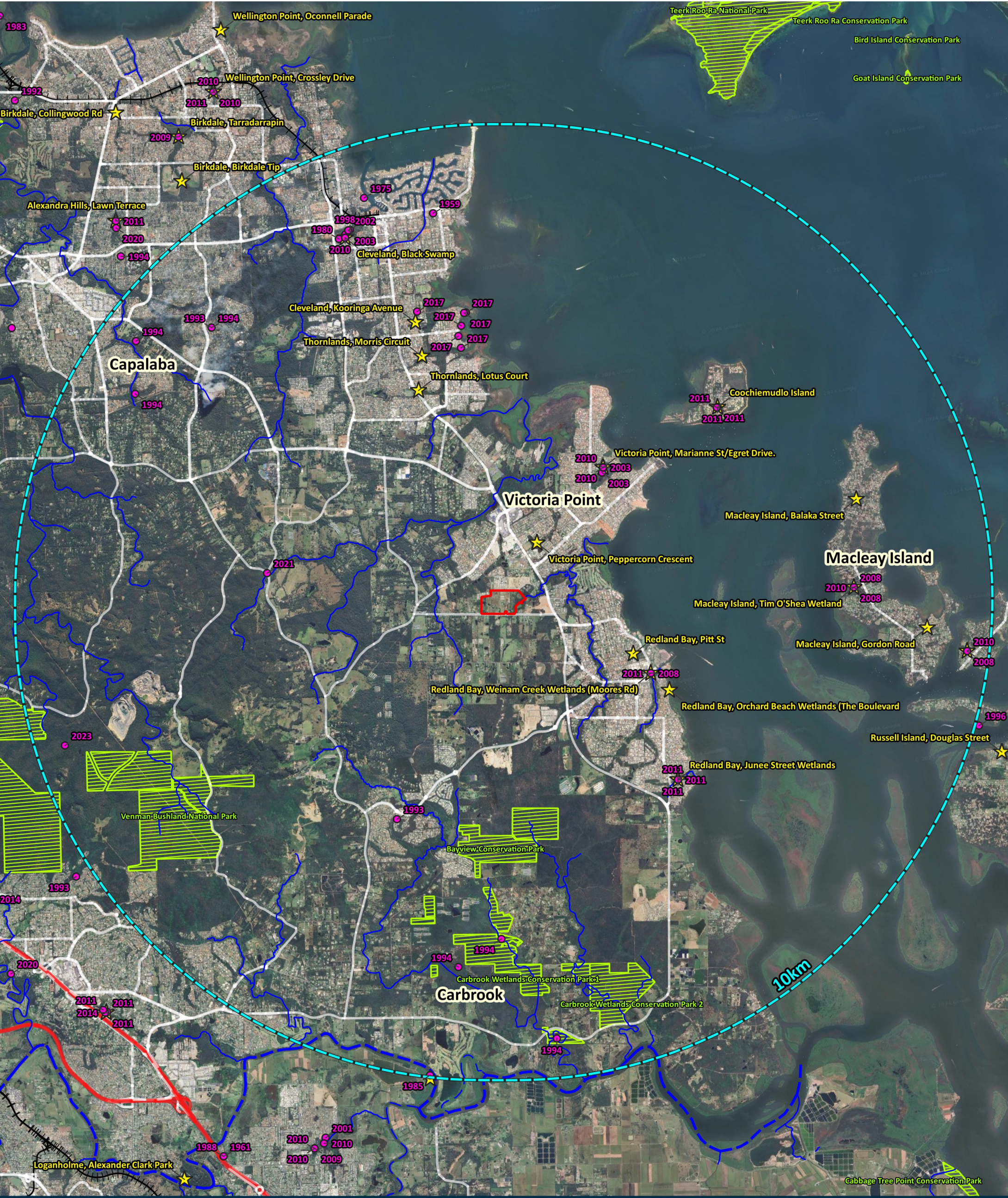
0.25

0.5

0.75

km

N



Double Jump Road Development

Figure 7 - Grey-headed flying fox records and monitoring camps within 10km of Site

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\Projects\2019\2019-100e (Double Jump Road Development)

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Links to data sources can be provided upon request.

28°S

ENVIRONMENTAL

Site Boundary

Road

Rail Network

Waterway/overland flow path

QLD Protected Areas

Grey-headed flying fox record

Flying fox monitoring camp

Issue Date

Dwg No.

Author

08-03-2024

MO

Approved

Revision Note

MB

GDA2020 MGA 56

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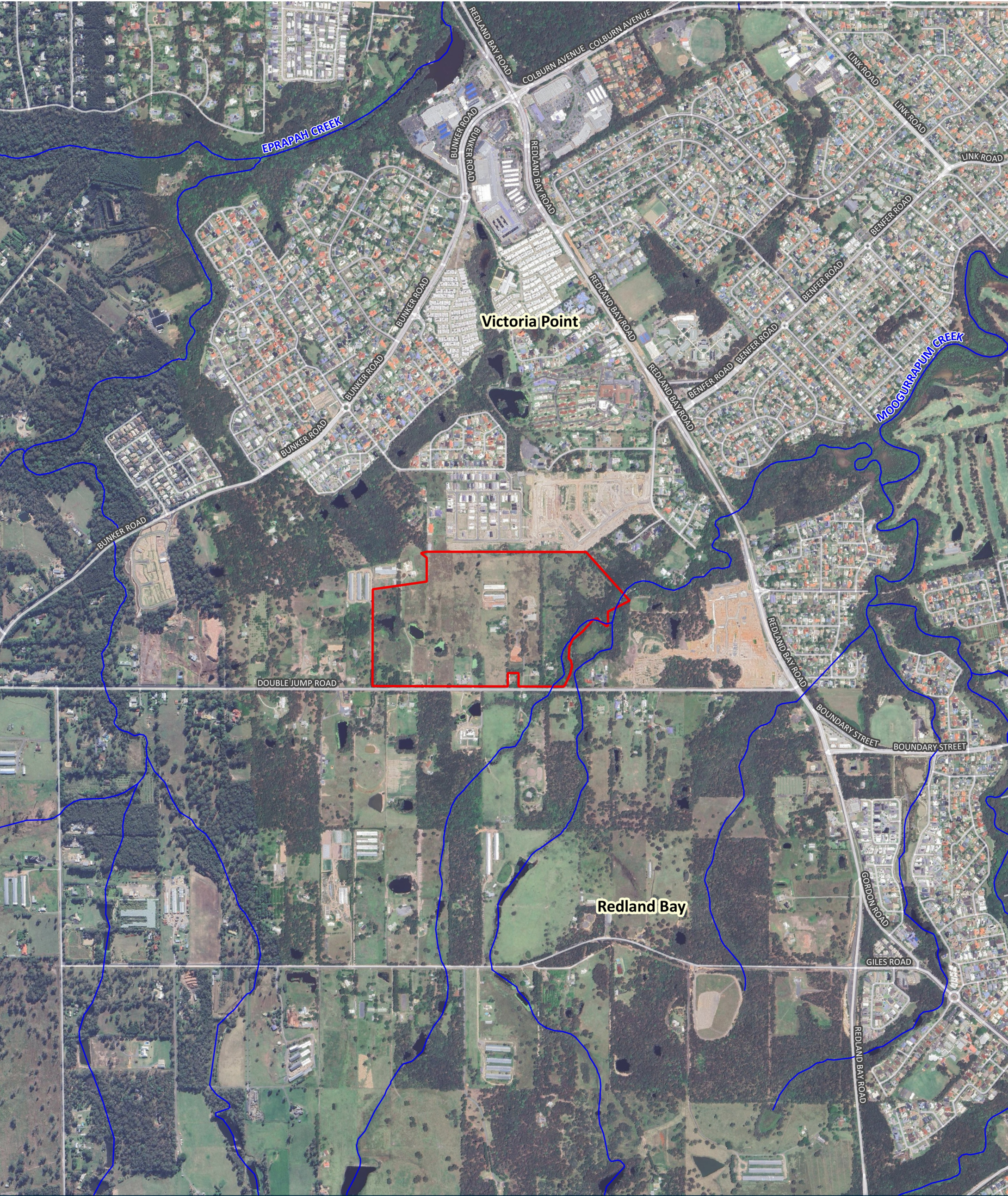
0

1

2

3 km

N



Double Jump Road Development

Figure 1 - Locality

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\Projects\2019\2019-100e (Double Jump Road Development)

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Links to data sources can be provided upon request.

Legend

Site Boundary

Road

Waterway/overland flow path

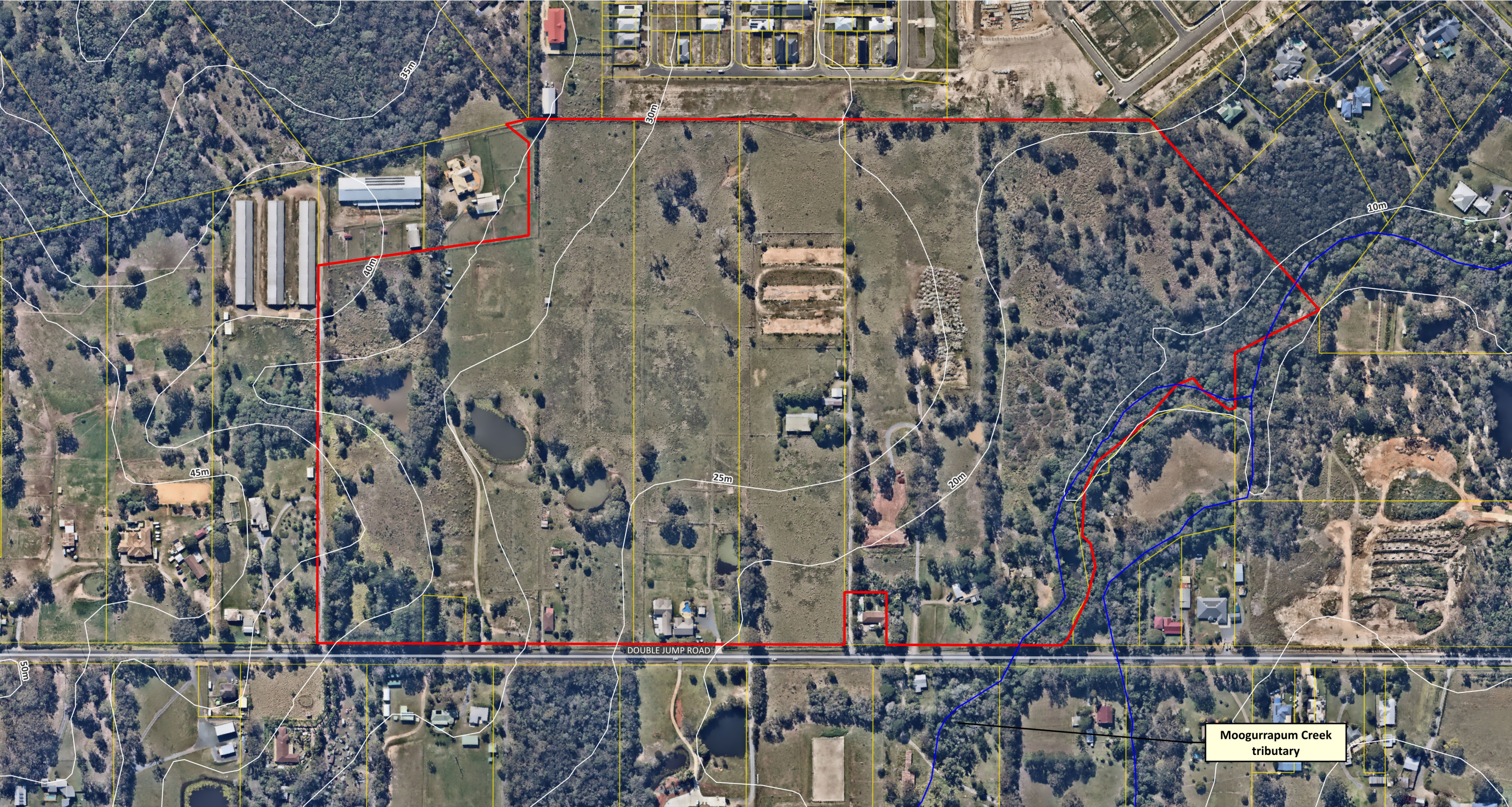
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08-03-2024		MO
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GDA2020 MGA 56

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N



Double Jump Road Development

Figure 2 - Site Context

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28°S
ENVIRONMENTAL

Legend

Site Boundary

Property Boundaries

Road

5m Contours

Waterway/overland flow path

Issue Date

08-03-2024

Dwg No.

Author

MO

Approved

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Revision Note

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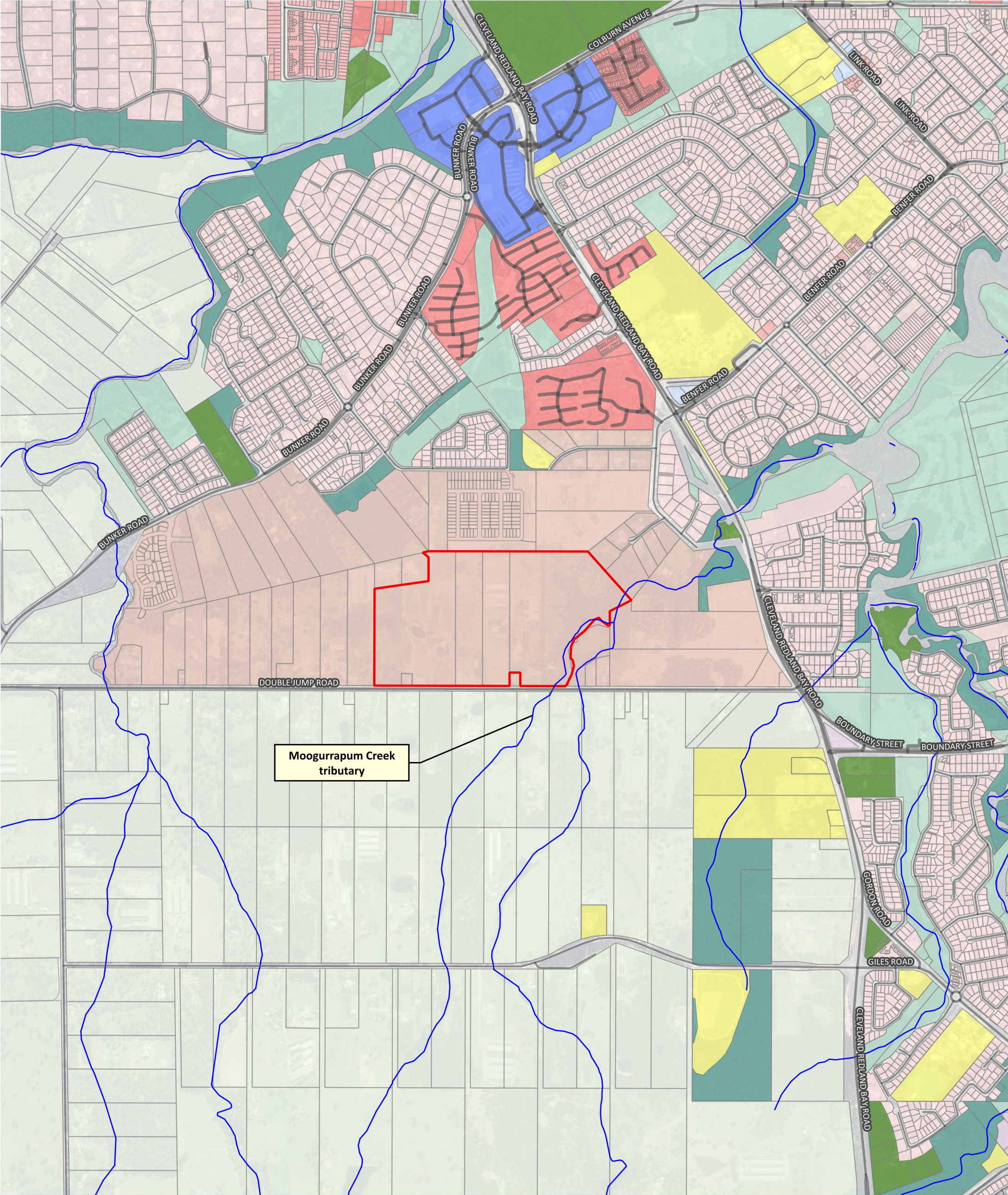
1:3,500

0

100

200 m

N



Double Jump Road Development

Figure 3 - RCC Zoning

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\Projects\2019\2019-100e (Double Jump Road Development)

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28°S

ENVIRONMENTAL

Site Boundary

Property Boundaries

Road

Residential Zones

Low Density Residential

Low-medium Density Residential

Medium Density Residential

Character Residential

Tourist Accommodation

Centre Zones

Principal Centre

Major Centre

District Centre

Local Centre

Neighbourhood Centre

Specialised Centre

Recreation Zones

Recreation and Open Space

Environmental Zones

Environmental Management

Conservation

Industry Zones

Low Impact Industry

Medium Impact Industry

Waterfront and Marine Industry

Other Zones

Community Facilities

Emerging Communities

Mixed Use

Rural

Precinct Boundary

Cadastral Properties

Outline of RCC

Local Authorities outside RCC

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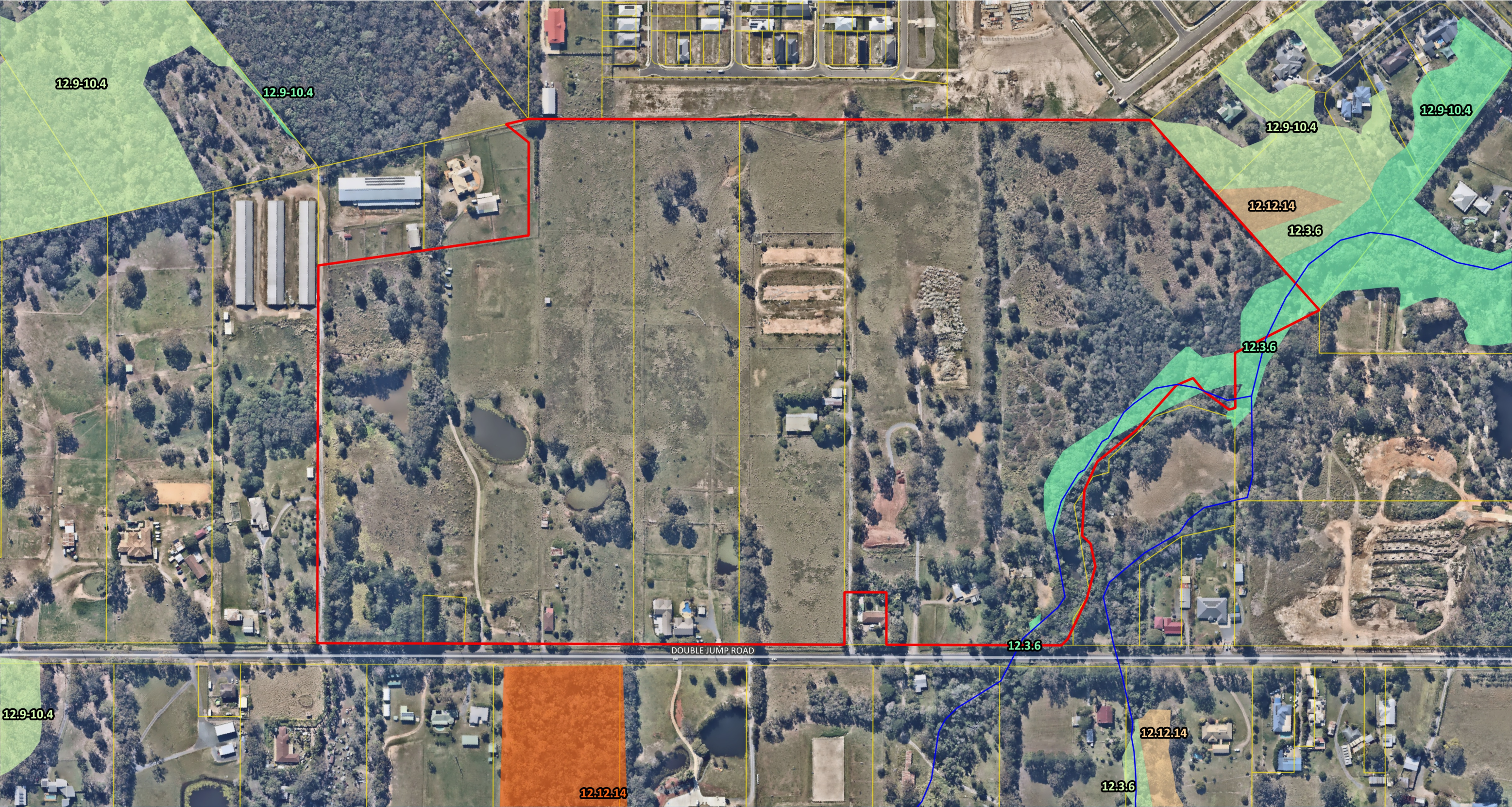
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400 m

N



Double Jump Road Development

Figure 4 - Regulated Vegetation

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\Projects\2019\2019-100e (Double Jump Road Development)

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Links to data sources can be provided upon request.

28°S

ENVIRONMENTAL

Site Boundary

Property Boundaries

Road

Waterway/overland flow path

QLD Regulated Vegetation

High Value Regrowth Least Concern

High Value Regrowth Of Concern

Remnant Least Concern

Remnant Of Concern

Issue Date

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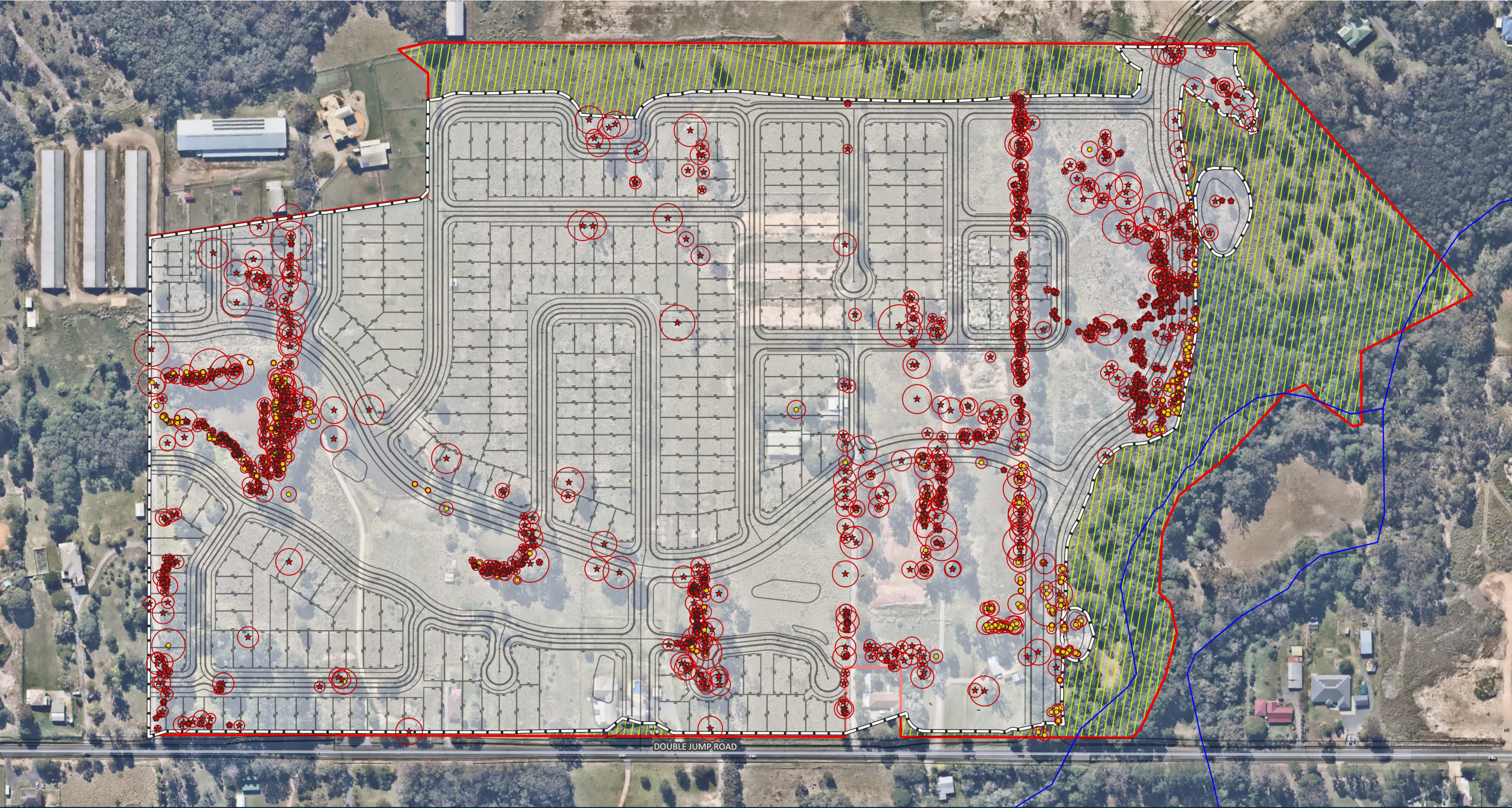
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0

100

200 m

N



Double Jump Road Development

Figure 5 - Tree Retention and Clearance

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28°S ENVIRONMENTAL

Links to data sources can be provided upon request.

Legend

Site Boundary

Extent of Impact

Proposed design

Road

Waterway/overland flow path

Area for conservation and rehabilitation

★

NJKHT to be removed [1054]

●

Other tree to be removed [262]

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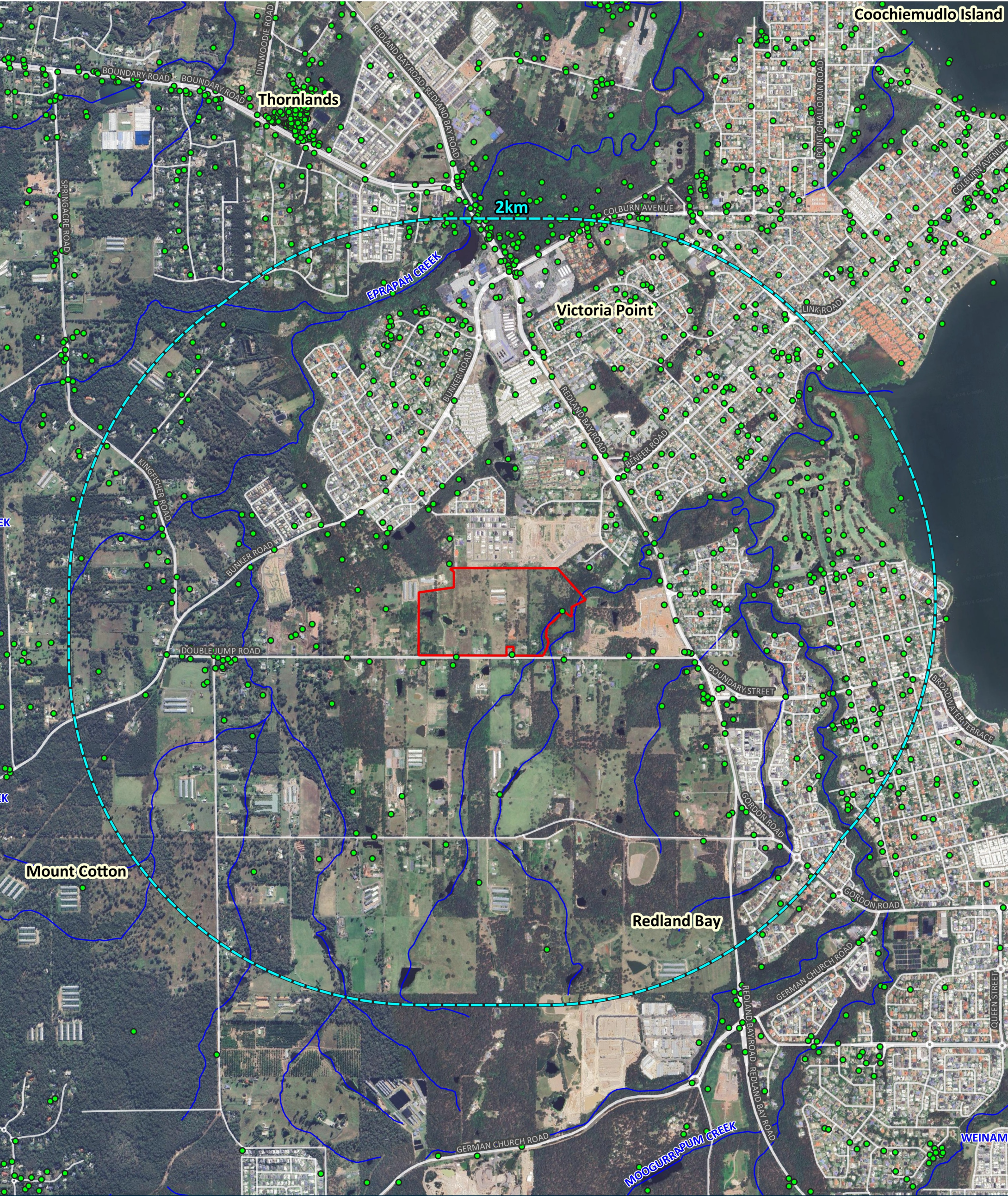
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0

100

200 m

N



Double Jump Road Development

Figure 6 - Koala records within 2km of Site

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\d Projects\2019\2019-100e (Double Jump Road Development)

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28°S ENVIRONMENTAL

Links to data sources can be provided upon request.

Legend

Site Boundary

Road

Waterway/overland flow path

Koala record

Issue Date

08-03-2024

Approved

MB

Dwg No.

Revision Note

Author

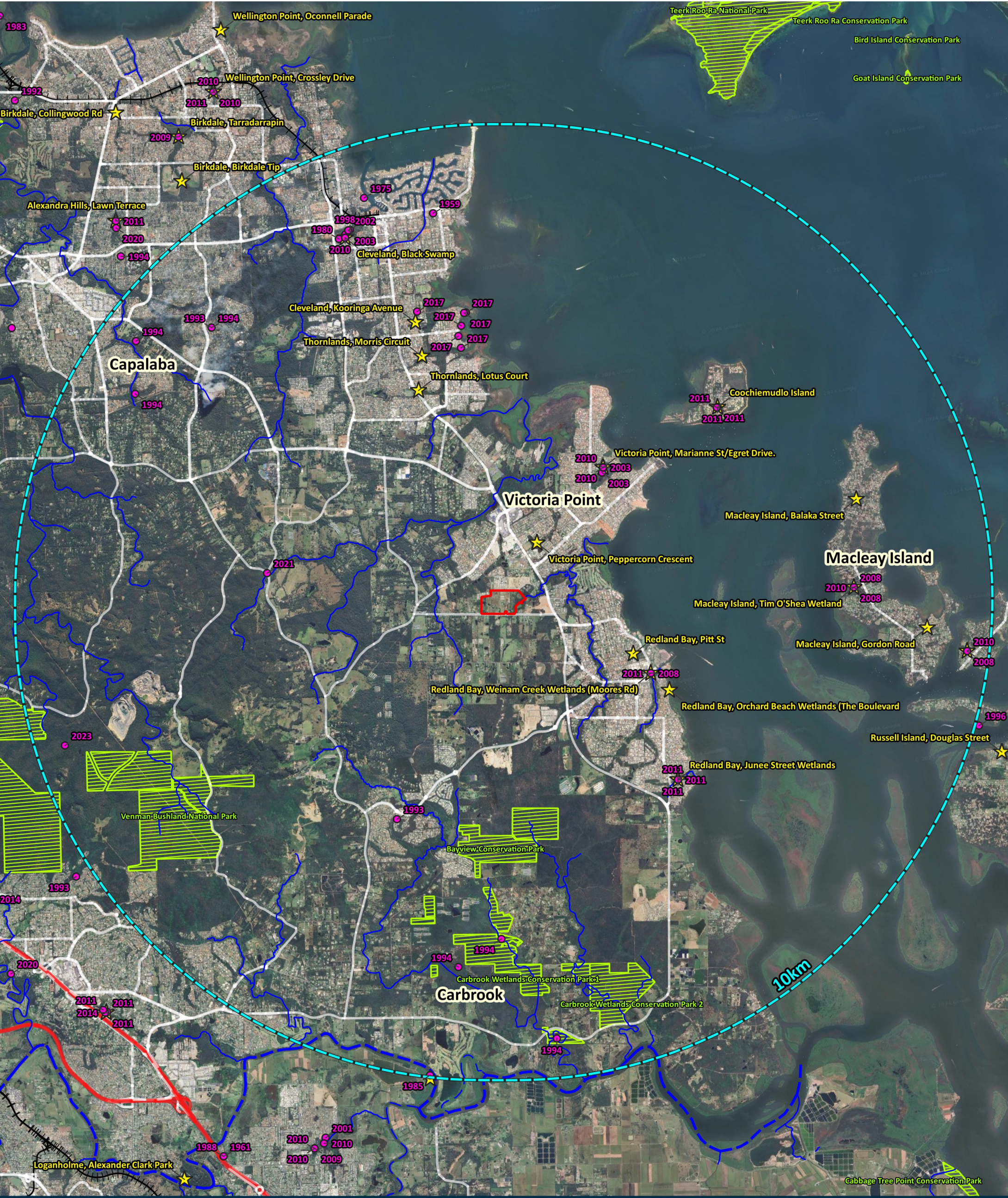
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0 0.25 0.5 0.75 km

N



Double Jump Road Development

Figure 7 - Grey-headed flying fox records and monitoring camps within 10km of Site

28 South Project Ref: 2019 -100e

Source: C:\Users\Mitch\Dropbox\Projects\2019\2019-100e (Double Jump Road Development)

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Links to data sources can be provided upon request.

28°S

ENVIRONMENTAL

Site Boundary

Road

Rail Network

Waterway/overland flow path

QLD Protected Areas

Grey-headed flying fox record

Flying fox monitoring camp

Issue Date

Dwg No.

Author

08-03-2024

MO

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Revision Note

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0

1

2

3 km

N

Attachment 9
EAR Attachment 2b
RVMR Lot 1 on
RP86773



Vegetation management report

For Lot: 1 Plan: RP86773

13/02/2024

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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 and Science 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 and Science 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 and Science 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	6
1.1 Tenure and title area	6
1.2 Property location	6
2. Vegetation management framework (administered by the Department of Resources)	7
2.1 Exempt clearing work	7
2.2 Accepted development vegetation clearing codes	7
2.3 Area management plans	8
2.4 Development approvals	8
2.5. Contact information for the Department of Resources	8
3. Vegetation management framework for Lot: 1 Plan: RP86773	9
3.1 Vegetation categories	9
3.2 Regional ecosystems	10
3.3 Watercourses	10
3.4 Wetlands	10
3.5 Essential habitat	10
3.6 Area Management Plan(s)	11
3.7 Coastal or non-coastal	11
3.8 Agricultural Land Class A or B	11
4. Vegetation management framework maps	12
4.1 Regulated vegetation management map	13
4.2 Vegetation management supporting map	14
4.3 Coastal/non-coastal map	15
4.4 Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture	16
5. Protected plants framework (administered by the Department of Environment and Science (DES))	17
5.1 Clearing in high risk areas on the flora survey trigger map	17
5.2 Clearing outside high risk areas on the flora survey trigger map	17
5.3 Exemptions	17
5.4 Contact information for DES	17
5.5 Protected plants flora survey trigger map	18
6. Koala protection framework (administered by the Department of Environment and Science (DES))	20
6.1 Koala mapping	20
6.2 Koala habitat planning controls	21
6.3 Koala Conservation Plan clearing requirements	22
6.4 Contact information for DES	22
7. Koala protection framework details for Lot: 1 Plan: RP86773	22
7.1 Koala districts	22
7.2 Koala priority area, koala habitat area and identified koala broad-hectare area map	23
7.3 Koala habitat regional ecosystems for core koala habitat areas	24
8. Other relevant legislation contacts list	25

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: RP86773, 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	RP86773	Freehold	50,300

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 this property 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: RP86773, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)
Redland City

Bioregion(s)	Subregion(s)
Southeast Queensland	Sunshine Coast - Gold Coast Lowlands
Southeast Queensland	Burringbar - Conondale Ranges

Catchment(s)
Logan-Albert

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

The *Vegetation Management Act 1999* (VMA), the Vegetation Management Regulation 2023, 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: RP86773

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. Total area: 5.03ha

Vegetation category	Area (ha)
Category X	5.0

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)

The following Property Map of Assessable Vegetation (PMAVs) may be present on this property:

Reference number

2018/001214

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
non-rem	None	X	5.03	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

There are no vegetation management wetlands present on this property.

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?

No Class A

Class B (with urban areas masked as per SPP): 2.77ha

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: RP86773.

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.

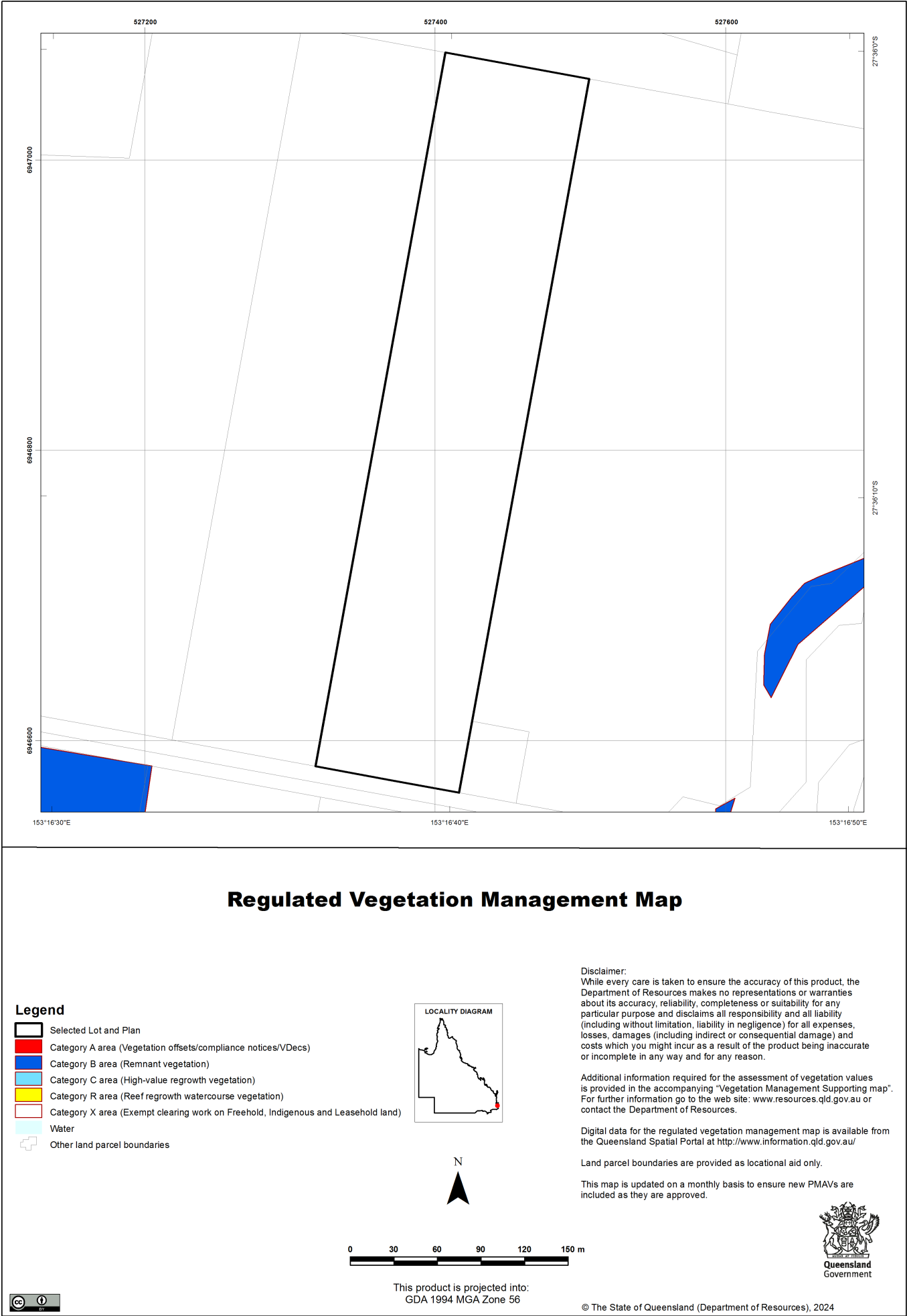
Coastal/non-coastal map

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).

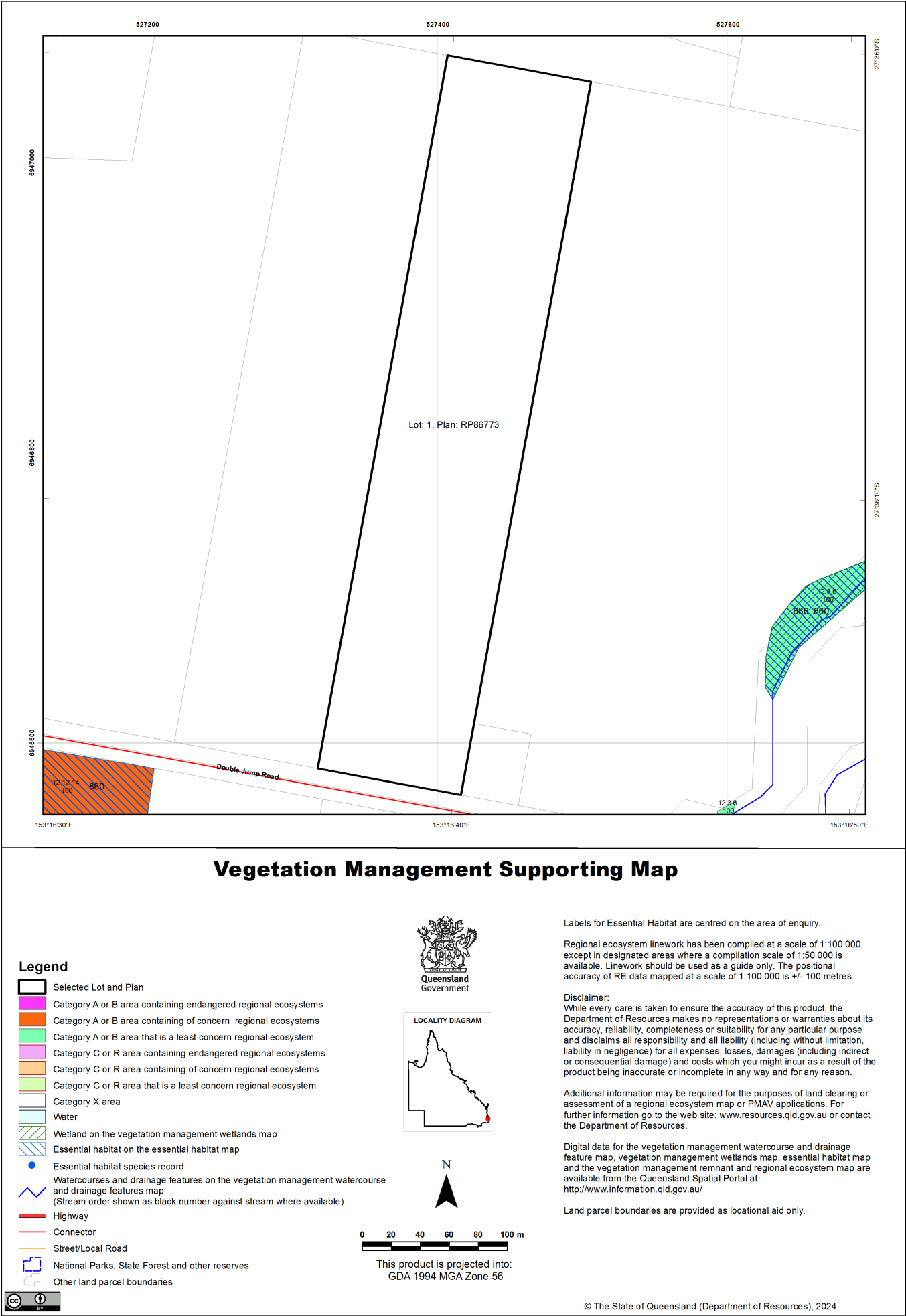
Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture

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.

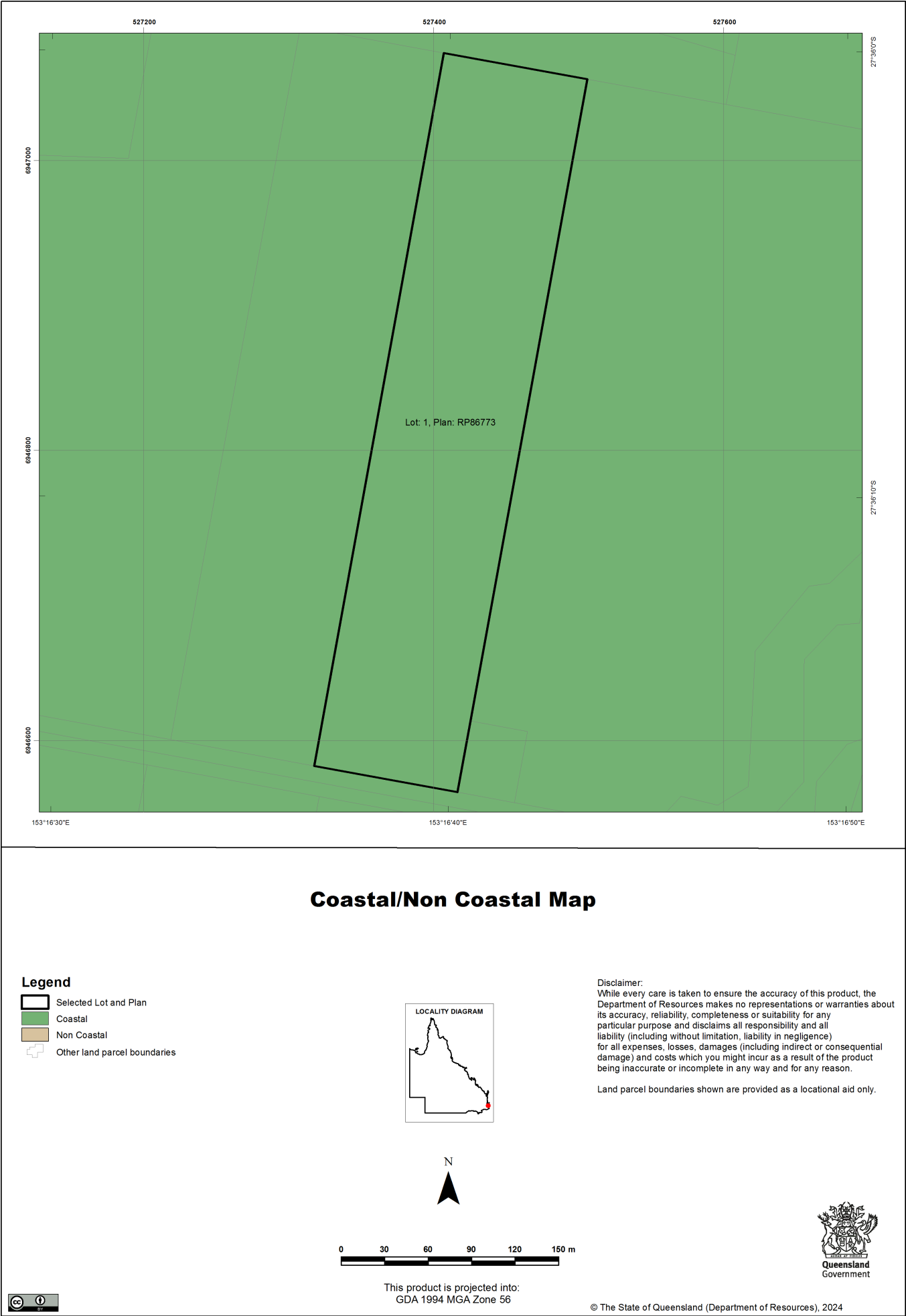
4.1 Regulated vegetation management map



4.2 Vegetation management supporting map



4.3 Coastal/non-coastal map



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



5. Protected plants framework (administered by the Department of Environment and Science (DES))

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 a threatened or near threatened plant can be avoided, the clearing activity is exempt from a permit. An [exempt clearing notification form](#) must be submitted to the Department of Environment and Science, 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 plants are 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 DES

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

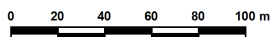
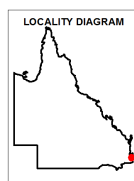
Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the [Queensland Spatial Catalogue](#), the Department of Environment and Science does not provide species information on request. 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 and Science webpage on the [clearing of protected plants](#) for more information.



Protected Plants Flora Survey Trigger Map

Legend

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



This product is projected into:
GDA 1994 MGA Zone 56

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 and Science 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 and Science (DES))

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 by 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 DES

For further information on the koala protection framework:

Phone 13 QGOV (13 74 68)

Email koala.assessment@des.qld.gov.au

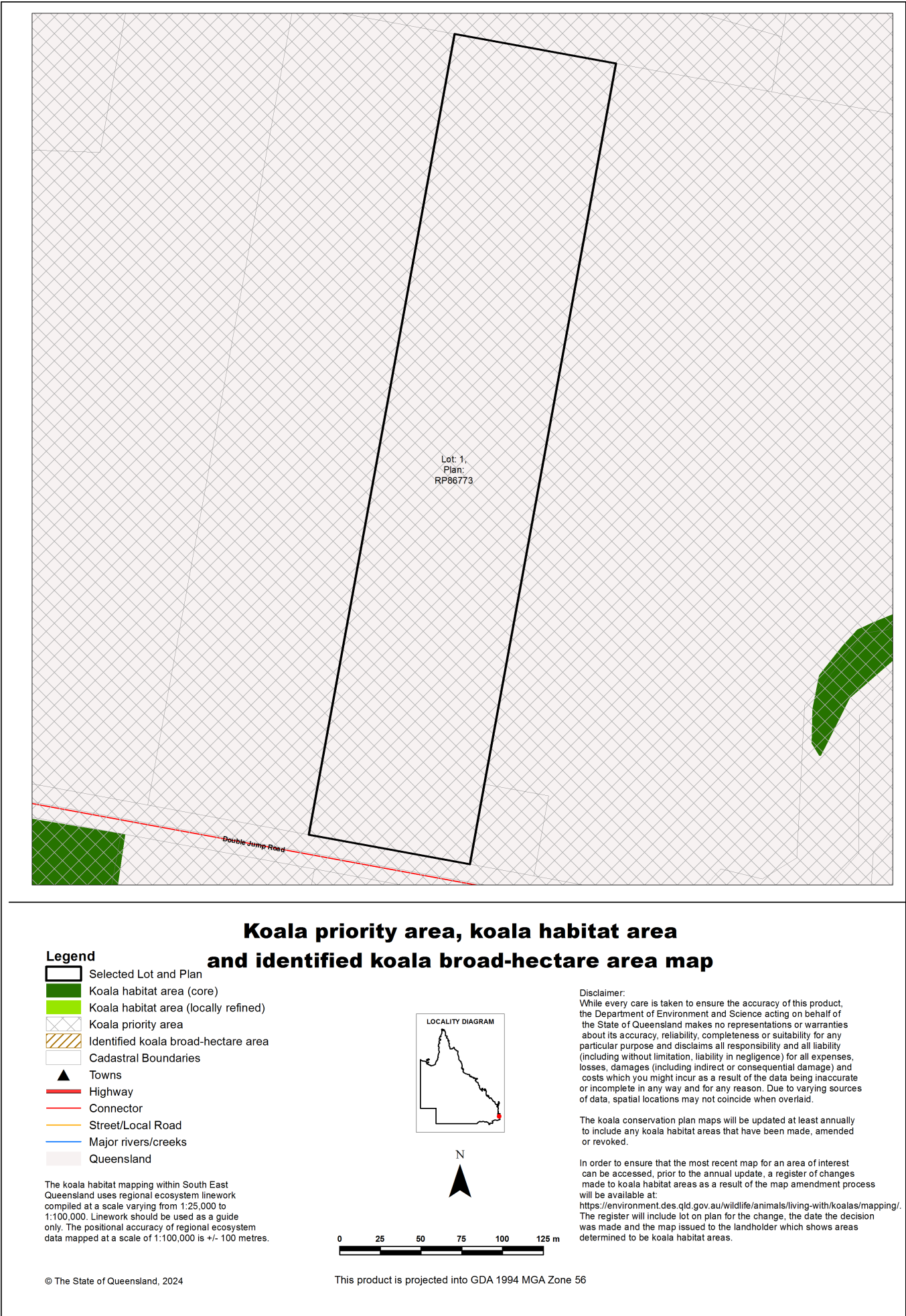
Visit <https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping>

7. Koala protection framework details for Lot: 1 Plan: RP86773

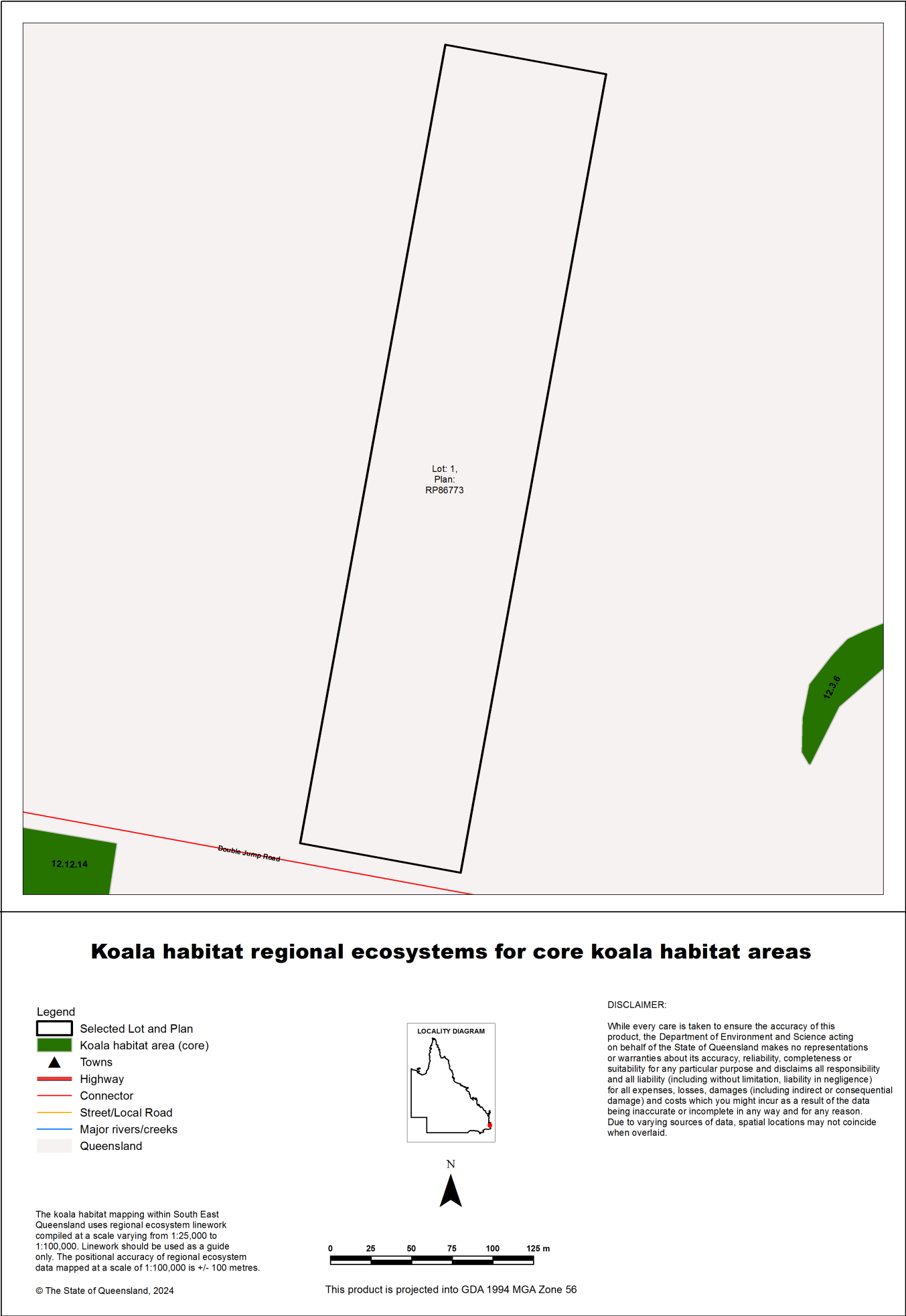
7.1 Koala districts

Koala District A

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



7.3 Koala habitat regional ecosystems for core koala habitat areas



8. Other relevant legislation contacts list

Activity	Legislation	Agency	Contact details
• Interference with overland flow • Earthworks, significant disturbance	<i>Water Act 2000</i> <i>Soil Conservation Act 1986</i>	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	<i>Aboriginal Cultural Heritage Act 2003</i> <i>Torres Strait Islander Cultural Heritage Act 2003</i>	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	<i>Environmental Protection Act 1994</i> <i>Coastal Protection and Management Act 1995</i> <i>Queensland Heritage Act 1992</i>	Department of Environment and Science (Queensland Government)	Ph: 13 QGOV (13 74 68) www.des.qld.gov.au
• Protected plants and protected areas	<i>Nature Conservation Act 1992</i>	Department of Environment and Science (Queensland Government)	Ph: 1300 130 372 (option 4) palm@des.qld.gov.au www.des.qld.gov.au
• Koala mapping and regulations	<i>Nature Conservation Act 1992</i>	Department of Environment and Science (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	<i>Fisheries Act 1994</i> <i>Forestry Act 1959</i>	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	<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Department of Agriculture, Water and the Environment (Australian Government)	Ph: 1800 803 772 www.environment.gov.au
• Development and planning processes	<i>Planning Act 2016</i> <i>State Development and Public Works Organisation Act 1971</i>	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	<i>Local Government Act 2009</i> <i>Planning Act 2016</i>	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	<i>Wet Tropics World Heritage Protection and Management Act 1993</i>	Wet Tropics Management Authority	Ph: (07) 4241 0500 www.wettropics.gov.au

Attachment 10
EAR Attachment 2a
RVMR Lot 1 on
RP165178



Vegetation management report

For Lot: 2 Plan: RP165178

9/23/2024



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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	6
1.1 Tenure and title area	6
1.2 Property location	6
2. Vegetation management framework (administered by the Department of Resources)	7
2.1 Exempt clearing work	7
2.2 Accepted development vegetation clearing codes	7
2.3 Area management plans	8
2.4 Development approvals	8
2.5. Contact information for the Department of Resources	8
3. Vegetation management framework for Lot: 2 Plan: RP165178	9
3.1 Vegetation categories	9
3.2 Regional ecosystems	10
3.3 Watercourses	10
3.4 Wetlands	10
3.5 Essential habitat	10
3.6 Area Management Plan(s)	11
3.7 Coastal or non-coastal	11
3.8 Agricultural Land Class A or B	11
4. Vegetation management framework maps	12
4.1 Regulated vegetation management map	13
4.2 Vegetation management supporting map	14
4.3 Coastal/non-coastal map	15
4.4 Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture	16
5. Protected plants framework (administered by the Department of Environment, Science and Innovation (DESI)).....	17
5.1 Clearing in high risk areas on the flora survey trigger map	17
5.2 Clearing outside high risk areas on the flora survey trigger map	17
5.3 Exemptions	17
5.4 Contact information for DESI	17
5.5 Protected plants flora survey trigger map	18
6. Koala protection framework (administered by the Department of Environment, Science and Innovation (DESI)).....	20
6.1 Koala mapping	20
6.2 Koala habitat planning controls	21
6.3 Koala Conservation Plan clearing requirements	22
6.4 Contact information for DESI	22
7. Koala protection framework details for Lot: 2 Plan: RP165178	23
7.1 Koala districts	23
7.2 Koala priority area, koala habitat area and identified koala broad-hectare map	23
7.3 Koala habitat regional ecosystems for core koala habitat areas	24
8. Other relevant legislation contacts list	25

1. Property details

1.1 Tenure and title area

All of the lot, plan, tenure and title area information associated with property Lot: 2 Plan: RP165178 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)
2	RP165178	Freehold	1,807

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: 2 Plan: RP165178 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: 2 Plan: RP165178, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)	Catchment(s)	Bioregion(s)	Subregion(s)
Redland City	Logan-Albert	Southeast Queensland	Burringbar - Conondale Ranges
		Southeast Queensland	Sunshine Coast - Gold Coast Lowlands

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: 2 Plan: RP165178

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 X	0.18

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)

The following Property Map of Assessable Vegetation (PMAVs) may be present on this property.

Reference number:

2018/001214

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
non-rem	None	X	0.18	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

There are no vegetation management wetlands present on this property.

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?

No Class A

Class B (with urban areas masked as per SPP): 0.18 ha

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: 2 Plan: RP165178.

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.

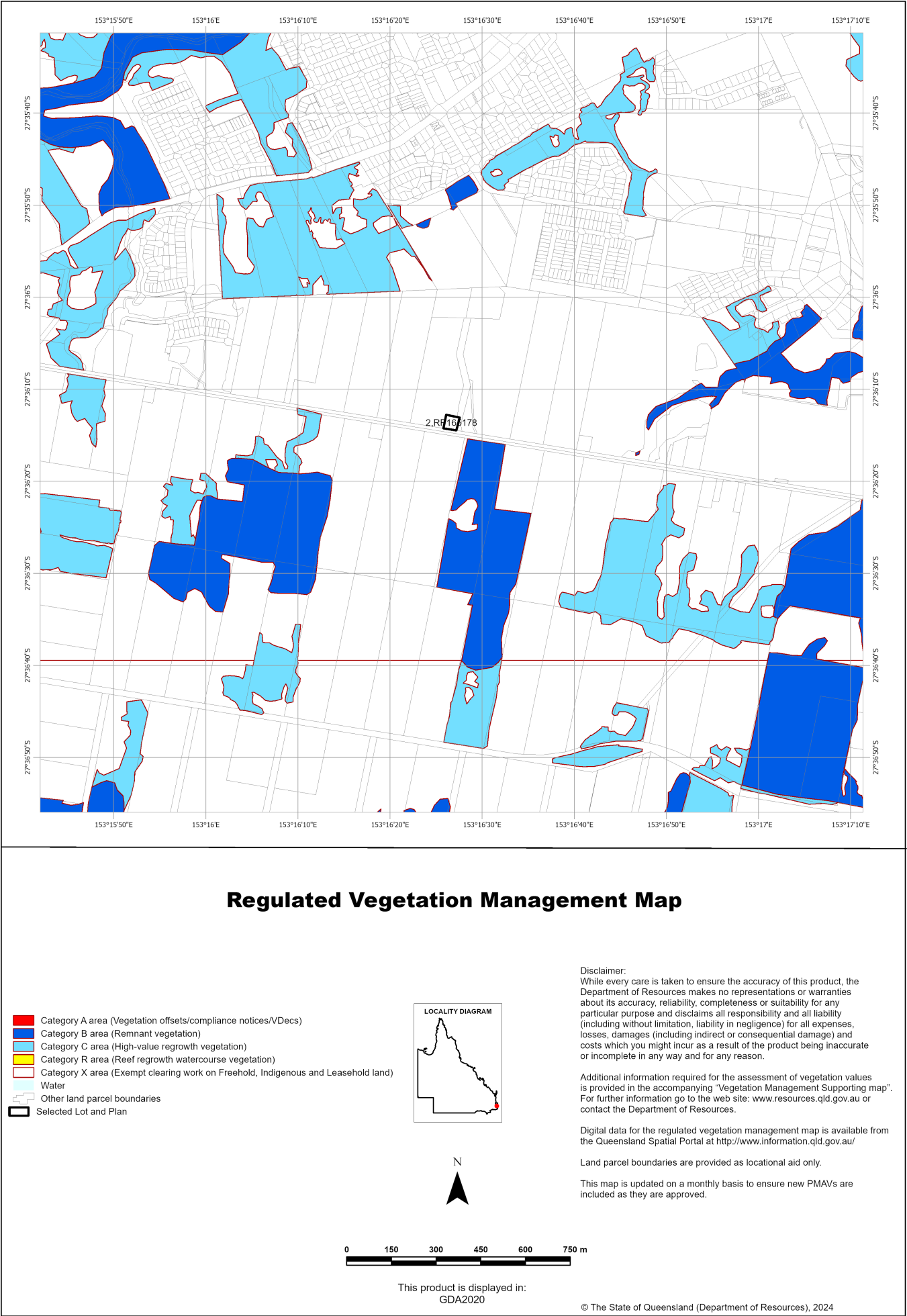
Coastal/non-coastal map

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).

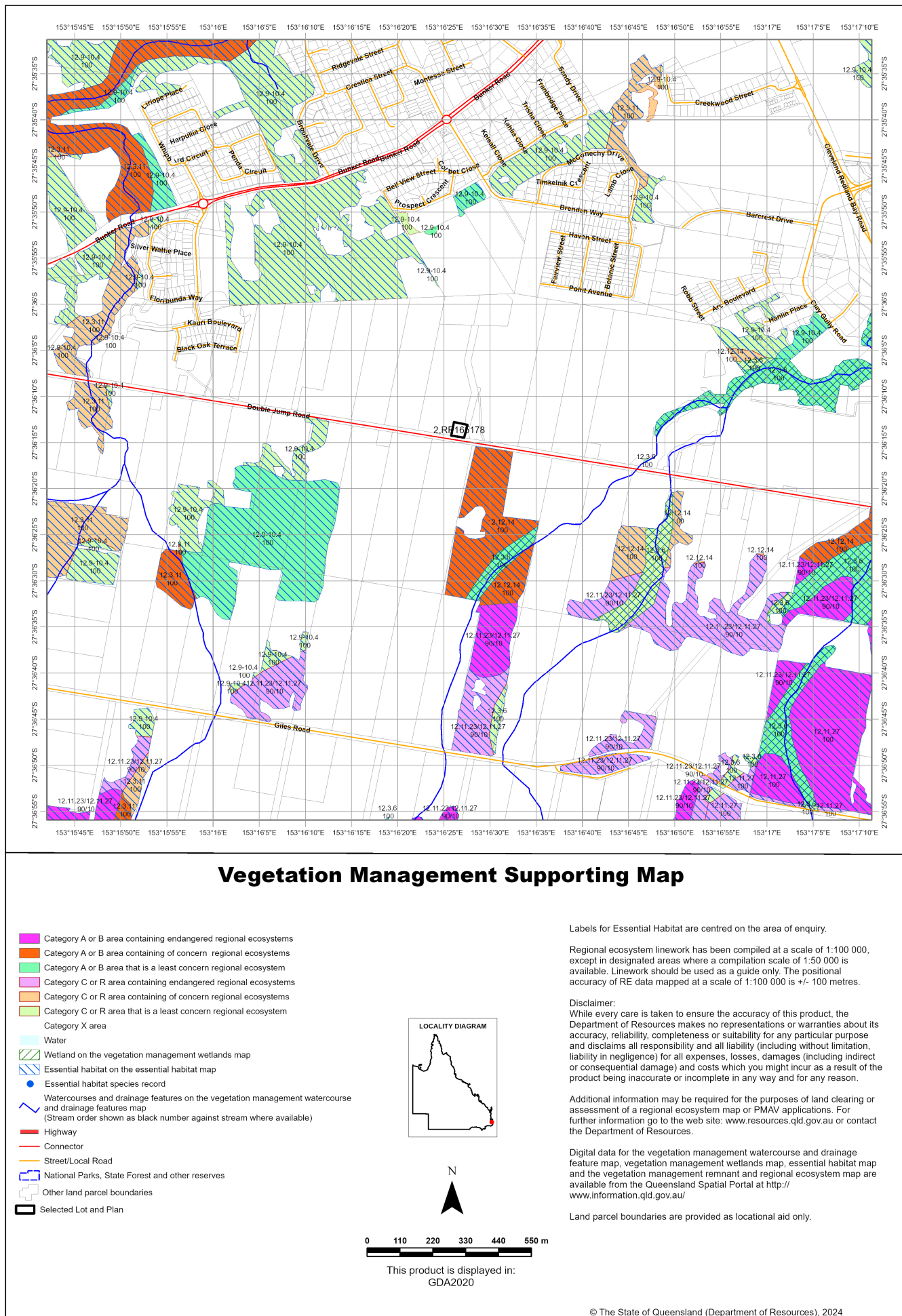
Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture

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.

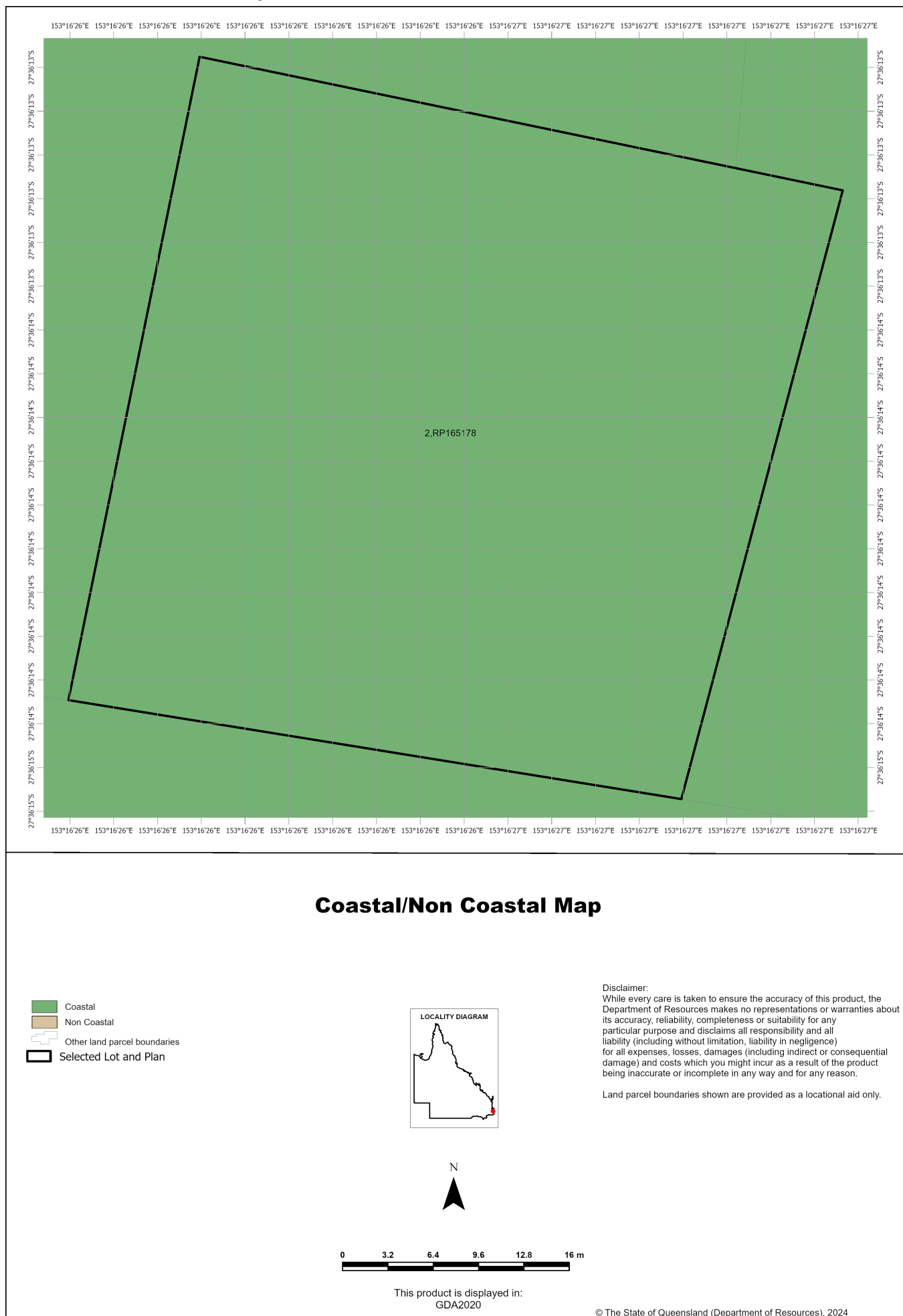
4.1 Regulated vegetation management map



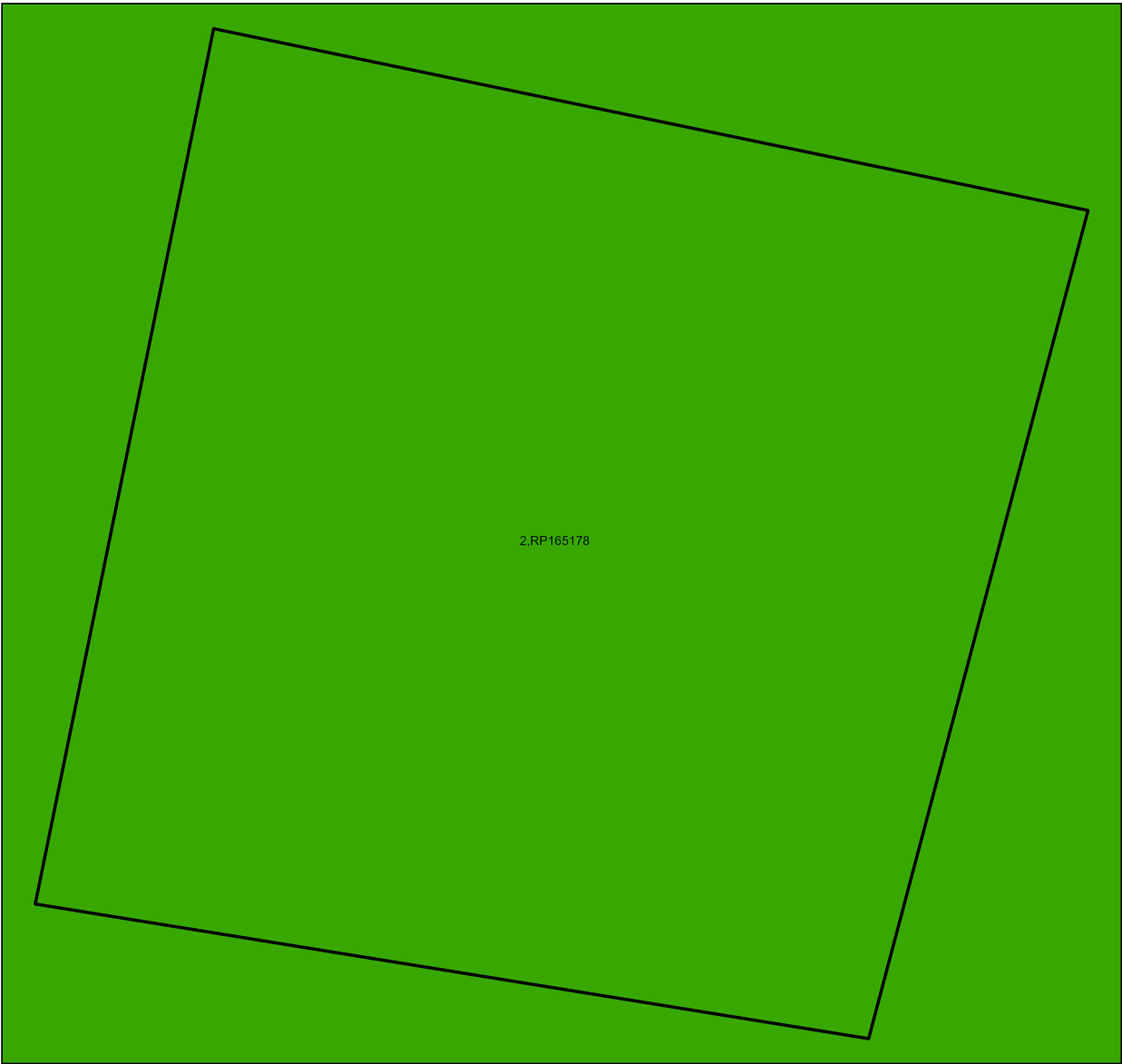
4.2 Vegetation management supporting map



4.3 Coastal/non-coastal map

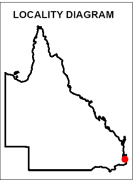


4.4 Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture



**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



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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 plants are 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

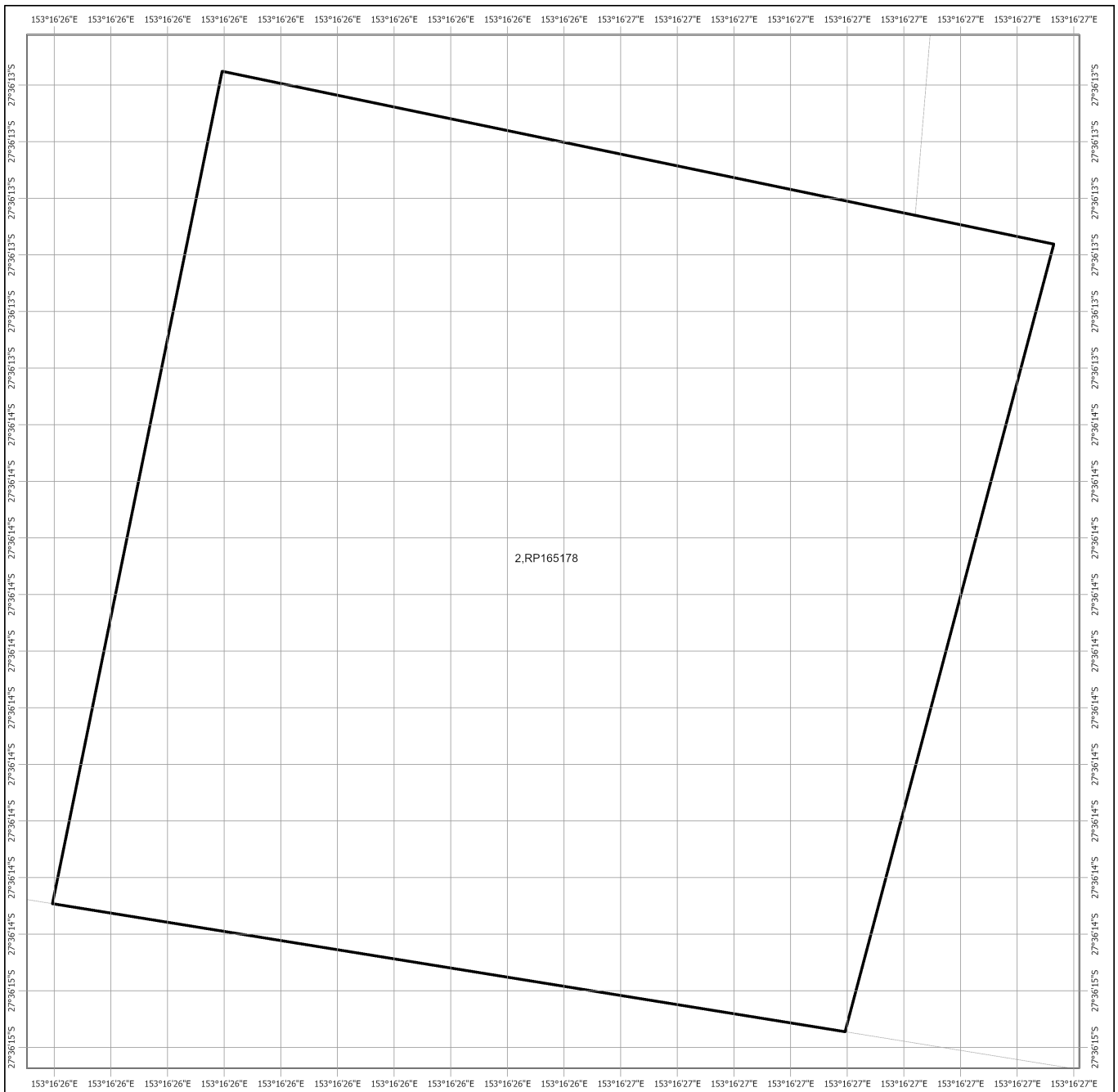
This map included may also be requested individually at: <https://apps.des.qld.gov.au/map-request/flora-survey-trigger/>.

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.

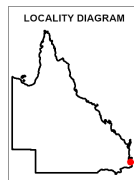
Species information

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



0 2.15 4.3 6.45 8.6 10.75 m

This product is displayed in:
GDA2020

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.

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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: 2 Plan: RP165178

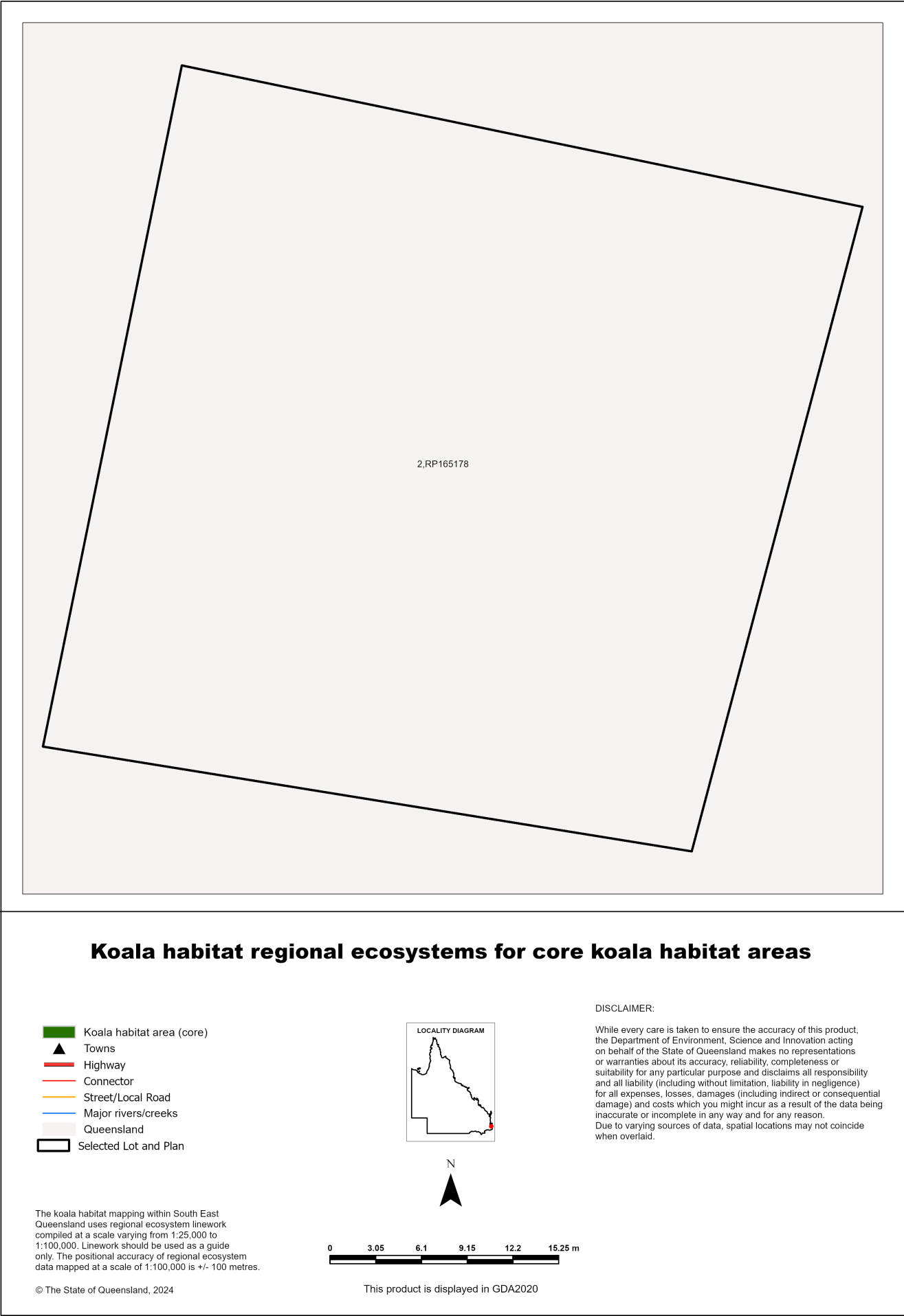
7.1 Koala districts

Koala District A

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



7.3 Koala habitat regional ecosystems for core koala habitat areas



8. Other relevant legislation contacts list

Activity	Legislation	Agency	Contact details
• Interference with overland flow • Earthworks, significant disturbance	<i>Water Act 2000</i> <i>Soil Conservation Act 1986</i>	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	<i>Aboriginal Cultural Heritage Act 2003</i> <i>Torres Strait Islander Cultural Heritage Act 2003</i>	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	<i>Environmental Protection Act 1994</i> <i>Coastal Protection and Management Act 1995</i> <i>Queensland Heritage Act 1992</i>	Department of Environment, Science and Innovation (Queensland Government)	Ph: 13 QGOV (13 74 68) www.des.qld.gov.au
• Protected plants and protected areas	<i>Nature Conservation Act 1992</i>	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	<i>Nature Conservation Act 1992</i>	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	<i>Fisheries Act 1994</i> <i>Forestry Act 1959</i>	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	<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Department of Agriculture, Water and the Environment (Australian Government)	Ph: 1800 803 772 www.environment.gov.au
• Development and planning processes	<i>Planning Act 2016</i> <i>State Development and Public Works Organisation Act 1971</i>	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	<i>Local Government Act 2009</i> <i>Planning Act 2016</i>	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	<i>Wet Tropics World Heritage Protection and Management Act 1993</i>	Wet Tropics Management Authority	Ph: (07) 4241 0500 https://www.wettropics.gov.au/

Attachment 11
EAR Attachment 2b
RVMR Lot 2 on
RP86773



Vegetation management report

For Lot: 2 Plan: RP86773

13/02/2024

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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 and Science 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 and Science 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 and Science 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	6
1.1 Tenure and title area	6
1.2 Property location	6
2. Vegetation management framework (administered by the Department of Resources)	7
2.1 Exempt clearing work	7
2.2 Accepted development vegetation clearing codes	7
2.3 Area management plans	8
2.4 Development approvals	8
2.5. Contact information for the Department of Resources	8
3. Vegetation management framework for Lot: 2 Plan: RP86773	9
3.1 Vegetation categories	9
3.2 Regional ecosystems	10
3.3 Watercourses	10
3.4 Wetlands	10
3.5 Essential habitat	10
3.6 Area Management Plan(s)	11
3.7 Coastal or non-coastal	11
3.8 Agricultural Land Class A or B	11
4. Vegetation management framework maps	12
4.1 Regulated vegetation management map	13
4.2 Vegetation management supporting map	14
4.3 Coastal/non-coastal map	15
4.4 Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture	16
5. Protected plants framework (administered by the Department of Environment and Science (DES))	17
5.1 Clearing in high risk areas on the flora survey trigger map	17
5.2 Clearing outside high risk areas on the flora survey trigger map	17
5.3 Exemptions	17
5.4 Contact information for DES	17
5.5 Protected plants flora survey trigger map	18
6. Koala protection framework (administered by the Department of Environment and Science (DES))	20
6.1 Koala mapping	20
6.2 Koala habitat planning controls	21
6.3 Koala Conservation Plan clearing requirements	22
6.4 Contact information for DES	22
7. Koala protection framework details for Lot: 2 Plan: RP86773	22
7.1 Koala districts	22
7.2 Koala priority area, koala habitat area and identified koala broad-hectare area map	23
7.3 Koala habitat regional ecosystems for core koala habitat areas	24
8. Other relevant legislation contacts list	25

1. Property details

1.1 Tenure and title area

All of the lot, plan, tenure and title area information associated with property Lot: 2 Plan: RP86773, 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)
2	RP86773	Freehold	50,310

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 this property 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: 2 Plan: RP86773, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)
Redland City

Bioregion(s)	Subregion(s)
Southeast Queensland	Sunshine Coast - Gold Coast Lowlands
Southeast Queensland	Burringbar - Conondale Ranges

Catchment(s)
Logan-Albert

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

The *Vegetation Management Act 1999* (VMA), the Vegetation Management Regulation 2023, 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: 2 Plan: RP86773

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. Total area: 5.03ha

Vegetation category	Area (ha)
Category X	5.0

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)

The following Property Map of Assessable Vegetation (PMAVs) may be present on this property:

Reference number

2018/001214

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
non-rem	None	X	5.03	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

There are no vegetation management wetlands present on this property.

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?

No Class A

Class B (with urban areas masked as per SPP): 2.95ha

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: 2 Plan: RP86773.

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.

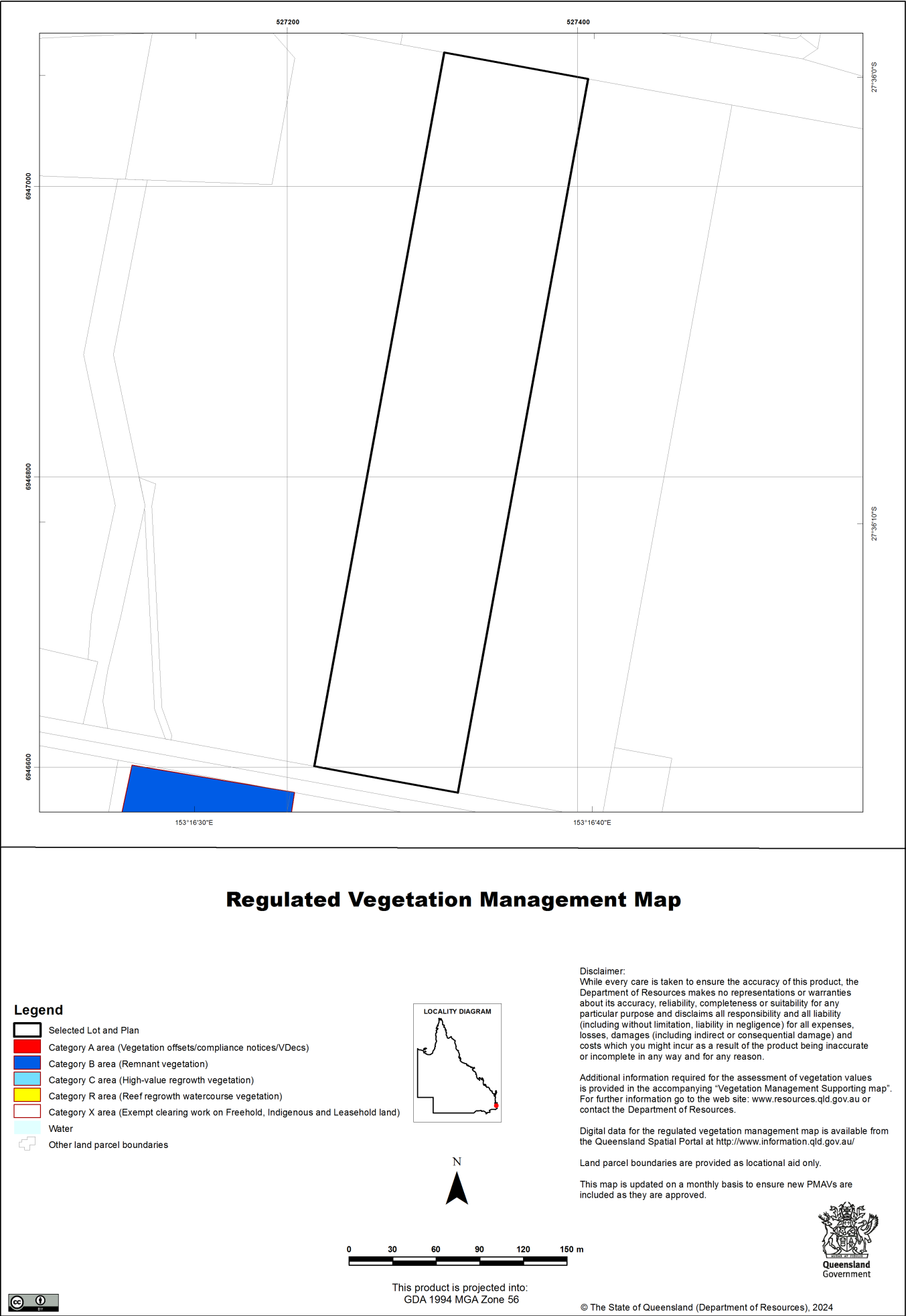
Coastal/non-coastal map

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).

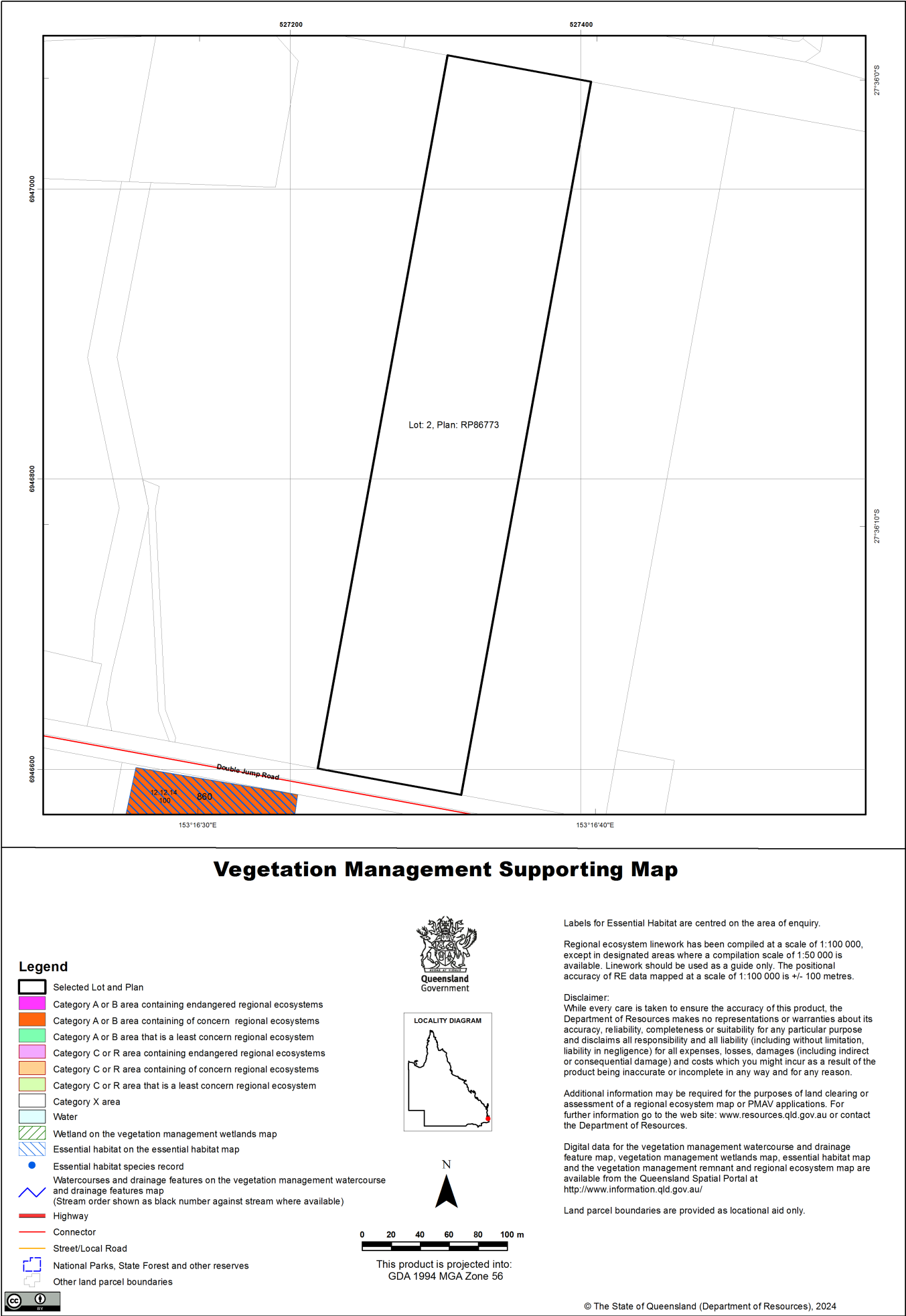
Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture

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.

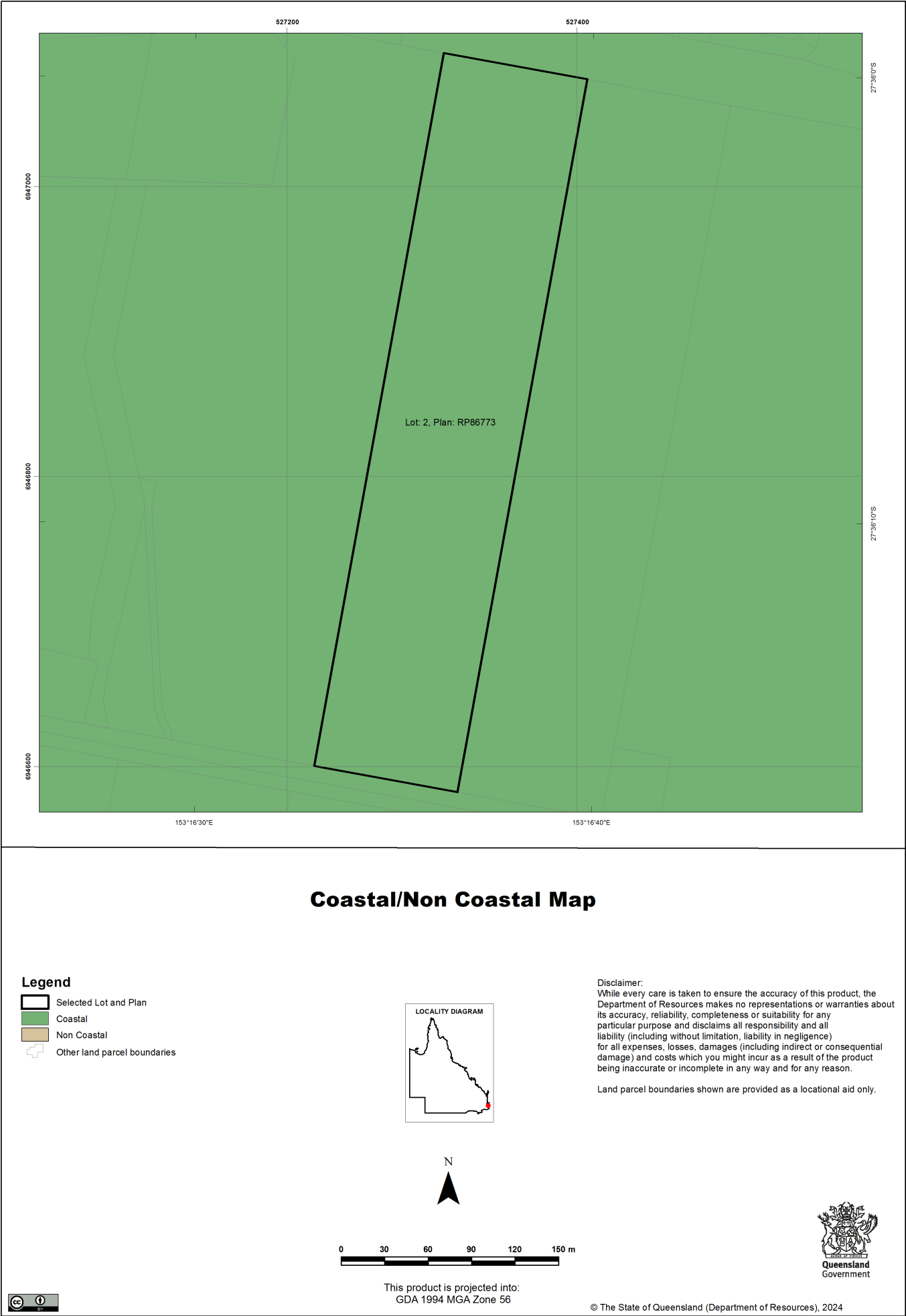
4.1 Regulated vegetation management map



4.2 Vegetation management supporting map



4.3 Coastal/non-coastal map



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



5. Protected plants framework (administered by the Department of Environment and Science (DES))

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 a threatened or near threatened plant can be avoided, the clearing activity is exempt from a permit. An [exempt clearing notification form](#) must be submitted to the Department of Environment and Science, 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 plants are 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 DES

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

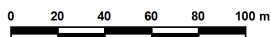
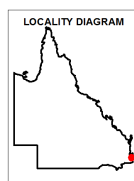
Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the [Queensland Spatial Catalogue](#), the Department of Environment and Science does not provide species information on request. 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 and Science webpage on the [clearing of protected plants](#) for more information.



Protected Plants Flora Survey Trigger Map

Legend

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



This product is projected into:
GDA 1994 MGA Zone 56

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 and Science 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 and Science (DES))

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 by 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 DES

For further information on the koala protection framework:

Phone 13 QGOV (13 74 68)

Email koala.assessment@des.qld.gov.au

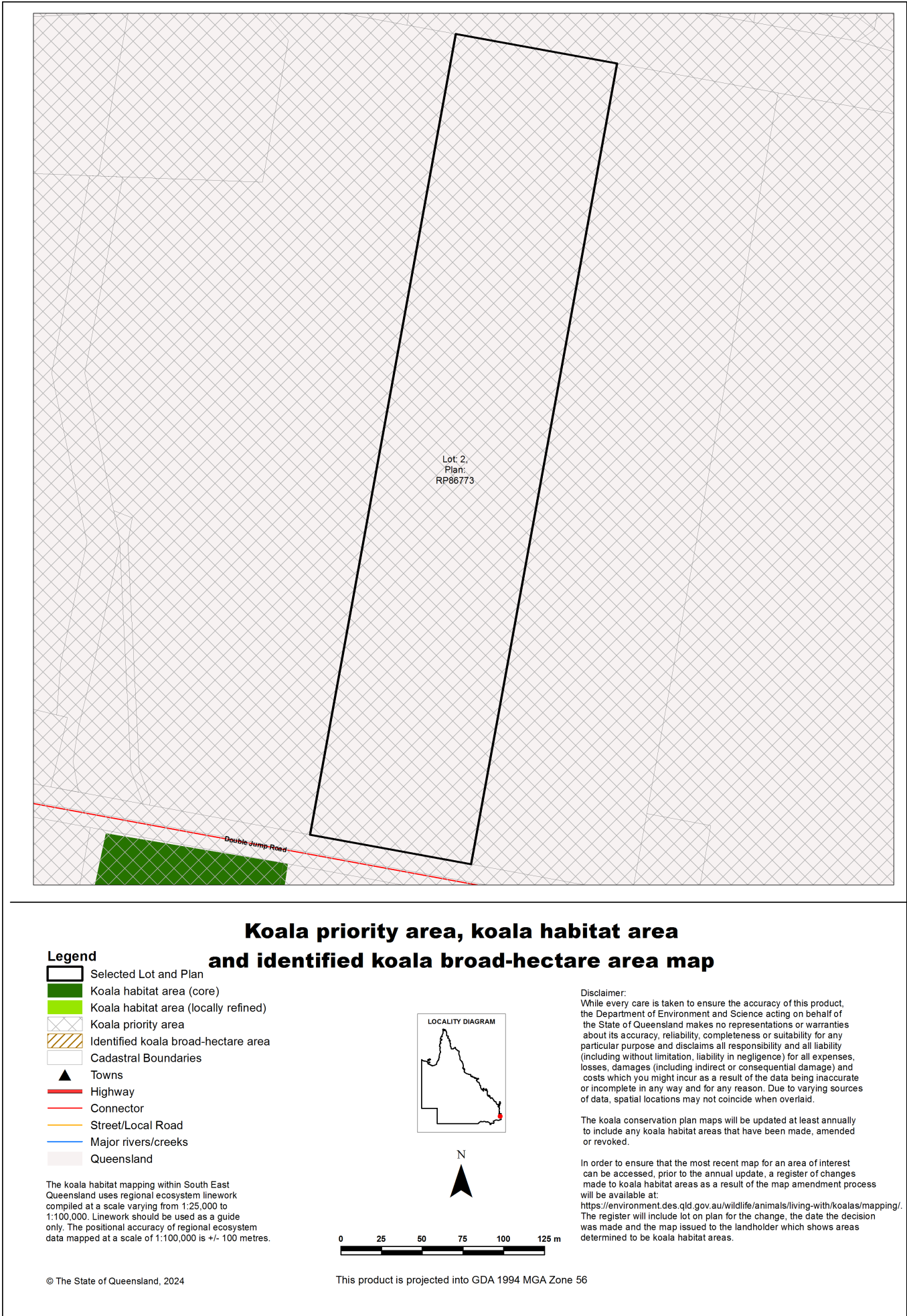
Visit <https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping>

7. Koala protection framework details for Lot: 2 Plan: RP86773

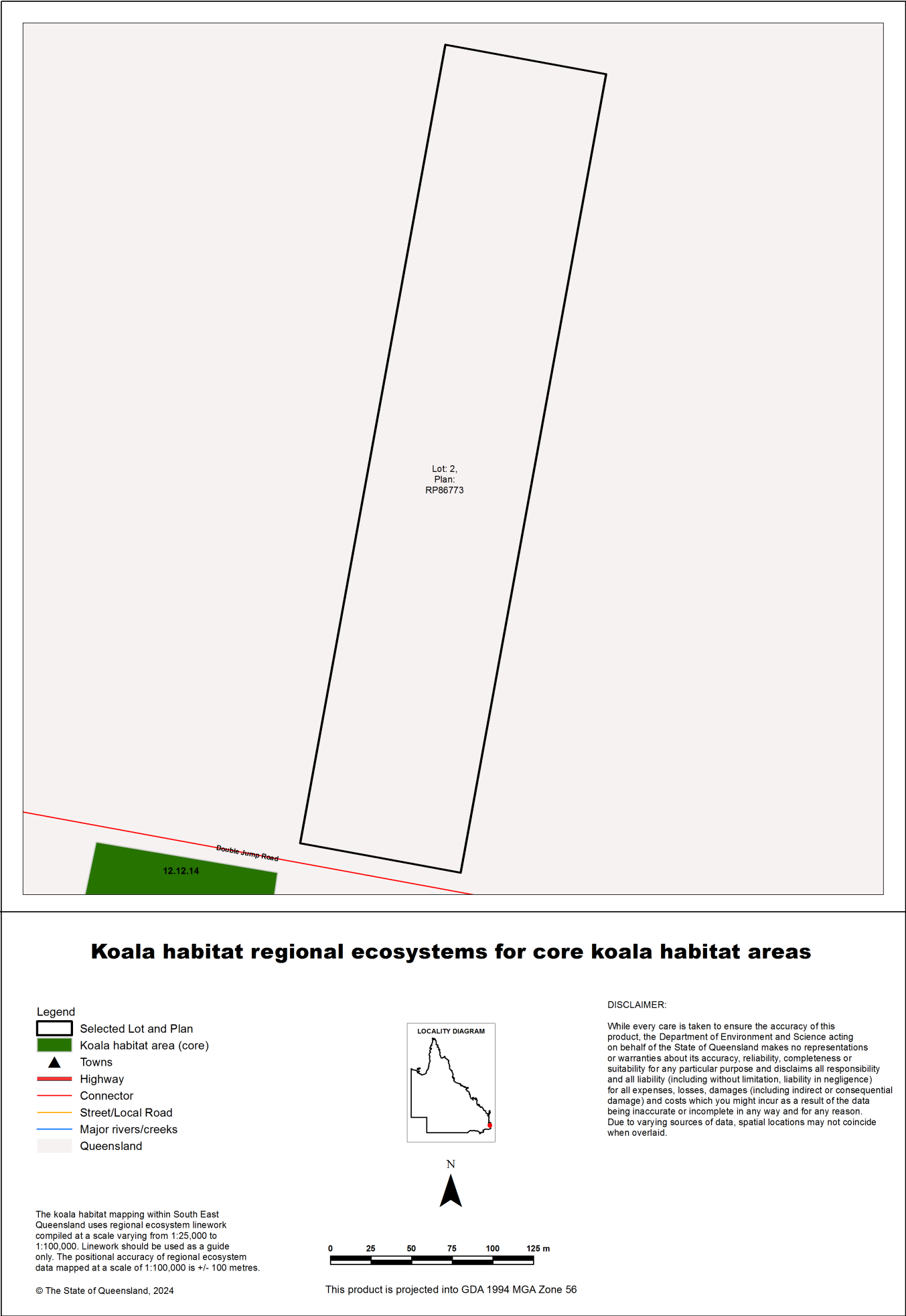
7.1 Koala districts

Koala District A

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



7.3 Koala habitat regional ecosystems for core koala habitat areas



8. Other relevant legislation contacts list

Activity	Legislation	Agency	Contact details
• Interference with overland flow • Earthworks, significant disturbance	<i>Water Act 2000</i> <i>Soil Conservation Act 1986</i>	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	<i>Aboriginal Cultural Heritage Act 2003</i> <i>Torres Strait Islander Cultural Heritage Act 2003</i>	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	<i>Environmental Protection Act 1994</i> <i>Coastal Protection and Management Act 1995</i> <i>Queensland Heritage Act 1992</i>	Department of Environment and Science (Queensland Government)	Ph: 13 QGOV (13 74 68) www.des.qld.gov.au
• Protected plants and protected areas	<i>Nature Conservation Act 1992</i>	Department of Environment and Science (Queensland Government)	Ph: 1300 130 372 (option 4) palm@des.qld.gov.au www.des.qld.gov.au
• Koala mapping and regulations	<i>Nature Conservation Act 1992</i>	Department of Environment and Science (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	<i>Fisheries Act 1994</i> <i>Forestry Act 1959</i>	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	<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Department of Agriculture, Water and the Environment (Australian Government)	Ph: 1800 803 772 www.environment.gov.au
• Development and planning processes	<i>Planning Act 2016</i> <i>State Development and Public Works Organisation Act 1971</i>	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	<i>Local Government Act 2009</i> <i>Planning Act 2016</i>	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	<i>Wet Tropics World Heritage Protection and Management Act 1993</i>	Wet Tropics Management Authority	Ph: (07) 4241 0500 www.wettropics.gov.au

Attachment 12
EAR Attachment 2c
RVMR Lot 5 on
SP293881



Vegetation management report

For Lot: 5 Plan: SP293881

13/02/2024

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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 and Science 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 and Science 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 and Science 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	6
1.1 Tenure and title area	6
1.2 Property location	6
2. Vegetation management framework (administered by the Department of Resources)	7
2.1 Exempt clearing work	7
2.2 Accepted development vegetation clearing codes	7
2.3 Area management plans	8
2.4 Development approvals	8
2.5. Contact information for the Department of Resources	8
3. Vegetation management framework for Lot: 5 Plan: SP293881	9
3.1 Vegetation categories	9
3.2 Regional ecosystems	10
3.3 Watercourses	10
3.4 Wetlands	10
3.5 Essential habitat	10
3.6 Area Management Plan(s)	11
3.7 Coastal or non-coastal	11
3.8 Agricultural Land Class A or B	11
4. Vegetation management framework maps	12
4.1 Regulated vegetation management map	13
4.2 Vegetation management supporting map	14
4.3 Coastal/non-coastal map	15
4.4 Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture	16
5. Protected plants framework (administered by the Department of Environment and Science (DES))	17
5.1 Clearing in high risk areas on the flora survey trigger map	17
5.2 Clearing outside high risk areas on the flora survey trigger map	17
5.3 Exemptions	17
5.4 Contact information for DES	17
5.5 Protected plants flora survey trigger map	18
6. Koala protection framework (administered by the Department of Environment and Science (DES))	20
6.1 Koala mapping	20
6.2 Koala habitat planning controls	21
6.3 Koala Conservation Plan clearing requirements	22
6.4 Contact information for DES	22
7. Koala protection framework details for Lot: 5 Plan: SP293881	22
7.1 Koala districts	22
7.2 Koala priority area, koala habitat area and identified koala broad-hectare area map	23
7.3 Koala habitat regional ecosystems for core koala habitat areas	24
8. Other relevant legislation contacts list	25

1. Property details

1.1 Tenure and title area

All of the lot, plan, tenure and title area information associated with property Lot: 5 Plan: SP293881, 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)
5	SP293881	Freehold	124,000
B	SP293881	Easement	948
A	SP293881	Easement	7,174

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 this property 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: 5 Plan: SP293881, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)
Redland City

Bioregion(s)	Subregion(s)
Southeast Queensland	Sunshine Coast - Gold Coast Lowlands
Southeast Queensland	Burringbar - Conondale Ranges

Catchment(s)
Logan-Albert

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

The *Vegetation Management Act 1999* (VMA), the Vegetation Management Regulation 2023, 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: 5 Plan: SP293881

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. Total area: 12.4ha

Vegetation category	Area (ha)
Category X	12.4

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)

The following Property Map of Assessable Vegetation (PMAVs) may be present on this property:

Reference number

2018/001214

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
non-rem	None	X	12.40	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

There are no vegetation management wetlands present on this property.

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?

No Class A

Class B (with urban areas masked as per SPP): 8.55ha

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: 5 Plan: SP293881.

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.

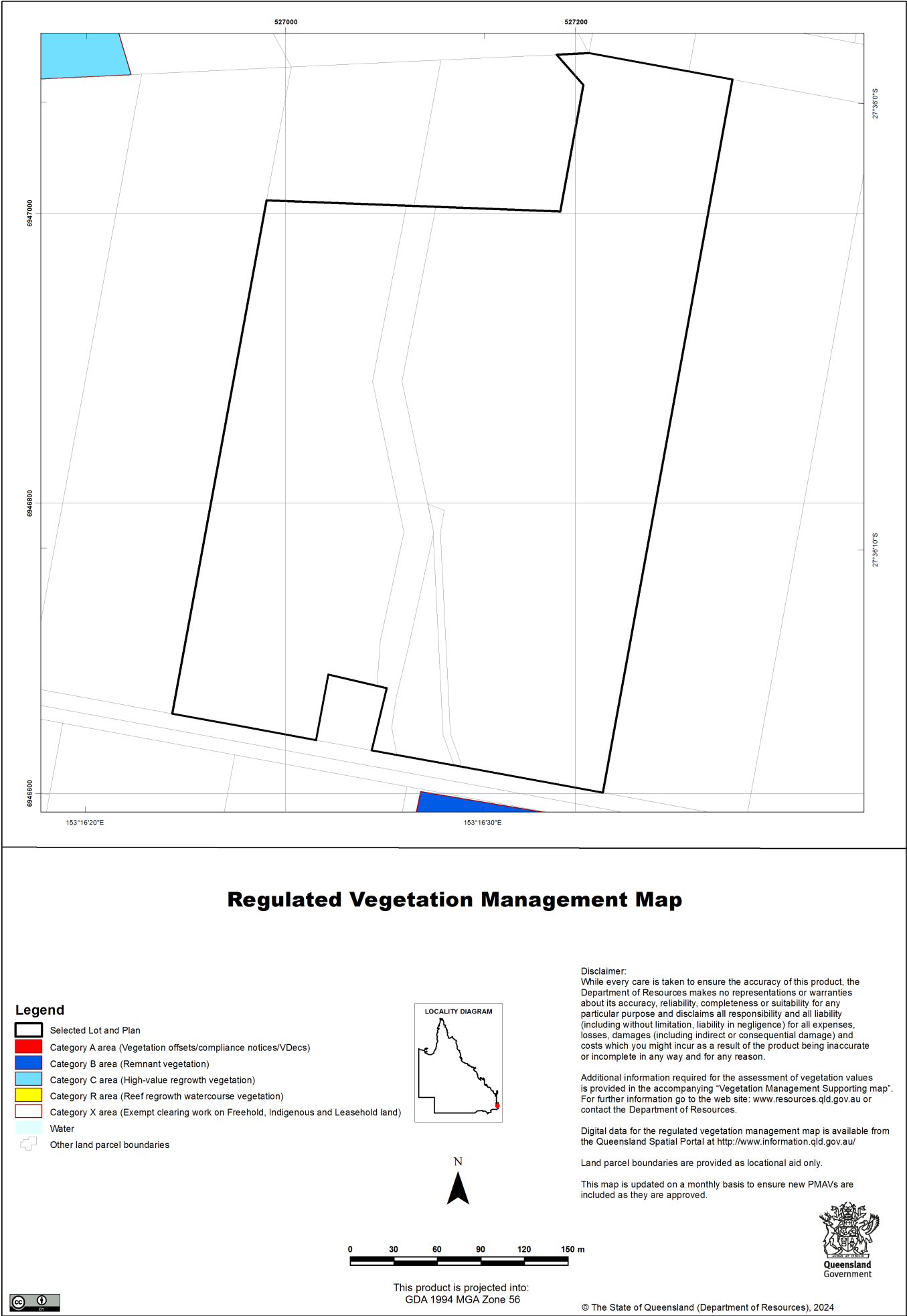
Coastal/non-coastal map

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).

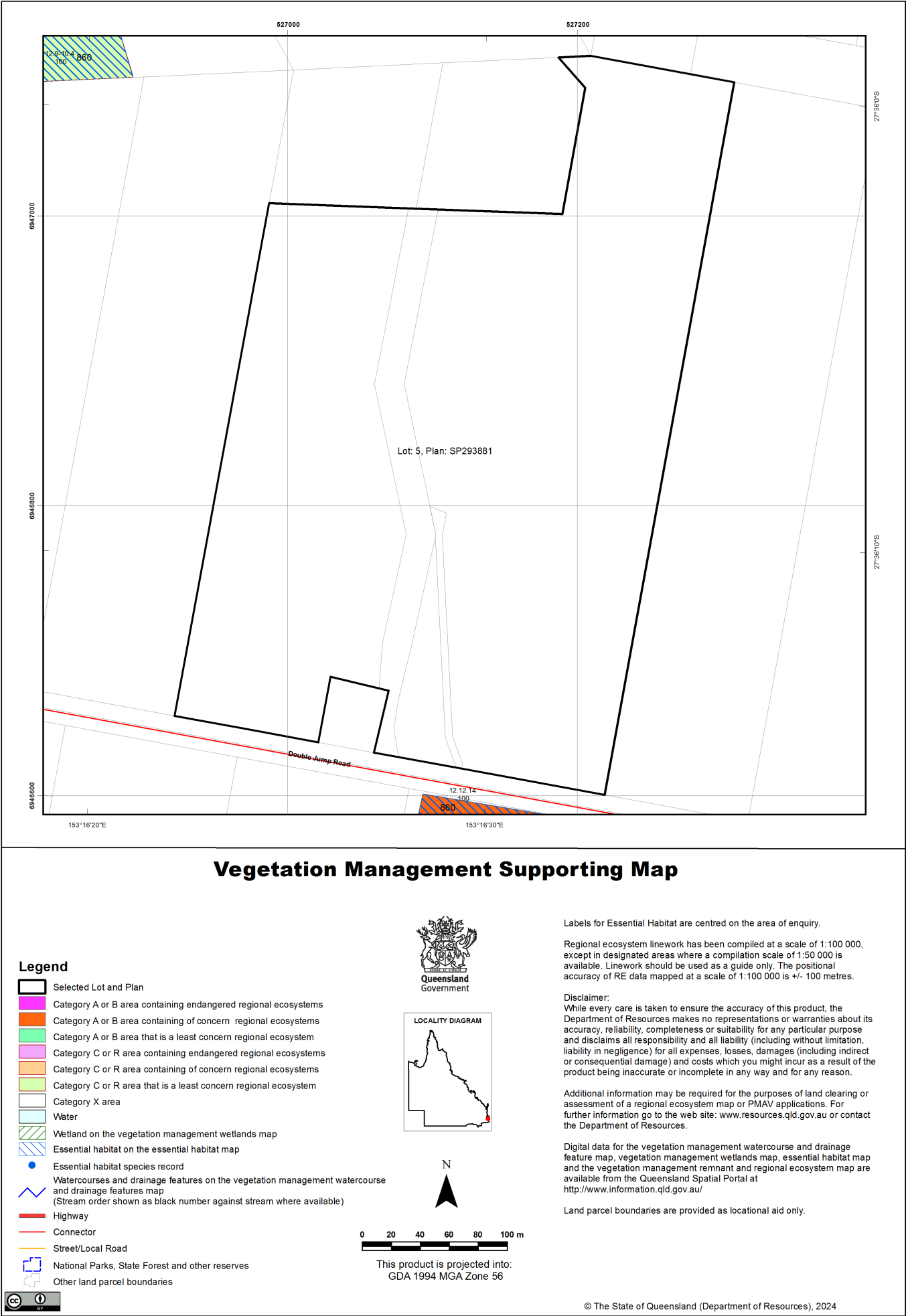
Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture

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.

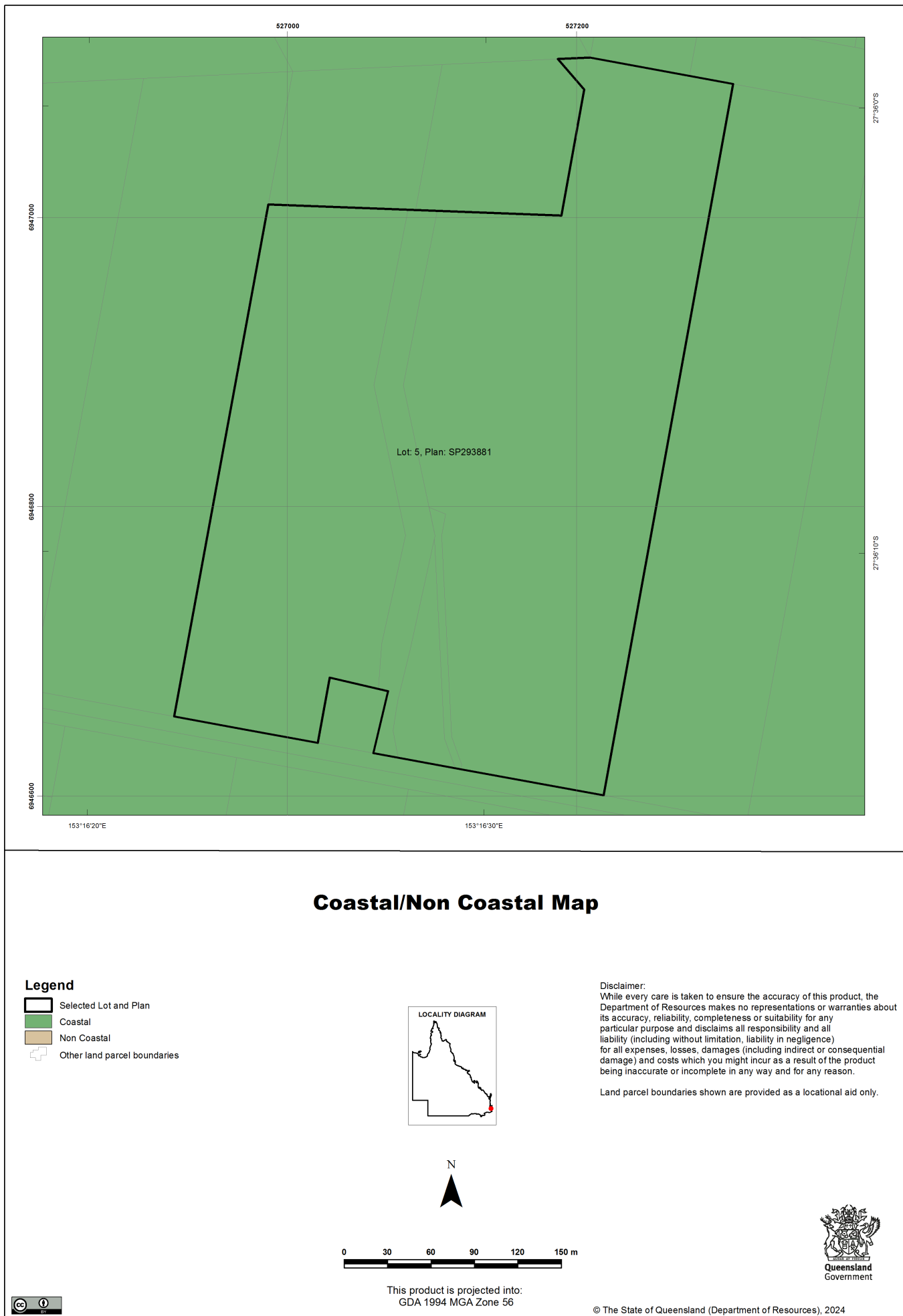
4.1 Regulated vegetation management map



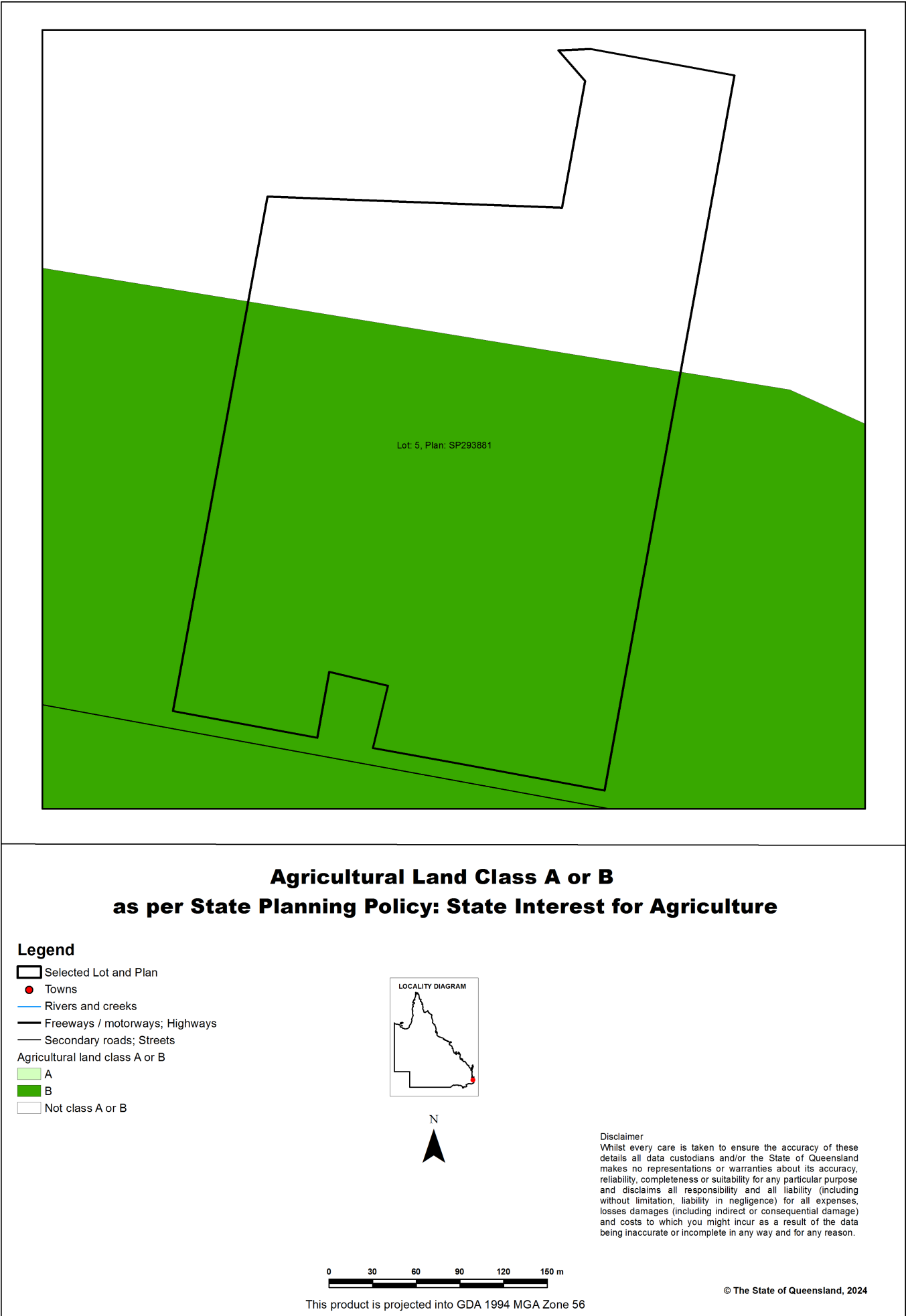
4.2 Vegetation management supporting map



4.3 Coastal/non-coastal map



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



5. Protected plants framework (administered by the Department of Environment and Science (DES))

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 a threatened or near threatened plant can be avoided, the clearing activity is exempt from a permit. An [exempt clearing notification form](#) must be submitted to the Department of Environment and Science, 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 plants are 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 DES

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

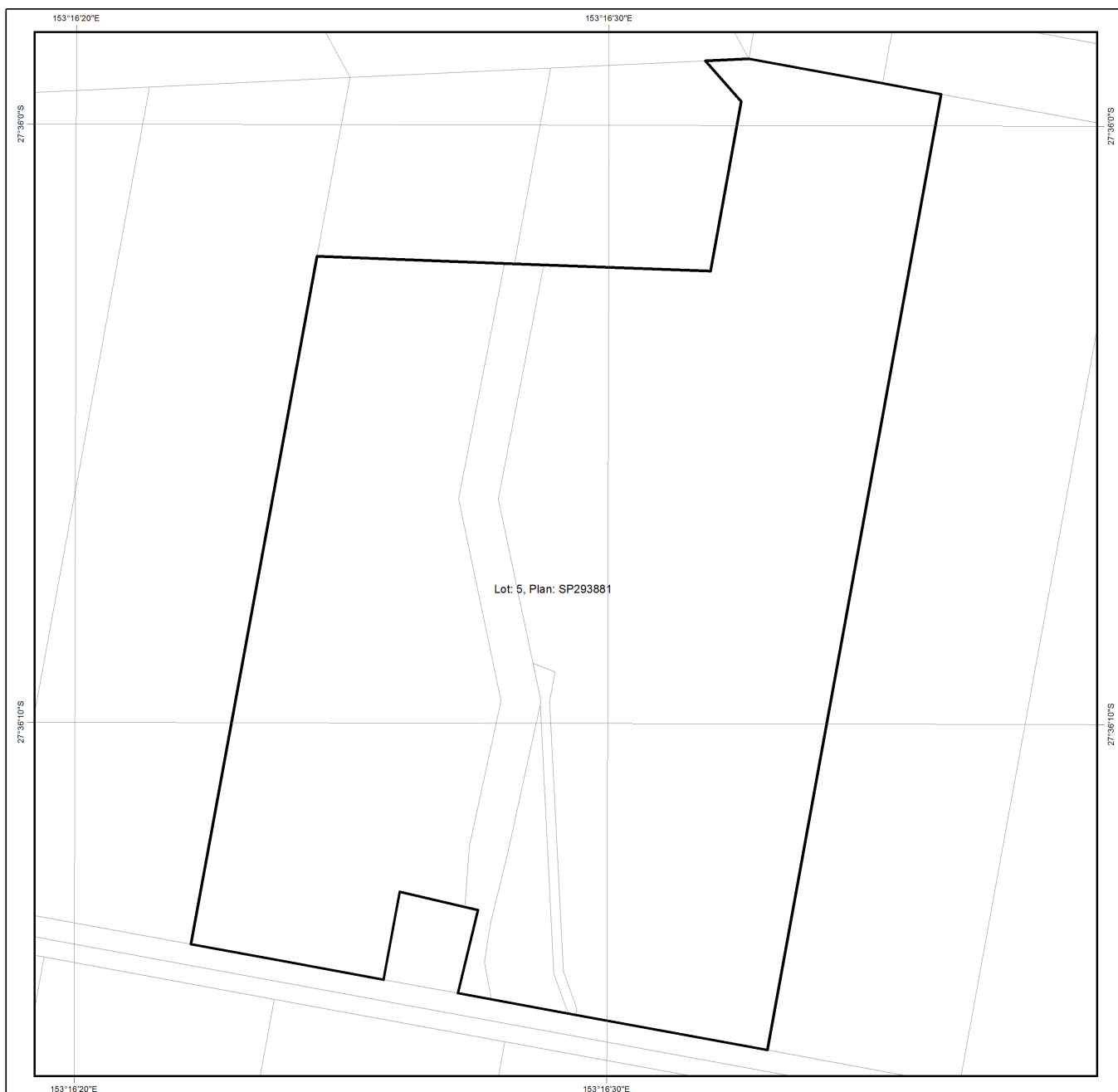
This map included may also be requested individually at: <https://apps.des.qld.gov.au/map-request/flora-survey-trigger/>.

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

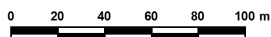
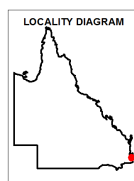
Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the [Queensland Spatial Catalogue](#), the Department of Environment and Science does not provide species information on request. 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 and Science webpage on the [clearing of protected plants](#) for more information.



Protected Plants Flora Survey Trigger Map

Legend

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



This product is projected into:
GDA 1994 MGA Zone 56

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 and Science 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.

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6. Koala protection framework (administered by the Department of Environment and Science (DES))

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 by 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 DES

For further information on the koala protection framework:

Phone 13 QGOV (13 74 68)

Email koala.assessment@des.qld.gov.au

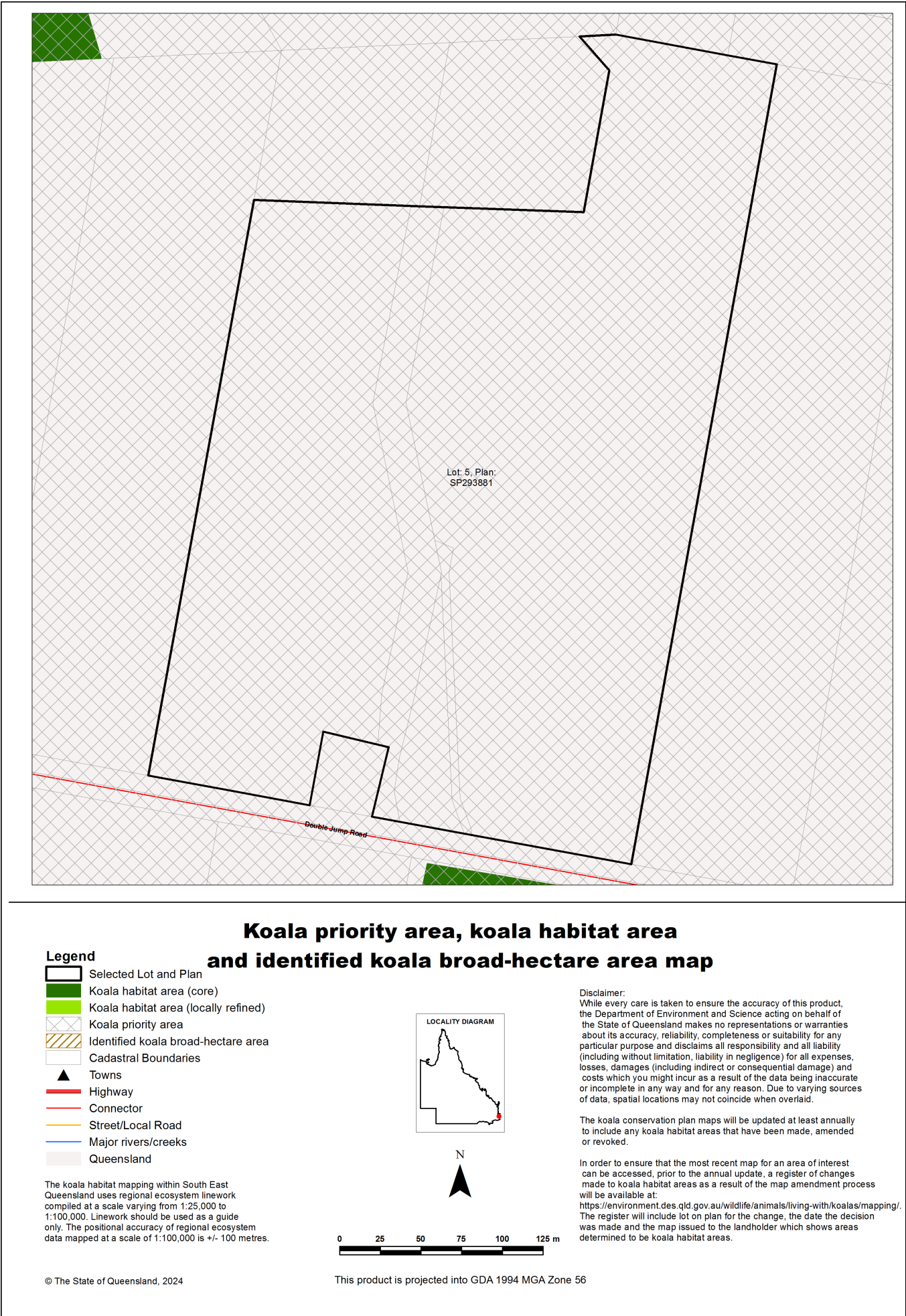
Visit <https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping>

7. Koala protection framework details for Lot: 5 Plan: SP293881

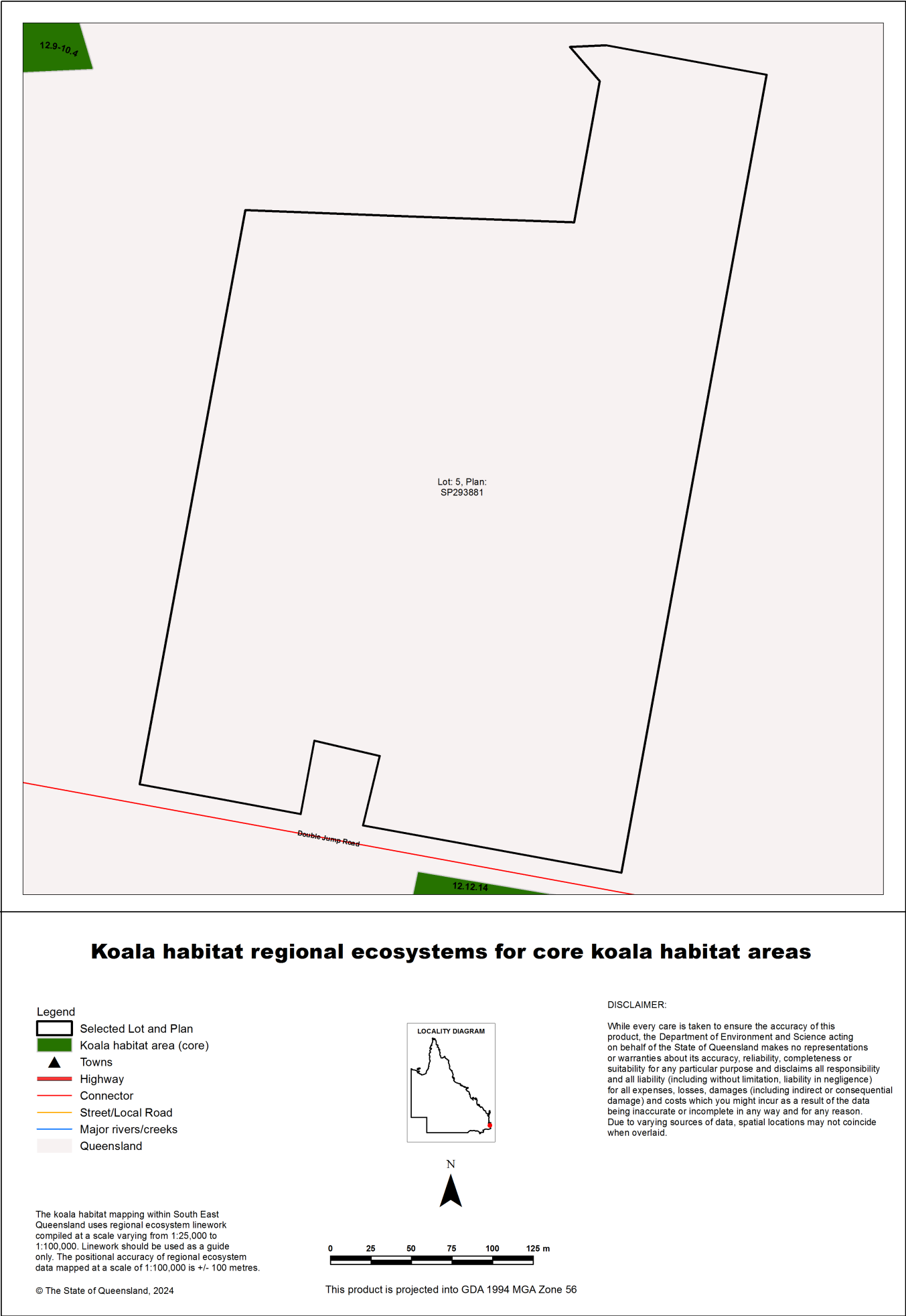
7.1 Koala districts

Koala District A

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



7.3 Koala habitat regional ecosystems for core koala habitat areas



8. Other relevant legislation contacts list

Activity	Legislation	Agency	Contact details
• Interference with overland flow • Earthworks, significant disturbance	<i>Water Act 2000</i> <i>Soil Conservation Act 1986</i>	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	<i>Aboriginal Cultural Heritage Act 2003</i> <i>Torres Strait Islander Cultural Heritage Act 2003</i>	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	<i>Environmental Protection Act 1994</i> <i>Coastal Protection and Management Act 1995</i> <i>Queensland Heritage Act 1992</i>	Department of Environment and Science (Queensland Government)	Ph: 13 QGOV (13 74 68) www.des.qld.gov.au
• Protected plants and protected areas	<i>Nature Conservation Act 1992</i>	Department of Environment and Science (Queensland Government)	Ph: 1300 130 372 (option 4) palm@des.qld.gov.au www.des.qld.gov.au
• Koala mapping and regulations	<i>Nature Conservation Act 1992</i>	Department of Environment and Science (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	<i>Fisheries Act 1994</i> <i>Forestry Act 1959</i>	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	<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Department of Agriculture, Water and the Environment (Australian Government)	Ph: 1800 803 772 www.environment.gov.au
• Development and planning processes	<i>Planning Act 2016</i> <i>State Development and Public Works Organisation Act 1971</i>	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	<i>Local Government Act 2009</i> <i>Planning Act 2016</i>	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	<i>Wet Tropics World Heritage Protection and Management Act 1993</i>	Wet Tropics Management Authority	Ph: (07) 4241 0500 www.wettropics.gov.au



Vegetation management report

For Lot: 23 Plan: SP325035

13/02/2024

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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 and Science 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 and Science 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 and Science 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	6
1.1 Tenure and title area	6
1.2 Property location	6
2. Vegetation management framework (administered by the Department of Resources)	7
2.1 Exempt clearing work	7
2.2 Accepted development vegetation clearing codes	7
2.3 Area management plans	8
2.4 Development approvals	8
2.5. Contact information for the Department of Resources	8
3. Vegetation management framework for Lot: 23 Plan: SP325035	9
3.1 Vegetation categories	9
3.2 Regional ecosystems	10
3.3 Watercourses	10
3.4 Wetlands	10
3.5 Essential habitat	10
3.6 Area Management Plan(s)	12
3.7 Coastal or non-coastal	12
3.8 Agricultural Land Class A or B	12
4. Vegetation management framework maps	13
4.1 Regulated vegetation management map	14
4.2 Vegetation management supporting map	15
4.3 Coastal/non-coastal map	16
4.4 Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture	17
5. Protected plants framework (administered by the Department of Environment and Science (DES))	18
5.1 Clearing in high risk areas on the flora survey trigger map	18
5.2 Clearing outside high risk areas on the flora survey trigger map	18
5.3 Exemptions	18
5.4 Contact information for DES	18
5.5 Protected plants flora survey trigger map	19
6. Koala protection framework (administered by the Department of Environment and Science (DES))	21
6.1 Koala mapping	21
6.2 Koala habitat planning controls	22
6.3 Koala Conservation Plan clearing requirements	23
6.4 Contact information for DES	23
7. Koala protection framework details for Lot: 23 Plan: SP325035	23
7.1 Koala districts	23
7.2 Koala priority area, koala habitat area and identified koala broad-hectare area map	24
7.3 Koala habitat regional ecosystems for core koala habitat areas	25
8. Other relevant legislation contacts list	26

1. Property details

1.1 Tenure and title area

All of the lot, plan, tenure and title area information associated with property Lot: 23 Plan: SP325035, 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)
23	SP325035	Freehold	155,600
A	SP325035	Easement	13,060

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 this property 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: 23 Plan: SP325035, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)
Redland City

Bioregion(s)	Subregion(s)
Southeast Queensland	Sunshine Coast - Gold Coast Lowlands
Southeast Queensland	Burringbar - Conondale Ranges

Catchment(s)
Logan-Albert

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

The *Vegetation Management Act 1999* (VMA), the Vegetation Management Regulation 2023, 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: 23 Plan: SP325035

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. Total area: 15.58ha

Vegetation category	Area (ha)
Category B	0.9
Category X	14.6

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)

The following Property Map of Assessable Vegetation (PMAVs) may be present on this property:

Reference number

- 2016/003955
- 2018/001209
- 2018/001213

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
12.3.6	Least concern	B	0.95	Melaleuca quinquenervia +/- Eucalyptus tereticornis, Lophostemon suaveolens, Corymbia intermedia open forest on coastal alluvial plains	Mid-dense
non-rem	None	X	14.63	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

Label	Scientific Name	Common Name	NCA Status	Vegetation Community	Altitude	Soils	Position in Landscape
686	Crinia tinnula	wallum froglet	V	Vegetation community is a mandatory essential habitat factor for this species. Permanent to ephemeral acidic (pH 4.3 - 5.2), soft freshwater in Melaleuca (e.g. M. quinquenervia) swamps, sedgeland, wet and dry heathland (e.g. Banksia robur, Xanthorrhoea) and wallum (Banksia aemula shrubland/woodland) areas coastal lowlands on sand or sandstone, occasionally in adjacent open forest/woodland (e.g. Eucalyptus racemosa, Corymbia citriodora) with heathy understorey; known to persist in small remnants (<10ha); may be found well away from water.	Sea level to 150m.	Sandy and sandy-alluvial substrates.	None
860	Phascolarctos cinereus	koala	E	Open forests and woodlands containing Eucalyptus, Corymbia, Lophostemon or Melaleuca trees having a trunk of a diameter of more than 10cm at 1.3m above the ground. Tree species used for food and habitat varies across the state and can include: Corymbia citriodora, Corymbia henryi, Corymbia intermedia, Eucalyptus acmenoides, Eucalyptus bancroftii, Eucalyptus biturbinata, Eucalyptus blakelyi, Eucalyptus brownii, Eucalyptus camaldulensis, Eucalyptus carnea, Eucalyptus chloroclada, Eucalyptus coolabah, Eucalyptus crebra, Eucalyptus dealbata, Eucalyptus drepanophylla, Eucalyptus dunni, Eucalyptus eugenioides, Eucalyptus exserta, Eucalyptus fibrosa, Eucalyptus grandis, Eucalyptus helidonica, Eucalyptus latisinensis, Eucalyptus longirostrata, Eucalyptus major, Eucalyptus melanophloia, Eucalyptus melliodora, Eucalyptus microcarpa, Eucalyptus microcorys, Eucalyptus microtheca, Eucalyptus moluccana, Eucalyptus montivaga, Eucalyptus orgadophila, Eucalyptus papuana, Eucalyptus pilularis, Eucalyptus platyphylla, Eucalyptus populnea, Eucalyptus portuensis, Eucalyptus propinqua, Eucalyptus racemosa, Eucalyptus resinifera, Eucalyptus robusta, Eucalyptus saligna, Eucalyptus seeana, Eucalyptus siderophloia, Eucalyptus sideroxylon, Eucalyptus tereticornis, Eucalyptus thozetiana, Eucalyptus tindaliae, Eucalyptus umbra, Lophostemon confertus, Melaleuca leucadendra, Melaleuca quinquenervia.	Sea level to 1000m.	None	Riparian areas, plains and hill/escarpment slopes.

Label	Regional Ecosystem (mandatory unless otherwise specified)
686	12.2.5, 12.2.7, 12.2.9, 12.2.10, 12.2.12, 12.2.15, 12.3.4, 12.3.5, 12.3.6, 12.3.12, 12.3.14, 12.3.20, 12.5.2, 12.5.10. These regional ecosystems are not a mandatory essential habitat factor for this species.

Label	Regional Ecosystem (mandatory unless otherwise specified)
860	4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.8, 4.3.10, 4.3.11, 4.5.3, 4.5.5, 4.5.6, 4.5.8, 4.5.9, 4.7.1, 4.7.7, 4.7.8, 4.9.6, 4.9.10, 4.9.12, 4.9.17, 6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.8, 6.3.9, 6.3.11, 6.3.12, 6.3.17, 6.3.18, 6.3.22, 6.3.24, 6.3.25, 6.4.1, 6.4.2, 6.4.3, 6.4.4, 6.5.1, 6.5.2, 6.5.3, 6.5.5, 6.5.6, 6.5.7, 6.5.8, 6.5.9, 6.5.10, 6.5.11, 6.5.13, 6.5.14, 6.5.15, 6.5.16, 6.5.17, 6.5.18, 6.5.19, 6.6.2, 6.7.1, 6.7.2, 6.7.5, 6.7.6, 6.7.7, 6.7.9, 6.7.11, 6.7.12, 6.7.13, 6.7.14, 6.7.17, 6.9.3, 7.2.3, 7.2.4, 7.2.7, 7.2.11, 7.3.7, 7.3.8, 7.3.9, 7.3.12, 7.3.13, 7.3.14, 7.3.16, 7.3.19, 7.3.20, 7.3.21, 7.3.25, 7.3.26, 7.3.39, 7.3.40, 7.3.42, 7.3.43, 7.3.44, 7.3.45, 7.3.47, 7.3.48, 7.3.50, 7.5.1, 7.5.2, 7.5.3, 7.5.4, 7.8.7, 7.8.8, 7.8.10, 7.8.15, 7.8.16, 7.8.17, 7.8.18, 7.8.19, 7.11.5, 7.11.6, 7.11.13, 7.11.14, 7.11.16, 7.11.18, 7.11.19, 7.11.20, 7.11.21, 7.11.31, 7.11.32, 7.11.33, 7.11.34, 7.11.35, 7.11.37, 7.11.41, 7.11.42, 7.11.43, 7.11.44, 7.11.45, 7.11.46, 7.11.47, 7.11.48, 7.11.49, 7.11.50, 7.11.51, 7.12.4, 7.12.5, 7.12.17, 7.12.21, 7.12.22, 7.12.23, 7.12.24, 7.12.25, 7.12.26, 7.12.27, 7.12.28, 7.12.29, 7.12.30, 7.12.33, 7.12.34, 7.12.35, 7.12.51, 7.12.52, 7.12.53, 7.12.54, 7.12.55, 7.12.56, 7.12.57, 7.12.58, 7.12.59, 7.12.60, 7.12.61, 7.12.62, 7.12.63, 7.12.65, 7.12.66, 7.12.69, 8.1.5, 8.2.3, 8.2.6, 8.2.7, 8.2.8, 8.2.11, 8.2.12, 8.2.13, 8.2.14, 8.3.1, 8.3.2, 8.3.3, 8.3.5, 8.3.6, 8.3.8, 8.3.10, 8.3.11, 8.3.13, 8.5.1, 8.5.2, 8.5.3, 8.5.5, 8.5.6, 8.5.7, 8.9.1, 8.10.1, 8.11.1, 8.11.3, 8.11.4, 8.11.5, 8.11.6, 8.11.8, 8.11.10, 8.11.12, 8.12.4, 8.12.5, 8.12.6, 8.12.7, 8.12.8, 8.12.9, 8.12.12, 8.12.14, 8.12.20, 8.12.22, 8.12.23, 8.12.25, 8.12.26, 8.12.27, 8.12.29, 8.12.31, 8.12.32, 9.3.1, 9.3.2, 9.3.3, 9.3.4, 9.3.5, 9.3.6, 9.3.7, 9.3.8, 9.3.10, 9.3.11, 9.3.13, 9.3.14, 9.3.15, 9.3.16, 9.3.17, 9.3.19, 9.3.20, 9.3.21, 9.3.22, 9.3.27, 9.4.1, 9.4.2, 9.5.1, 9.5.3, 9.5.4, 9.5.5, 9.5.6, 9.5.7, 9.5.8, 9.5.9, 9.5.10, 9.5.11, 9.5.12, 9.5.15, 9.5.16, 9.5.17, 9.7.1, 9.7.2, 9.7.3, 9.7.4, 9.7.5, 9.7.6, 9.8.1, 9.8.2, 9.8.3, 9.8.4, 9.8.5, 9.8.9, 9.8.10, 9.8.11, 9.8.13, 9.10.1, 9.10.3, 9.10.4, 9.10.5, 9.10.7, 9.10.8, 9.11.1, 9.11.2, 9.11.3, 9.11.4, 9.11.5, 9.11.7, 9.11.10, 9.11.12, 9.11.13, 9.11.14, 9.11.15, 9.11.16, 9.11.17, 9.11.18, 9.11.19, 9.11.21, 9.11.22, 9.11.23, 9.11.24, 9.11.25, 9.11.26, 9.11.28, 9.11.29, 9.11.30, 9.11.31, 9.11.32, 9.12.1, 9.12.2, 9.12.3, 9.12.4, 9.12.5, 9.12.6, 9.12.7, 9.12.10, 9.12.11, 9.12.12, 9.12.13, 9.12.14, 9.12.15, 9.12.16, 9.12.17, 9.12.18, 9.12.19, 9.12.20, 9.12.21, 9.12.22, 9.12.23, 9.12.24, 9.12.25, 9.12.26, 9.12.27, 9.12.28, 9.12.29, 9.12.30, 9.12.31, 9.12.32, 9.12.33, 9.12.35, 9.12.36, 9.12.37, 9.12.38, 9.12.39, 9.12.44, 10.3.2, 10.3.3, 10.3.4, 10.3.5, 10.3.6, 10.3.8, 10.3.9, 10.3.10, 10.3.11, 10.3.12, 10.3.13, 10.3.14, 10.3.15, 10.3.16, 10.3.17, 10.3.20, 10.3.22, 10.3.27, 10.3.28, 10.4.2, 10.4.3, 10.4.5, 10.4.8, 10.4.9, 10.5.1, 10.5.2, 10.5.4, 10.5.5, 10.5.7, 10.5.8, 10.5.9, 10.5.10, 10.5.11, 10.5.12, 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12.11.27, 12.11.28, 12.12.2, 12.12.3, 12.12.4, 12.12.5, 12.12.6, 12.12.7, 12.12.8, 12.12.9, 12.12.11, 12.12.12, 12.12.14, 12.12.15, 12.12.23, 12.12.24, 12.12.25, 12.12.28, 13.3.1, 13.3.2, 13.3.3, 13.3.4, 13.3.5, 13.3.7, 13.9.2, 13.11.1, 13.11.2, 13.11.3, 13.11.4, 13.11.5, 13.11.6, 13.11.8, 13.11.9, 13.12.1, 13.12.2, 13.12.3, 13.12.4, 13.12.5, 13.12.6, 13.12.8, 13.12.9, 13.12.10.

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?

No Class A

Class B (with urban areas masked as per SPP): 5.06ha

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: 23 Plan: SP325035.

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.

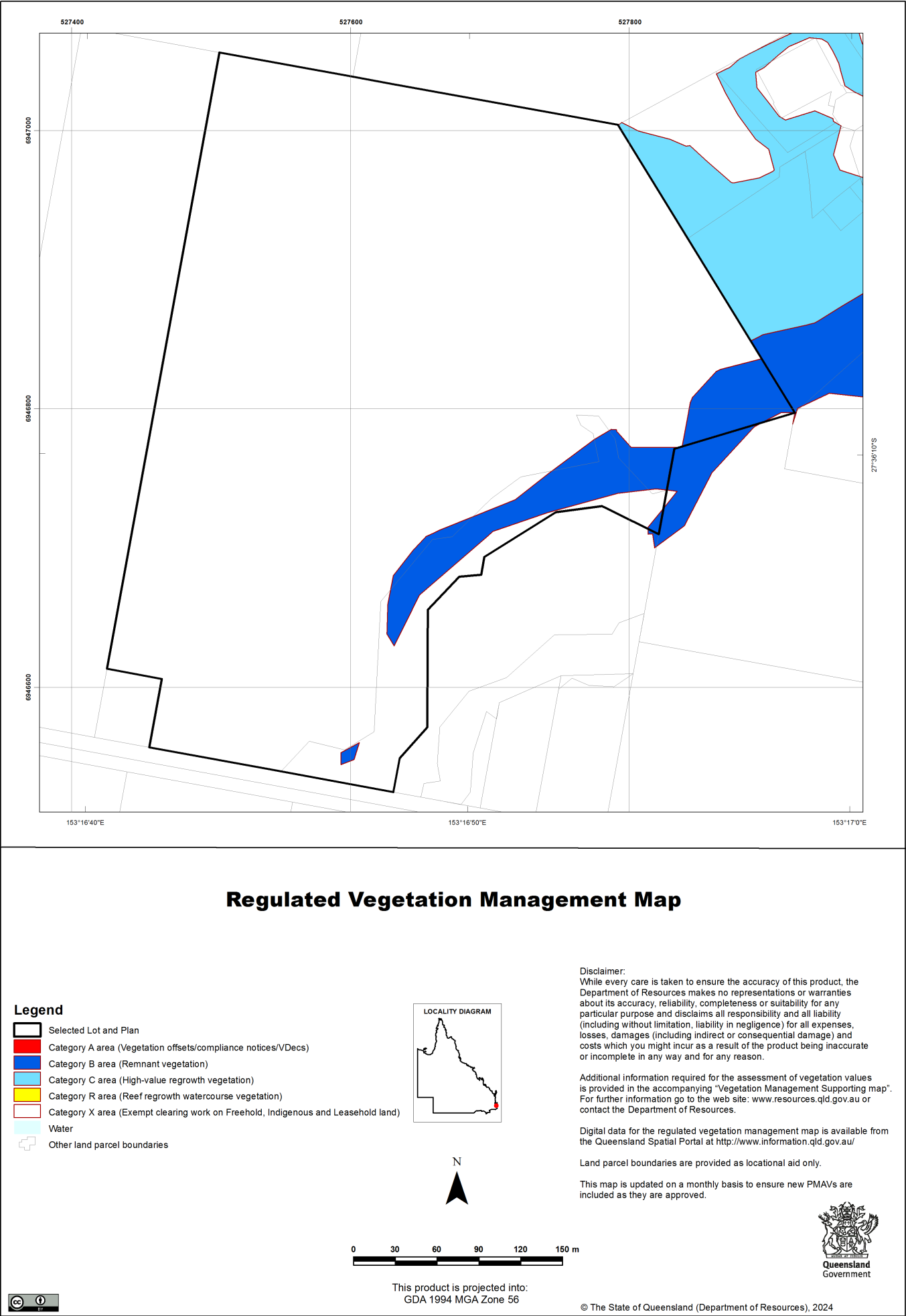
Coastal/non-coastal map

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).

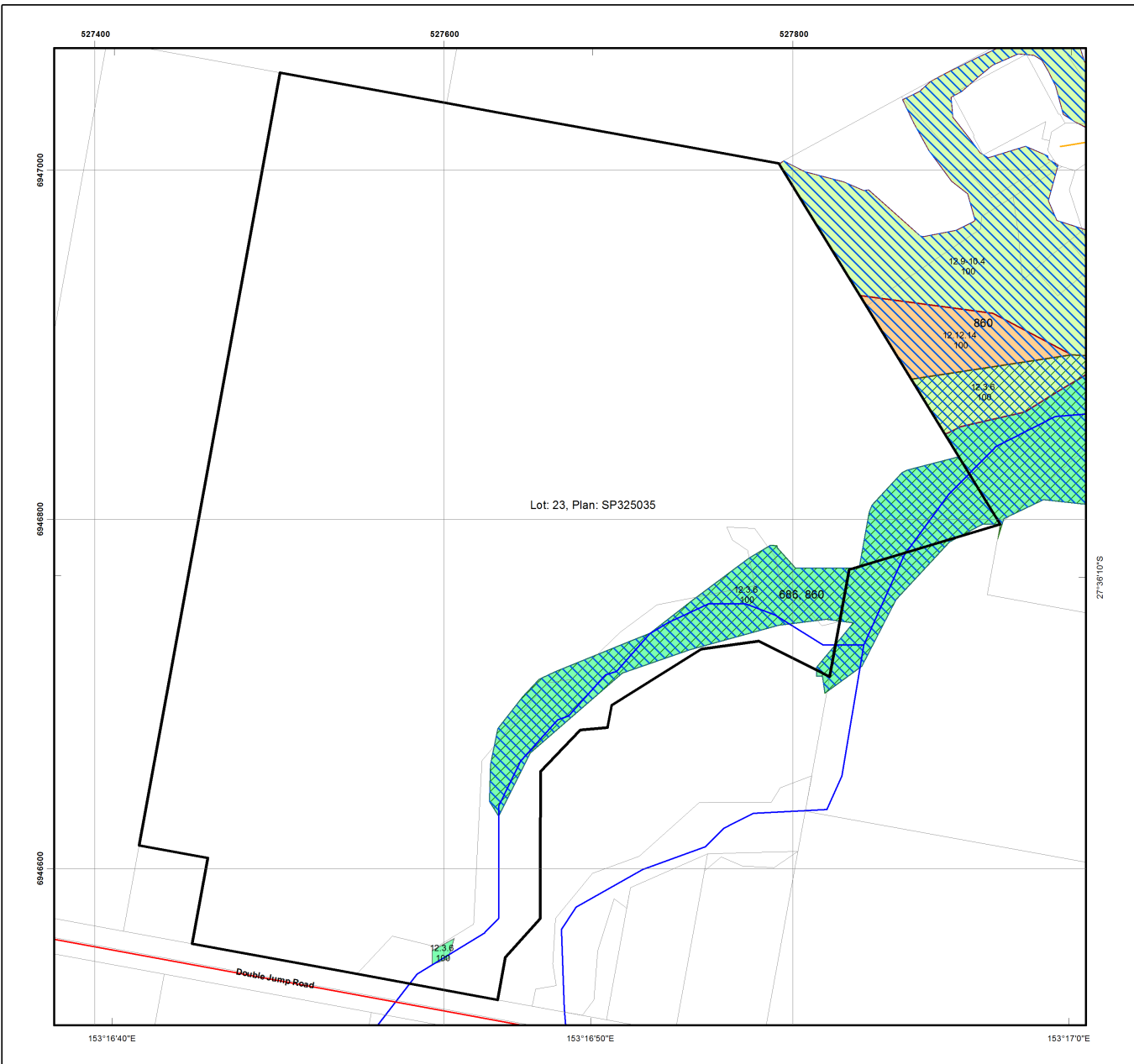
Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture

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



4.2 Vegetation management supporting map



Vegetation Management Supporting Map



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.

Disclaimer:

While every care is taken to ensure the accuracy of this product, the Department of Resources makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or incomplete in any way and for any reason.

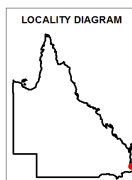
Additional information may be required for the purposes of land clearing or assessment of a regional ecosystem map or PMAV applications. For further information go to the web site: www.resources.qld.gov.au or contact the Department of Resources.

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.

Legend

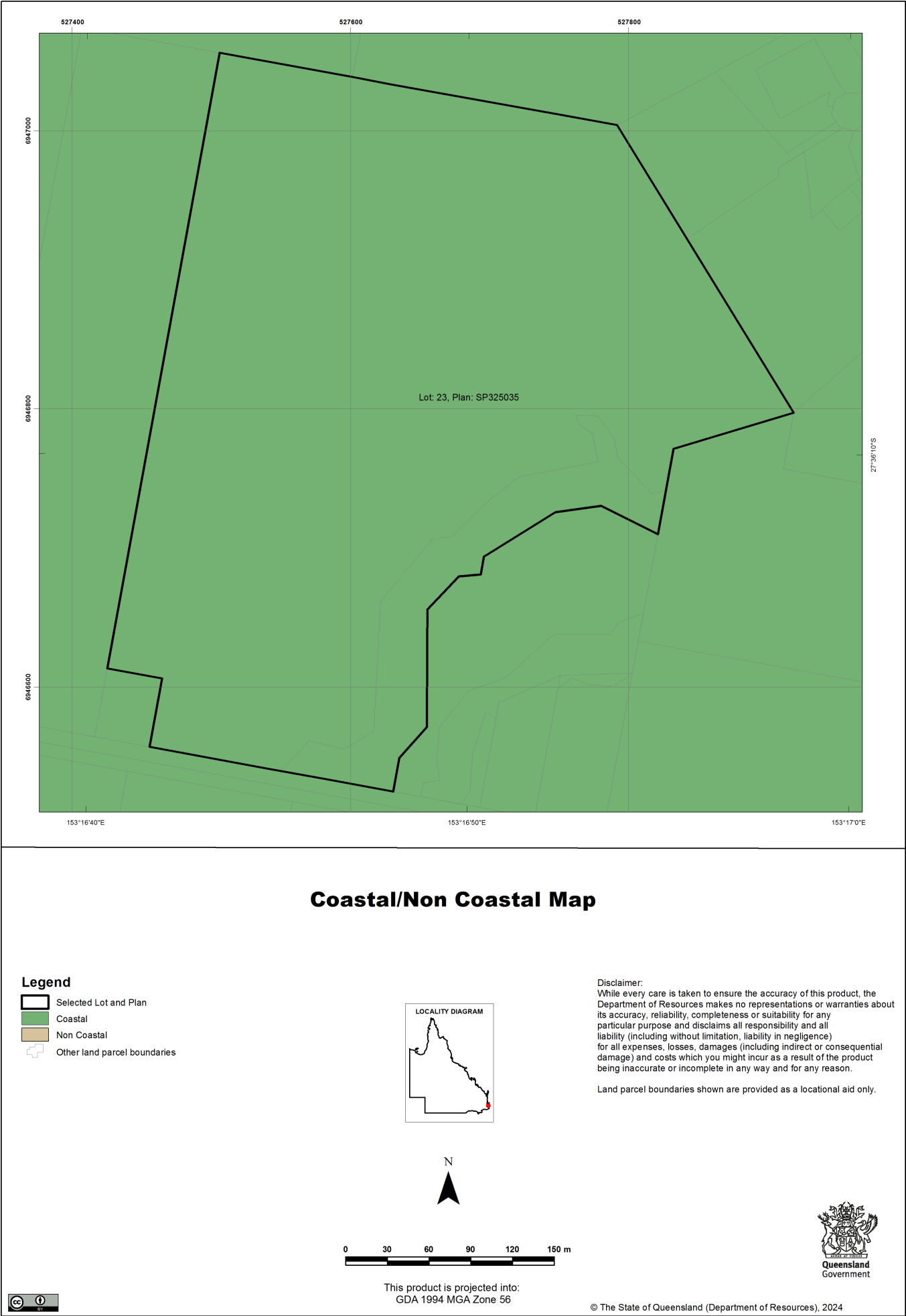
-
- Selected Lot and Plan
 Category A or B area containing endangered regional ecosystems
 Category A or B area containing of concern regional ecosystems
 Category A or B area that is a least concern regional ecosystem
 Category C or R area containing endangered regional ecosystems
 Category C or R area 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



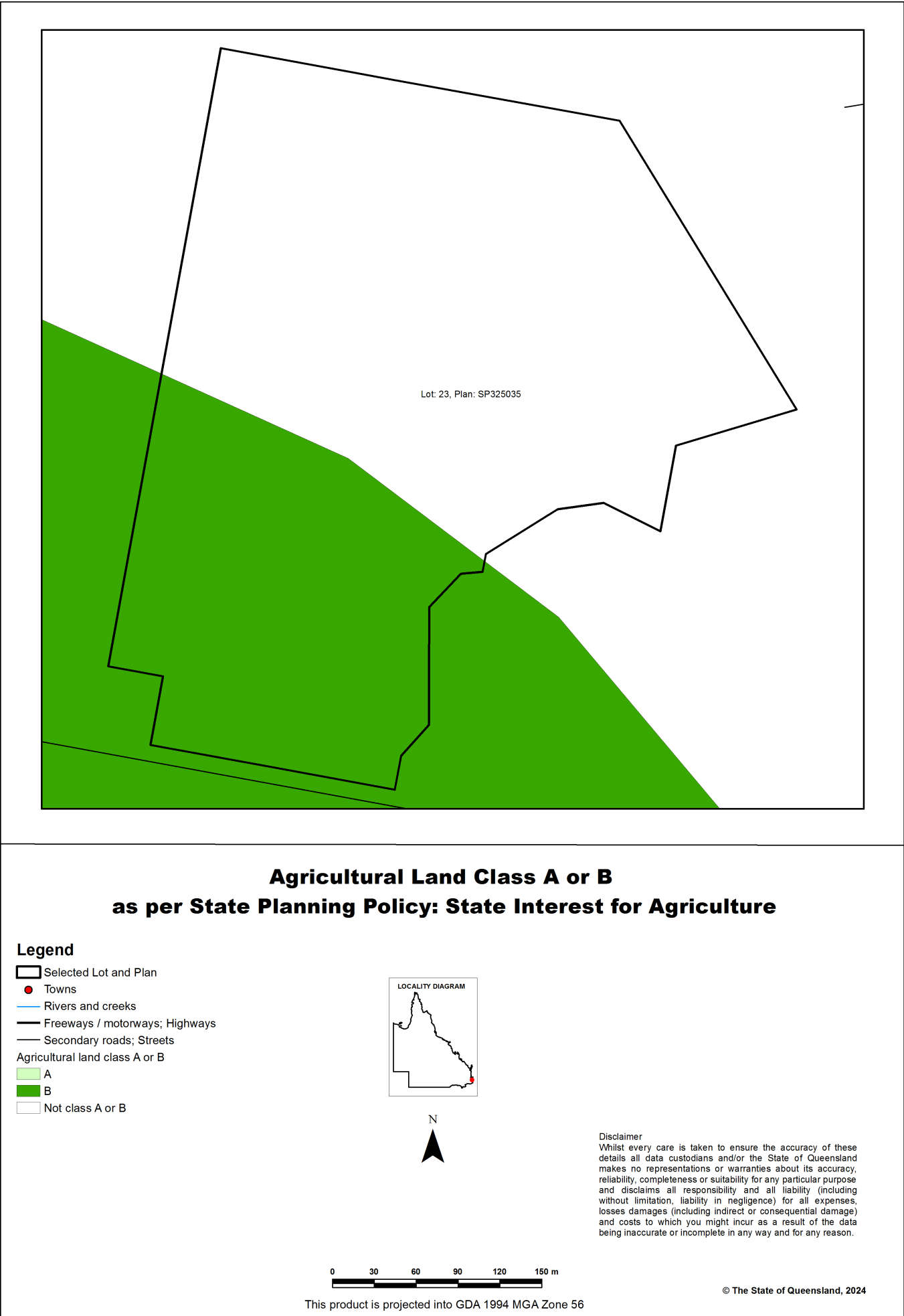
A horizontal scale bar with alternating black and white segments. Above the bar, numerical labels are placed at intervals of 20 units: 0, 20, 40, 60, 80, and 100 m.

This product is projected into:
GDA 1994 MGA Zone 56

4.3 Coastal/non-coastal map



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



5. Protected plants framework (administered by the Department of Environment and Science (DES))

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 a threatened or near threatened plant can be avoided, the clearing activity is exempt from a permit. An [exempt clearing notification form](#) must be submitted to the Department of Environment and Science, 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 plants are 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 DES

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

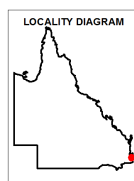
Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the [Queensland Spatial Catalogue](#), the Department of Environment and Science does not provide species information on request. 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 and Science webpage on the [clearing of protected plants](#) for more information.



Protected Plants Flora Survey Trigger Map

Legend

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



0 20 40 60 80 100 m

This product is projected into:
GDA 1994 MGA Zone 56

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 and Science 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.

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6. Koala protection framework (administered by the Department of Environment and Science (DES))

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 by 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 DES

For further information on the koala protection framework:

Phone 13 QGOV (13 74 68)

Email koala.assessment@des.qld.gov.au

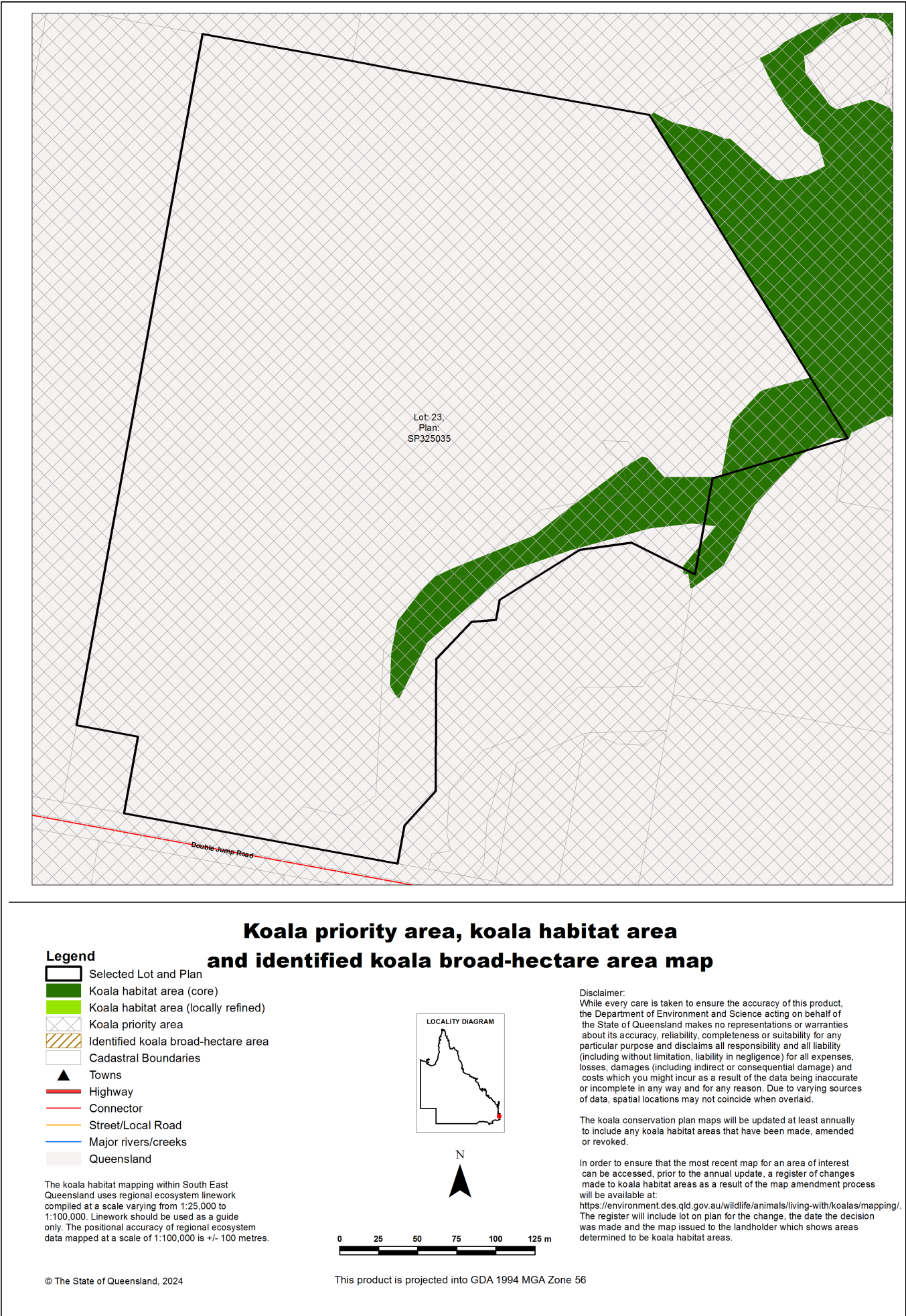
Visit <https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping>

7. Koala protection framework details for Lot: 23 Plan: SP325035

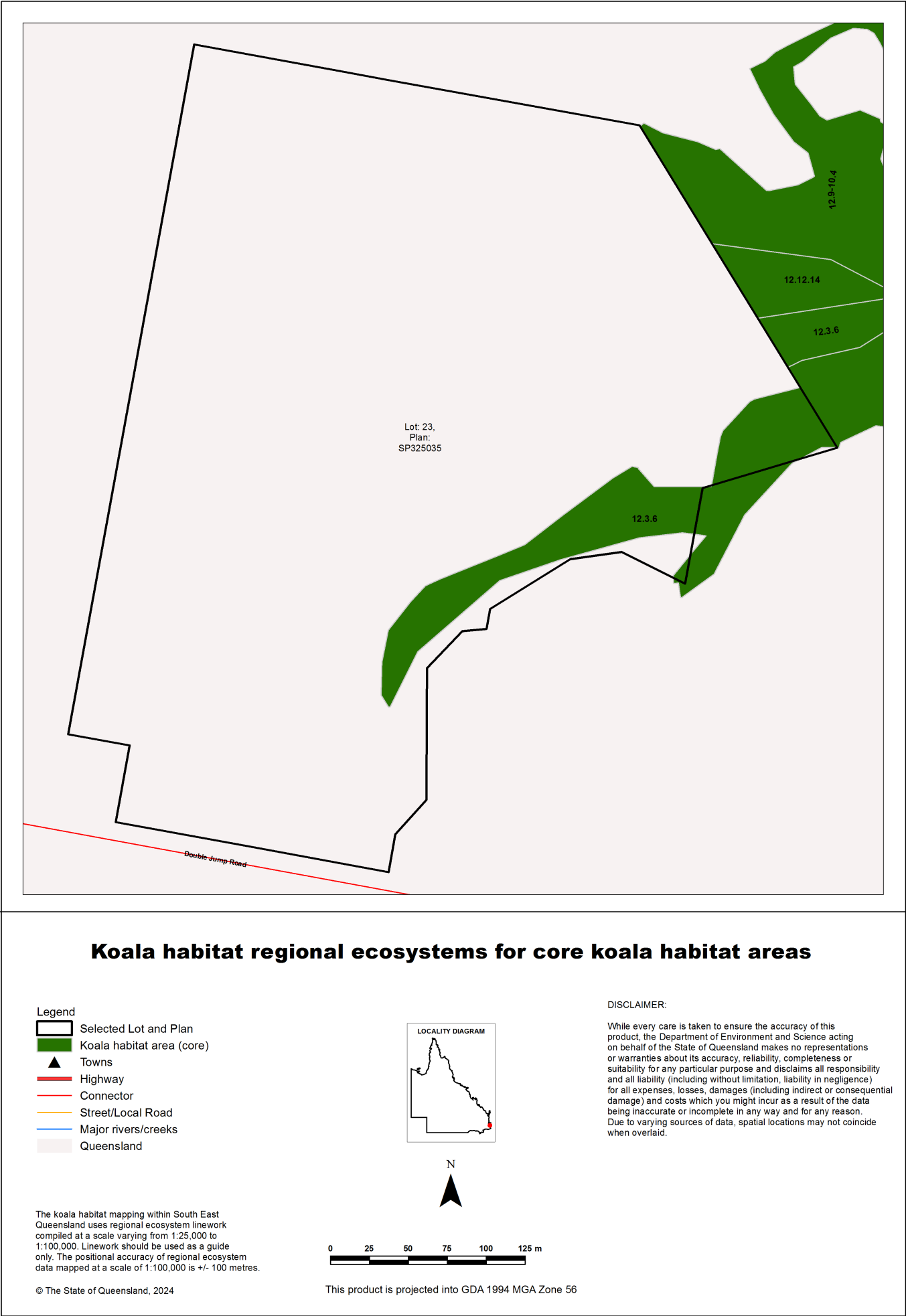
7.1 Koala districts

Koala District A

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



7.3 Koala habitat regional ecosystems for core koala habitat areas



8. Other relevant legislation contacts list

Activity	Legislation	Agency	Contact details
• Interference with overland flow • Earthworks, significant disturbance	<i>Water Act 2000</i> <i>Soil Conservation Act 1986</i>	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	<i>Aboriginal Cultural Heritage Act 2003</i> <i>Torres Strait Islander Cultural Heritage Act 2003</i>	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	<i>Environmental Protection Act 1994</i> <i>Coastal Protection and Management Act 1995</i> <i>Queensland Heritage Act 1992</i>	Department of Environment and Science (Queensland Government)	Ph: 13 QGOV (13 74 68) www.des.qld.gov.au
• Protected plants and protected areas	<i>Nature Conservation Act 1992</i>	Department of Environment and Science (Queensland Government)	Ph: 1300 130 372 (option 4) palm@des.qld.gov.au www.des.qld.gov.au
• Koala mapping and regulations	<i>Nature Conservation Act 1992</i>	Department of Environment and Science (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	<i>Fisheries Act 1994</i> <i>Forestry Act 1959</i>	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	<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Department of Agriculture, Water and the Environment (Australian Government)	Ph: 1800 803 772 www.environment.gov.au
• Development and planning processes	<i>Planning Act 2016</i> <i>State Development and Public Works Organisation Act 1971</i>	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	<i>Local Government Act 2009</i> <i>Planning Act 2016</i>	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	<i>Wet Tropics World Heritage Protection and Management Act 1993</i>	Wet Tropics Management Authority	Ph: (07) 4241 0500 www.wettropics.gov.au

Attachment 14
EAR Attachment 3
PMST



Australian Government

Department of Climate Change, Energy,
the Environment and Water

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: 13-Feb-2024

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	5
Listed Threatened Species:	91
Listed Migratory Species:	64

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:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	94
Whales and Other Cetaceans:	13
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:	1
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	18
Key Ecological Features (Marine):	None
Biologically Important Areas:	6
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands)		[Resource Information]
Ramsar Site Name	Proximity	Buffer Status
Moreton bay	Within Ramsar site	In feature area

Listed Threatened Ecological Communities	[Resource Information]
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For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community likely to occur within area	In feature area
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community likely to occur within area	In feature area
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occur within area	In feature area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area	In buffer area only
Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions	Endangered	Community likely to occur within area	In feature area

Listed Threatened Species	[Resource Information]
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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			
Anthochaera phrygia			
Regent Honeyeater [82338]	Critically Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat 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 feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area	In feature area
Cyclopsitta diophthalma coxeni Coxen's Fig-Parrot [59714]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Erythroriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat likely to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
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
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat may occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat may occur within area	In feature area
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may 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
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pterodroma neglecta neglecta Kermadec Petrel (western) [64450]	Vulnerable	Foraging, feeding or related behaviour may 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
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat may occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area
Turnix melanogaster Black-breasted Button-quail [923]	Vulnerable	Species or species habitat may occur within area	In feature area
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
FISH			
Epinephelus daemeli Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only
FROG			
Litoria olongburensis Wallum Sedge Frog [1821]	Vulnerable	Species or species habitat may occur within area	In feature area
INSECT			
Argynnis hyperbius inconstans Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat may occur within area	In feature area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat likely to occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Macroderma gigas Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In feature area
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat likely to occur within area	In feature area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
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 feature area
Potorous tridactylus tridactylus			
Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat may occur within area	In feature area
Pteropus poliocephalus			
Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
Xeromys myoides			
Water Mouse, False Water Rat, Yirrkoo [66]	Vulnerable	Species or species habitat known to occur within area	In feature area
PLANT			
Acronychia littoralis			
Scented Acronychia [8582]	Endangered	Species or species habitat may occur within area	In feature area
Arthraxon hispidus			
Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Baloghia marmorata			
Marbled Balogia, Jointed Baloghia [8463]	Vulnerable	Species or species habitat may occur within area	In feature area
Bosistoa transversa			
Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Corchorus cunninghamii			
Native Jute [14659]	Endangered	Species or species habitat likely to occur within area	In feature area
Cryptocarya foetida			
Stinking Cryptocarya, Stinking Laurel [11976]	Vulnerable	Species or species habitat may occur within area	In feature area
Cryptostylis hunteriana			
Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Cupaniopsis shirleyana Wedge-leaf Tuckeroo [3205]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Endiandra floydii Floyd's Walnut, Crystal Creek Walnut [52955]	Endangered	Species or species habitat likely to occur within area	In feature area
Macadamia integrifolia Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Macadamia tetraphylla Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia, Rough-leaved Queensland Nut [6581]	Vulnerable	Species or species habitat may occur within area	In feature area
Notelaea lloydii Lloyd's Olive [15002]	Vulnerable	Species or species habitat may occur within area	In feature area
Phaius australis Lesser Swamp-orchid [5872]	Endangered	Species or species habitat likely to occur within area	In feature area
Planchonella eerwah Shiny-leaved Condoo, Black Plum, Wild Apple [17340]	Endangered	Species or species habitat likely to occur within area	In feature area
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area	In feature area

REPTILE

Scientific Name	Threatened Category	Presence Text	Buffer Status
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Coeranoscincus reticulatus Three-toed Snake-tooth Skink [59628]	Vulnerable	Species or species habitat may occur within area	In feature area
Delma torquata Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Hemiaspis damelii Grey Snake [1179]	Endangered	Species or species habitat may occur within area	In feature area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
SHARK			
Carcharias taurus (east coast population) Grey Nurse Shark (east coast population) [68751]	Critically Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Breeding may 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 likely 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 likely to occur within area	In buffer area only
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardeenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area	In buffer area only
Ardeenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may 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
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Migratory Marine Species

Scientific Name	Threatened Category	Presence Text	Buffer Status
Balaenoptera edeni Bryde's Whale [35]	Endangered	Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]		Species or species habitat may occur within area	In buffer area only
Carcharhinus longimanus Oceanic Whitetip Shark [84108]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]		Species or species habitat known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Dugong dugon Dugong [28]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]		Species or species habitat known to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Species or species habitat likely 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known 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 may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]		Species or species habitat may 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 zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Breeding may 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 sahalensis 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known 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 likely 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	Species or species habitat likely to occur within area	In buffer area only
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat 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 feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	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
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat may occur within area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius phaeopus Whimbrel [849]		Species or species habitat likely to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In feature area
Pluvialis fulva Pacific Golden Plover [25545]		Species or species habitat likely to occur within area	In buffer area only
Tringa brevipes Grey-tailed Tattler [851]		Species or species habitat likely to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only

Other Matters Protected by the EPBC Act

Listed Marine Species	[Resource Information]		
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
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 likely 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
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area	In buffer area only
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
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	Species or species habitat 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 feature area
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
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea antipodensis gibsoni as Diomedea gibsoni Gibson's Albatross [82270]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within 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
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
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely 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 feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may 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
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius phaeopus Whimbrel [849]		Species or species habitat likely to occur within area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In feature area
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Species or species habitat likely to occur within area	In buffer area only
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
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 striata White-fronted Tern [799]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Sternula albifrons as Sterna albifrons Little Tern [82849]		Species or species habitat may occur within area	In buffer area only
Symposiachrus trivirgatus as Monarcha trivirgatus Spectacled Monarch [83946]		Species or species habitat likely to occur within area overfly marine area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Tringa brevipes as Heteroscelus brevipes Grey-tailed Tattler [851]		Species or species habitat likely to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Species or species habitat likely 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
Campichthys tryoni Tryon's Pipefish [66193]		Species or species habitat may occur within area	In buffer area only
Corythoichthys amplexus Fijian Banded Pipefish, Brown-banded Pipefish [66199]		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
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area	In buffer area only
Filicampus tigris Tiger Pipefish [66217]		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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hippichthys cyanospilos Blue-speckled Pipefish, Blue-spotted Pipefish [66228]	Endangered	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
Hippocampus kelloggi Kellogg's Seahorse, Great Seahorse [66723]		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 trimaculatus Three-spot Seahorse, Low-crowned Seahorse, Flat-faced Seahorse [66720]		Species or species habitat may occur within area	In buffer area only
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]		Species or species habitat likely to occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Micrognathus brevirostris thorntail Pipefish, Thorn-tailed Pipefish [66254]		Species or species habitat may occur within area	In buffer area only
Microphis manadensis Manado Pipefish, Manado River Pipefish [66258]		Species or species habitat may occur within area	In buffer area only
Solegnathus dunckeri Duncker's Pipehorse [66271]		Species or species habitat may occur within area	In buffer area only
Solegnathus hardwickii Pallid Pipehorse, Hardwick's Pipehorse [66272]		Species or species habitat may occur within area	In buffer area only
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		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
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		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
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		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 laevis Olive Sea Snake, Olive-brown Sea Snake [1120]		Species or species habitat may occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat 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 platurus as Pelamis platurus Yellow-bellied Sea Snake [93517]		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
Laticauda laticaudata a sea krait [1093]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour 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]	Endangered	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]		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
Eubalaena australis Southern Right Whale [40]		Species or species habitat likely to occur within area	In buffer area only
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 may occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
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
Moreton Bay	Marine Park	QLD	In buffer area only

Nationally Important Wetlands			[Resource Information]
Wetland Name		State	Buffer Status
Moreton Bay		QLD	In buffer area only

EPBC Act Referrals					[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status	
Redlands Coast Regional Sport and Recreation Precinct	2022/09420		Assessment	In buffer area only	

Not controlled action				
Clay Gully Road residential development, Victoria Point, QLD	2017/7984	Not Controlled Action	Completed	In feature area
Clearance of approx 152ha of open forest vegetation for residential development at Mt Cotton Villag	2004/1592	Not Controlled Action	Completed	In feature area
Development of Leisure Life Retirement Community	2004/1746	Not Controlled Action	Completed	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Eddie Santagiuliana Way Boardwalk	2005/2049	Not Controlled Action	Completed	In buffer area only
Eprapah Heights Bushland Residential Subdivision	2001/286	Not Controlled Action	Completed	In feature area
establishment of a car wash and service station facility on Lot 12 RP 57455	2005/2077	Not Controlled Action	Completed	In feature area
Extension of existing hard rock quarry	2004/1713	Not Controlled Action	Completed	In buffer area only
GCCC Northern Wastewater Strategy and associated Reclaimed Water Scheme - Stage	2001/282	Not Controlled Action	Completed	In buffer area only
Gordon Road Residential Development	2002/854	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Integrated Employment and Residential Community	2007/3449	Not Controlled Action	Completed	In buffer area only
Prawn Aquaculture Enterprise Expansion	2001/294	Not Controlled Action	Completed	In feature area
Residential estate Bunker Rd	2005/2130	Not Controlled Action	Completed	In feature area
Residential subdivision, Redland Bay Road	2002/739	Not Controlled Action	Completed	In feature area
Urban Subdivision	2001/493	Not Controlled Action	Completed	In buffer area only
works within the Black Swamp	2005/2334	Not Controlled Action	Completed	In feature area
Referral decision				
Breeding program for Grey Nurse Sharks	2007/3245	Referral Decision	Completed	In buffer area only
Biologically Important Areas				
Scientific Name		Behaviour	Presence	Buffer Status
Dolphins				
Sousa chinensis				
Indo-Pacific Humpback Dolphin [50]		Breeding	Known to occur	In buffer area only

Scientific Name		Behaviour	Presence	Buffer Status
Tursiops aduncus				
Indo-Pacific/Spotted Bottlenose Dolphin [68418]		Breeding	Known to occur	In buffer area only
Marine Turtles				
Caretta caretta				
Loggerhead Turtle [1763]		Nesting	Known to occur	In buffer area only
Chelonia mydas				
Green Turtle [1765]		Foraging	Known to occur	In buffer area only
Sharks				
Carcharias taurus				
Grey Nurse Shark [64469]		Foraging	Known to occur	In buffer area only
Whales				
Megaptera novaeangliae				
Humpback Whale [38]		Resting on migration (southbound)	Known to occur	In buffer area only
Bioregional Assessments				
SubRegion	BioRegion	Website		Buffer Status
Clarence-Moreton	Clarence-Moreton	BA website		In feature area

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

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

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-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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Department of Climate Change, Energy, the Environment and Water

GPO Box 3090

Canberra ACT 2601 Australia

+61 2 6274 1111

WildNet Records Species List

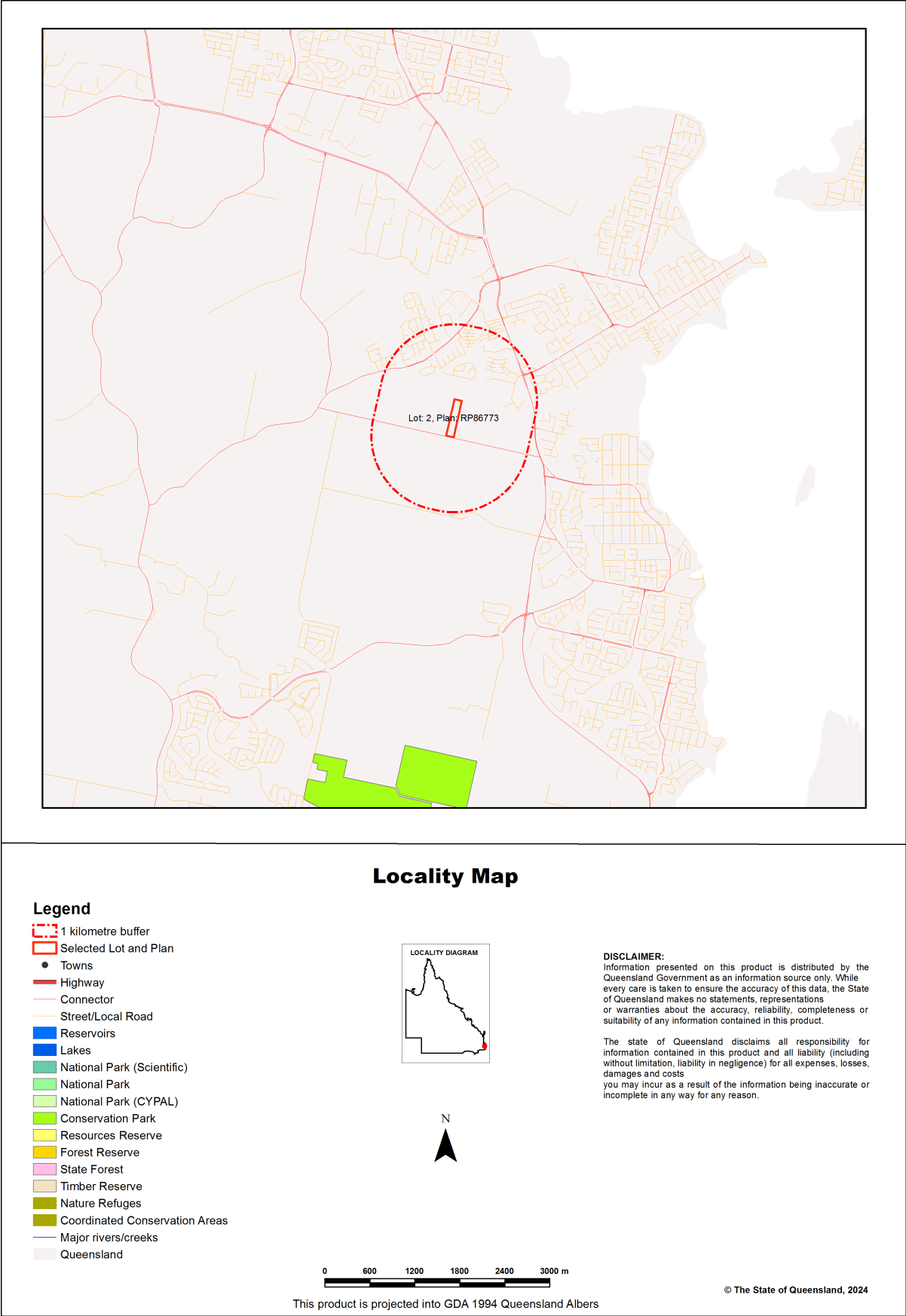


For the selected area of interest 5.03ha Lot: 2 Plan: RP86773

Current as at 13/02/2024

WildNetSpeciesList

Map 1. Locality Map



Summary Information

The following table provides an overview of the area of interest Lot: 2 Plan: RP86773.

Table 1. Area of interest details

Size (ha)	5.03
Local Government(s)	Redland City
Bioregion(s)	Southeast Queensland
Subregion(s)	Sunshine Coast - Gold Coast Lowlands, Burringbar - Conondale Ranges
Catchment(s)	Logan-Albert

Protected Area(s)

No estates or reserves are located within the area of interest.

World Heritage Area(s)

No World Heritage Areas are located within the area of interest.

Ramsar Area(s)

No Ramsar Areas are located within the area of interest.

Species List

Introduction

This report is derived from a spatial layer generated from the [WildNet database](#) managed by the Department of Environment and Science. The layer which is generated weekly contains the WildNet wildlife records that are not classed as erroneous or duplicate, that have a location precision equal to or less than 10000 metres and do not have a count of zero.

The WildNet dataset is constantly being enhanced and the taxonomic and status information revised. If a species is not listed in this report, it does not mean it doesn't occur there and listed species may also no longer inhabit the area. It is recommended that you also access other internal and external data sources for species information in your area of interest (Refer Links and Support).

Table 2 lists the animals recorded within the area of interest and its one kilometre buffer.

Table 3 lists the plants recorded within the area of interest and its one kilometre buffer.

Table 4 lists the fungi recorded within the area of interest and its one kilometre buffer.

Table 5 lists the other species recorded within the area of interest and its one kilometre buffer.

Table 2. Animals recorded within the area of interest and its one kilometre buffer

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
27055	Actinopterygii	Poeciliidae	Gambusia holbrooki	mosquitofish	None	None	0	1	31/01/1989
716	Amphibia	Bufo	Rhinella marina	cane toad	None	None	0	2	24/09/2004
608	Amphibia	Hylidae	Litoria fallax	eastern sedgefrog	C	None	0	1	24/09/2004
681	Amphibia	Limnodynastidae	Limnodynastes peronii	striped marshfrog	C	None	0	2	24/09/2004
661	Amphibia	Myobatrachidae	Pseudophryne raveni	copper backed broodfrog	C	None	0	2	24/09/2004
1419	Aves	Acanthizidae	Acanthiza chrysorrhoa	yellow-rumped thornbill	C	None	0	1	14/08/1956
1421	Aves	Acanthizidae	Acanthiza lineata	striated thornbill	C	None	0	3	24/09/2004

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
1423	Aves	Acanthizidae	<i>Acanthiza pusilla</i>	brown thornbill	C	None	0	4	24/09/2004
1396	Aves	Acanthizidae	<i>Gerygone olivacea</i>	white-throated gerygone	C	None	0	4	24/09/2004
1382	Aves	Acanthizidae	<i>Sericornis frontalis</i>	white-browed scrubwren	C	None	0	3	24/09/2004
1371	Aves	Acanthizidae	<i>Smicronis brevirostris</i>	weebill	C	None	0	2	24/09/2004
1729	Aves	Accipitridae	<i>Accipiter fasciatus</i>	brown goshawk	C	None	0	3	24/09/2004
1721	Aves	Accipitridae	<i>Aviceda subcristata</i>	Pacific baza	C	None	0	2	24/09/2004
1718	Aves	Accipitridae	<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle	C	None	0	2	24/09/2004
1707	Aves	Accipitridae	<i>Haliastur sphenurus</i>	whistling kite	C	None	0	3	24/09/2004
1767	Aves	Alcedinidae	<i>Dacelo novaeguineae</i>	laughing kookaburra	C	None	0	4	24/09/2004
1760	Aves	Alcedinidae	<i>Todiramphus macleayii</i>	forest kingfisher	C	None	0	1	14/08/1956
1762	Aves	Alcedinidae	<i>Todiramphus sanctus</i>	sacred kingfisher	C	None	0	3	24/09/2004
1994	Aves	Anatidae	<i>Anas platyrhynchos</i>	northern mallard	None	None	0	1	24/09/2004
1998	Aves	Anatidae	<i>Anas superciliosa</i>	Pacific black duck	C	None	0	3	24/09/2004
2003	Aves	Anatidae	<i>Chenonetta jubata</i>	Australian wood duck	C	None	0	3	24/09/2004
1279	Aves	Anhingidae	<i>Anhinga novaehollandiae</i>	Australasian darter	C	None	0	2	24/09/2004
1971	Aves	Apodidae	<i>Hirundapus caudacutus</i>	white-throated needletail	V	V	0	2	24/09/2004
1830	Aves	Ardeidae	<i>Bubulcus ibis</i>	cattle egret	C	None	0	3	24/09/2004
1840	Aves	Ardeidae	<i>Egretta garzetta</i>	little egret	C	None	0	2	24/09/2004
1826	Aves	Ardeidae	<i>Egretta novaehollandiae</i>	white-faced heron	C	None	0	2	24/09/2004
1660	Aves	Artamidae	<i>Artamus leucorhynchus</i>	white-breasted woodswallow	C	None	0	2	24/09/2004
1654	Aves	Artamidae	<i>Cracticus nigrogularis</i>	pied butcherbird	C	None	0	4	24/09/2004
1656	Aves	Artamidae	<i>Cracticus torquatus</i>	grey butcherbird	C	None	0	4	24/09/2004
1644	Aves	Artamidae	<i>Gymnorhina tibicen</i>	Australian magpie	C	None	0	4	24/09/2004
1191	Aves	Cacatuidae	<i>Cacatua galerita</i>	sulphur-crested cockatoo	C	None	0	2	24/09/2004
1194	Aves	Cacatuidae	<i>Cacatua sanguinea</i>	little corella	C	None	0	2	24/09/2004
1193	Aves	Cacatuidae	<i>Eolophus roseicapilla</i>	galah	C	None	0	3	24/09/2004

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
1636	Aves	Campephagidae	<i>Coracina novae hollandiae</i>	black-faced cuckoo-shrike	C	None	0	4	24/09/2004
1640	Aves	Campephagidae	<i>Lalage leucomela</i>	varied triller	C	None	0	2	24/09/2004
1933	Aves	Charadriidae	<i>Vanellus miles novaehollandiae</i>	masked lapwing (southern subspecies)	C	None	0	1	14/08/1956
1294	Aves	Cisticolidae	<i>Cisticola exilis</i>	golden-headed cisticola	C	None	0	3	24/09/2004
1617	Aves	Climacteridae	<i>Cormobates leucophaea</i>	white-throated treecreeper	C	None	0	1	21/08/2004
18293	Aves	Climacteridae	<i>Cormobates leucophaea metastasis</i>	white-throated treecreeper (southern)	C	None	0	3	24/09/2004
1804	Aves	Columbidae	<i>Columba livia</i>	rock dove	None	None	0	2	24/09/2004
1810	Aves	Columbidae	<i>Geopelia humeralis</i>	bar-shouldered dove	C	None	0	3	24/09/2004
18323	Aves	Columbidae	<i>Geopelia placida</i>	peaceful dove	C	None	0	4	24/09/2004
1774	Aves	Columbidae	<i>Spilopelia chinensis</i>	spotted dove	None	None	0	3	24/09/2004
1609	Aves	Corvidae	<i>Corvus orru</i>	Torresian crow	C	None	0	4	24/09/2004
1754	Aves	Cuculidae	<i>Cacomantis flabelliformis</i>	fan-tailed cuckoo	C	None	0	2	24/09/2004
1745	Aves	Cuculidae	<i>Chalcites lucidus</i>	shining bronze-cuckoo	C	None	0	3	24/09/2004
1611	Aves	Dicaeidae	<i>Dicaeum hirundinaceum</i>	mistletoebird	C	None	0	3	24/09/2004
1601	Aves	Dicruridae	<i>Dicrurus bracteatus</i>	spangled drongo	C	None	0	2	24/09/2004
1366	Aves	Estrildidae	<i>Lonchura castaneothorax</i>	chestnut-breasted mannikin	C	None	0	2	24/09/2004
1367	Aves	Estrildidae	<i>Lonchura punctulata</i>	nutmeg mannikin	None	None	0	1	14/08/1956
1359	Aves	Estrildidae	<i>Neochmia temporalis</i>	red-browed finch	C	None	0	4	24/09/2004
1342	Aves	Estrildidae	<i>Taeniopygia bichenovii</i>	double-barred finch	C	None	0	3	24/09/2004
1572	Aves	Hirundinidae	<i>Hirundo neoxena</i>	welcome swallow	C	None	0	4	24/09/2004
1585	Aves	Hirundinidae	<i>Petrochelidon ariel</i>	fairy martin	C	None	0	2	24/09/2004
1573	Aves	Hirundinidae	<i>Petrochelidon nigricans</i>	tree martin	C	None	0	1	14/08/1956
18458	Aves	Maluridae	<i>Malurus lamberti</i>	variegated fairy-wren	C	None	0	3	24/09/2004
1558	Aves	Maluridae	<i>Malurus melanocephalus</i>	red-backed fairy-wren	C	None	0	4	24/09/2004
1523	Aves	Meliphagidae	<i>Caligavis chrysops</i>	yellow-faced honeyeater	C	None	0	3	24/09/2004
1539	Aves	Meliphagidae	<i>Entomyzon cyanotis</i>	blue-faced honeyeater	C	None	0	2	24/09/2004

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
1497	Aves	Meliphagidae	<i>Lichmera indistincta</i>	brown honeyeater	C	None	0	4	24/09/2004
1500	Aves	Meliphagidae	<i>Manorina melanocephala</i>	noisy miner	C	None	0	3	24/09/2004
1504	Aves	Meliphagidae	<i>Meliphaga lewinii</i>	Lewin's honeyeater	C	None	0	4	24/09/2004
1507	Aves	Meliphagidae	<i>Melithreptus albogularis</i>	white-throated honeyeater	C	None	0	4	24/09/2004
1489	Aves	Meliphagidae	<i>Myzomela sanguinolenta</i>	scarlet honeyeater	C	None	0	4	24/09/2004
1494	Aves	Meliphagidae	<i>Philemon corniculatus</i>	noisy friarbird	C	None	0	4	24/09/2004
1471	Aves	Meliphagidae	<i>Plectorhyncha lanceolata</i>	striped honeyeater	C	None	0	3	24/09/2004
1764	Aves	Meropidae	<i>Merops ornatus</i>	rainbow bee-eater	C	None	0	4	24/09/2004
1589	Aves	Monarchidae	<i>Grallina cyanoleuca</i>	magpie-lark	C	None	0	4	24/09/2004
1595	Aves	Monarchidae	<i>Monarcha melanopsis</i>	black-faced monarch	SL	None	0	2	24/09/2004
1586	Aves	Monarchidae	<i>Myiagra rubecula</i>	leaden flycatcher	C	None	0	3	24/09/2004
1455	Aves	Motacillidae	<i>Anthus novaeseelandiae</i>	Australasian pipit	C	None	0	2	24/09/2004
1453	Aves	Neosittidae	<i>Daphoenositta chrysoptera</i>	varied sittella	C	None	0	3	24/09/2004
1442	Aves	Oriolidae	<i>Oriolus sagittatus</i>	olive-backed oriole	C	None	0	4	24/09/2004
1444	Aves	Oriolidae	<i>Sphecotheres vieilloti</i>	Australasian figbird	C	None	0	3	24/09/2004
1449	Aves	Pachycephalidae	<i>Colluricincla harmonica</i>	grey shrike-thrush	C	None	0	4	24/09/2004
1436	Aves	Pachycephalidae	<i>Pachycephala pectoralis</i>	golden whistler	C	None	0	4	24/09/2004
1437	Aves	Pachycephalidae	<i>Pachycephala rufiventris</i>	rufous whistler	C	None	0	4	24/09/2004
1389	Aves	Pardalotidae	<i>Pardalotus punctatus</i>	spotted pardalote	C	None	0	1	14/08/1956
1392	Aves	Pardalotidae	<i>Pardalotus striatus</i>	striated pardalote	C	None	0	4	24/09/2004
1360	Aves	Passeridae	<i>Passer domesticus</i>	house sparrow	None	None	0	3	24/09/2004
1347	Aves	Petroicidae	<i>Eopsaltria australis</i>	eastern yellow robin	C	None	0	4	24/09/2004
1339	Aves	Petroicidae	<i>Microeca fascians</i>	jacky winter	C	None	0	1	14/08/1956
1332	Aves	Petroicidae	<i>Petroica rosea</i>	rose robin	C	None	0	3	24/09/2004
1261	Aves	Phalacrocoracidae	<i>Microcarbo melanoleucos</i>	little pied cormorant	C	None	0	2	24/09/2004
1687	Aves	Phasianidae	<i>Synoicus ypsilophorus</i>	brown quail	C	None	0	2	24/09/2004

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
1955	Aves	Podargidae	<i>Podargus strigoides</i>	tawny frogmouth	C	None	0	2	24/09/2004
1318	Aves	Pomatostomidae	<i>Pomatostomus temporalis</i>	grey-crowned babbler	C	None	0	1	14/08/1956
1147	Aves	Psittaculidae	<i>Parvipsitta pusilla</i>	little lorikeet	C	None	0	3	24/09/2004
1136	Aves	Psittaculidae	<i>Platycercus adscitus</i>	pale-headed rosella	C	None	0	2	21/08/2004
21976	Aves	Psittaculidae	<i>Platycercus adscitus paliceps</i>	pale-headed rosella (southern form)	C	None	0	2	24/09/2004
1124	Aves	Psittaculidae	<i>Trichoglossus chlorolepidotus</i>	scaly-breasted lorikeet	C	None	0	4	24/09/2004
1125	Aves	Psittaculidae	<i>Trichoglossus moluccanus</i>	rainbow lorikeet	C	None	0	4	24/09/2004
1623	Aves	Psophodidae	<i>Psophodes olivaceus</i>	eastern whipbird	C	None	0	4	24/09/2004
1673	Aves	Rallidae	<i>Gallinula tenebrosa</i>	dusky moorhen	C	None	0	2	24/09/2004
1575	Aves	Rhipiduridae	<i>Rhipidura albiscapa</i>	grey fantail	C	None	0	4	24/09/2004
1576	Aves	Rhipiduridae	<i>Rhipidura leucophrys</i>	willie wagtail	C	None	0	4	24/09/2004
1578	Aves	Rhipiduridae	<i>Rhipidura rufifrons</i>	rufous fantail	SL	None	0	3	24/09/2004
1314	Aves	Sturnidae	<i>Acridotheres tristis</i>	common myna	None	None	0	2	24/09/2004
1303	Aves	Sturnidae	<i>Sturnus vulgaris</i>	common starling	None	None	0	1	14/08/1956
1812	Aves	Threskiornithidae	<i>Threskiornis molucca</i>	Australian white ibis	C	None	0	3	24/09/2004
1800	Aves	Threskiornithidae	<i>Threskiornis spinicollis</i>	straw-necked ibis	C	None	0	3	24/09/2004
1276	Aves	Zosteropidae	<i>Zosterops lateralis</i>	silveryeye	C	None	0	4	24/09/2004
1071	Mammalia	Canidae	<i>Vulpes vulpes</i>	red fox	None	None	0	2	24/09/2004
22485	Mammalia	Dasyuridae	<i>Antechinus flavipes flavipes</i>	yellow-footed antechinus (south-east Queensland)	C	None	0	2	24/09/2004
811	Mammalia	Dasyuridae	<i>Planigale maculata</i>	common planigale	C	None	0	2	24/09/2004
1056	Mammalia	Felidae	<i>Felis catus</i>	cat	None	None	0	2	24/09/2004
832	Mammalia	Leporidae	<i>Lepus europaeus</i>	European brown hare	None	None	0	2	24/09/2004
904	Mammalia	Macropodidae	<i>Notamacropus rufogriseus</i>	red-necked wallaby	C	None	0	2	24/09/2004
885	Mammalia	Macropodidae	<i>Wallabia bicolor</i>	swamp wallaby	C	None	0	2	24/09/2004
989	Mammalia	Molossidae	<i>Austronomus australis</i>	white-striped freetail bat	C	None	0	2	24/09/2004
1000	Mammalia	Molossidae	<i>Mormopterus norfolkensis</i>	east coast freetail bat	C	None	0	2	24/09/2004

Taxon Id	Class	Family	Scientific Name	Common Name	NCA	EPBC	Specimens	Records	Last record
767	Mammalia	Muridae	<i>Hydromys chrysogaster</i>	water rat	C	None	0	2	24/09/2004
764	Mammalia	Muridae	<i>Mus musculus</i>	house mouse	None	None	0	2	24/09/2004
731	Mammalia	Muridae	<i>Rattus rattus</i>	black rat	None	None	0	2	24/09/2004
784	Mammalia	Peramelidae	<i>Isodon macrourus</i>	northern brown bandicoot	C	None	0	2	24/09/2004
859	Mammalia	Phalangeridae	<i>Trichosurus vulpecula</i>	common brushtail possum	C	None	0	2	24/09/2004
860	Mammalia	Phascolarctidae	<i>Phascolarctos cinereus</i>	koala	E	E	0	75	16/11/2021
851	Mammalia	Pseudocheiridae	<i>Pseudocheirus peregrinus</i>	common ringtail possum	C	None	0	2	24/09/2004
1080	Mammalia	Suidae	<i>Sus scrofa</i>	pig	None	None	0	2	24/09/2004
838	Mammalia	Tachyglossidae	<i>Tachyglossus aculeatus</i>	short-beaked echidna	SL	None	0	2	24/09/2004
22066	Mammalia	Vespertilionidae	<i>Myotis macropus</i>	large-footed myotis	C	None	0	1	24/09/2004
554	Reptilia	Agamidae	<i>Intellagama lesueurii</i>	eastern water dragon	C	None	0	2	24/09/2004
556	Reptilia	Agamidae	<i>Pogona barbata</i>	bearded dragon	C	None	0	2	24/09/2004
457	Reptilia	Elapidae	<i>Cryptophis nigrescens</i>	eastern small-eyed snake	C	None	0	2	24/09/2004
493	Reptilia	Elapidae	<i>Demansia psammophis</i>	yellow-faced whipsnake	C	None	0	2	24/09/2004
411	Reptilia	Gekkonidae	<i>Hemidactylus frenatus</i>	house gecko	None	None	0	2	24/09/2004
308	Reptilia	Scincidae	<i>Anomalopus verreauxii</i>	three-clawed worm-skink	C	None	0	2	24/09/2004
312	Reptilia	Scincidae	<i>Calyptotis scutirostrum</i>	scute-snouted calyptotis	C	None	0	2	24/09/2004
277	Reptilia	Scincidae	<i>Carlia vivax</i>	tussock rainbow-skink	C	None	0	2	24/09/2004
31898	Reptilia	Scincidae	<i>Cryptoblepharus pulcher pulcher</i>	elegant snake-eyed skink	C	None	0	3	16/10/2013
240	Reptilia	Scincidae	<i>Ctenotus spaldingi</i>	straight-browed ctenotus	C	None	0	2	24/09/2004
190	Reptilia	Scincidae	<i>Eulamprus quoyii</i>	eastern water skink	C	None	0	2	24/09/2004
184	Reptilia	Scincidae	<i>Lampropholis delicata</i>	dark-flecked garden sunskink	C	None	0	3	16/10/2013
107	Reptilia	Scincidae	<i>Tiliqua scincoides scincoides</i>	eastern bluetongue	C	None	0	2	24/09/2004
61	Reptilia	Varanidae	<i>Varanus varius</i>	lace monitor	C	None	0	2	24/09/2004

Table 3. Plants recorded within the area of interest and its one kilometre buffer

No species found within the area of interest and its one kilometre buffer.

Table 4. Fungi recorded within the area of interest and its one kilometre buffer

No species found within the area of interest and its one kilometre buffer.

Table 5. Other species recorded within the area of interest and its one kilometre buffer

No species found within the area of interest and its one kilometre buffer.

Species table headings and codes

Taxon Id: Unique identifier of the taxon from the WildNet database.

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

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

Specimens: The number of specimen-backed records of the taxon.

Records: The total number of records of the taxon.

Last record: Date of latest record of the taxon.

Links and Support

Other sites that deliver species information from the [WildNet database](#) include:

- [Species profile search](#) - access species information approved for publication including species names, statuses, notes, images, distribution maps and records
- [Species lists](#) - generate species lists for Queensland protected areas, forestry areas, local governments and areas defined using coordinates
- [Biomaps](#) - view biodiversity information, including WildNet records approved for publication, and generate reports
- [Queensland Globe](#) - view spatial information, including WildNet records approved for publication
- [Old wildlife data API](#) - access WildNet species information approved for publication such as notes, images and records etc.
- [WetlandMaps](#) - view species records, survey locations etc. approved for publication
- [WetlandSummary](#) - view wildlife statistics, species lists for a range of area types, and access WildNet species profiles
- [WildNet wildlife records - published - Queensland](#) - spatial layer of WildNet records approved for publication generated weekly
- [Generalised distribution and densities of Queensland wildlife](#) - Queensland species distributions and densities generalised to a 10 km grid resolution
- [Conservation status of Queensland wildlife](#) - access current lists of priority species for Queensland including nomenclature and status information
- [Queensland Confidential Species](#) - the list of species flagged as confidential in the WildNet database.

Please direct queries about this report to the [WildNet Team](#).

Other useful sites for accessing Queensland biodiversity data include:

- [Useful wildlife resources](#)
- [Queensland Government Data](#)
- [Atlas of Living Australia \(ALA\)](#)
- [Online Zoological Collections of Australian Museums \(OZCAM\)](#)
- [Australia's Virtual Herbarium \(AVH\)](#)
- [Protected Matters Search Tool](#)

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ECOLOGICAL ASSESSMENT

36-40, 42, 44, 48, 50, 52 & 56 DOUBLE JUMP ROAD AND 26 PROSPECT CRESCENT, VICTORIA POINT

Prepared for
Sutgold Pty Ltd



Biodiversity Assessment and Management Pty Ltd
PO Box 1376
CLEVELAND 4163

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Document Control Sheet

File Number: 0396-001/05

Project Manager/s: Adrian Caneris

Client: Sutgold Pty Ltd

Project Title: Ecological Assessment - 36-40, 42, 44, 48, 50, 52 & 56 Double Jump Road and 26 Prospect Crescent, Victoria Point

Project Author/s: Adrian Caneris

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Signed on behalf of
Biodiversity Assessment and Management Pty Ltd

Date: 04/10/2018



Managing Director

Ecological Assessment – 36-40, 42, 44, 48, 50, 52 & 56 Double Jump Road and 26 Prospect Crescent, Victoria Point

Table of Contents

1.0	INTRODUCTION	1
1.1	Background and Study Area Description	1
1.2	Study Aims	1
2.0	METHODOLOGY	4
2.1	Desktop Review	4
2.2	Field Assessment	4
3.0	RESULTS	6
3.1	General Ecological Values	6
3.1.1	<i>Terrestrial Habitats</i>	6
3.1.2	<i>Aquatic Habitats</i>	6
3.1.3	<i>Existing Corridors and Connectivity</i>	8
3.2	Matters of National Environmental Significance	9
3.2.1	<i>Listed Threatened Ecological Communities</i>	9
3.2.2	<i>Listed Threatened Terrestrial Species</i>	9
3.2.3	<i>Listed Migratory Species</i>	11
3.2.4	<i>Wetlands of International Importance</i>	11
3.2.5	<i>Weeds of National Significance</i>	12
3.3	Matters of State Environmental Significance	12
3.3.1	<i>Regulated Vegetation/Essential Habitat</i>	12
3.3.2	<i>Threatened Species</i>	12
3.3.3	<i>Wetlands and Waterways</i>	13
3.3.4	<i>South East Queensland Koala Planning Framework</i>	13
3.3.5	<i>Animal Breeding Places</i>	14
3.3.6	<i>Weeds of State Significance</i>	15
3.4	Matters of Local Environmental Significance	15
3.4.1	<i>Environmental Significance Overlay</i>	15
3.4.2	<i>Waterway Corridors and Wetlands Overlay</i>	20
4.0	WILDLIFE HABITAT MANAGEMENT	23
5.0	REFERENCES	25

List of Figures

- Figure 1.1: Study Area Location
Figure 1.2: Development Layout
Figure 3.1 MLES Overlay and NJKHT within Development Footprint

Table of Appendices

Appendix 1:	EPBC Act Protect Matters Online Search Tool and Wildlife Online Database Results
Appendix 2:	Matters of State Ecological Significance Mapping
Appendix 3:	RCC Environmental Significance Overlay
Appendix 4:	Likelihood of occurrence of threatened flora and fauna species listed in database results
Appendix 5:	Location of NJKHT within the Study Area
Appendix 6:	Fauna survey results and assessment of likelihood of occurrence of unrecorded species within the VPSPA

Table of Abbreviations

BAAM	Biodiversity Assessment and Management Pty Ltd
DAMS	Development Assessment Mapping System
DES	Queensland Department of Environment and Science (formerly DEHP)
DILGP	Department of Infrastructure, Local Government and Planning
DNRM	Queensland Department of Natural Resources and Mines
DOEE	Department of Environment and Energy
DotE	Commonwealth Department of the Environment (now Department of Environment and Energy)
EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
EVNT	Species listed as endangered, vulnerable or near threatened under the EPBC Act or NC Act
KSPRP	<i>South East Queensland Koala Conservation State Planning Regulatory Provisions</i>
MNES	Matters of National Environmental Significance
MSES	Matters of State Environmental Significance
MLES	Matters of Local Environmental Significance
NC Act	Queensland <i>Nature Conservation Act 1992</i>
RE	Regional Ecosystem
RCC	Redland City Council
TEC	Threatened Ecological Community
VM Act	Queensland <i>Vegetation Management Act 1999</i>

1.0 INTRODUCTION

1.1 BACKGROUND AND STUDY AREA DESCRIPTION

Biodiversity Assessment and Management (BAAM) has prepared this ecological assessment to inform a development application for the proposed residential development located at 36-40, 42, 44, 48, 50, 52 & 56 Double Jump Road and 26 Prospect Crescent, Victoria Point (the 'study area'), within the proposed Victoria Point Structure Plan Area (VPSPA) as shown on **Figure 1.1**.

This ecological assessment addresses the relevant overlays and associated codes of the Redland City Plan 2018 Version 1 ('City Plan') and should be read in conjunction with the Ecological Matters Report for the Victoria Point Structure Plan Area (BAAM 2018).

The study area is zoned as 'Emerging Community' under the City Plan.

Located between Double Jump Road & Bunker Road, these lots are located on the fringe of urban development to the north, and rural properties to the east, west and south (**Figure 1.2**).

The subject lots are identified as:

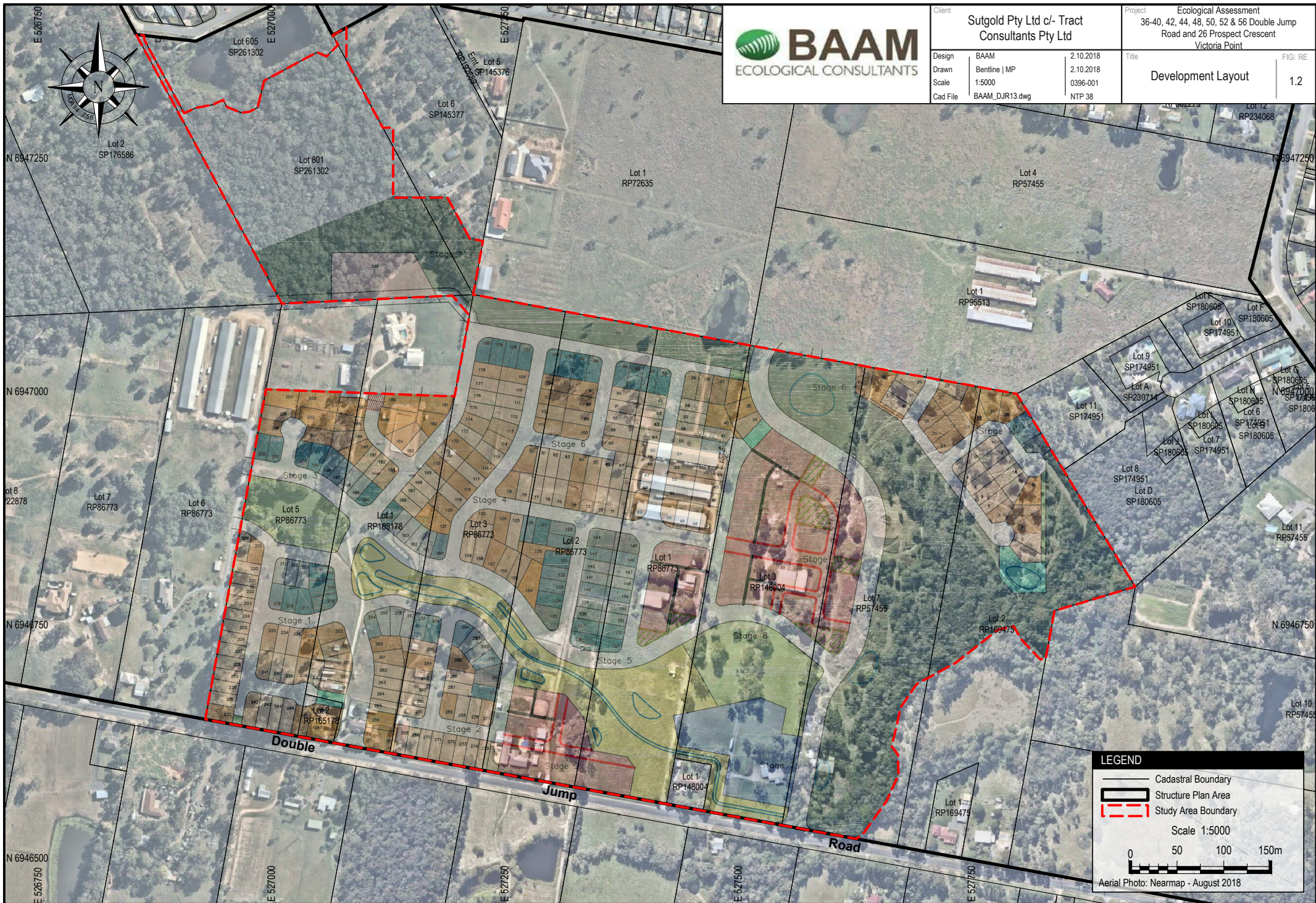
- Lot 801 on SP261302, 26 Prospect Crescent;
- Lot 5 on SP293881, 52, 54 & 58 Double Jump Rd;
- Lot 2 on RP86773, 50 Double Jump Rd;
- Lot 1 on RP86773, 48 Double Jump Rd;
- Lot 3 on RP148004, 44 Double Jump Rd;
- Lot 7 on RP57455, 42 Double Jump Rd;
- Lot 2 on RP169475, 36-40 Double Jump Rd;
- Lot 6 on SP145377, 27 Brendan Way; and
- Lot 2 on RP169475, 36-40 Double Jump Road.

These rural properties include residential dwellings and infrastructure such as farm sheds, dams, chicken sheds and horse training facilities. They are all subject to prior disturbance and predominantly supporting open pastoral areas with some native vegetation, particularly around dams, fencelines and the tributary of Moogurrapum Creek that forms the eastern study area boundary. Lot 801 in the north is around 5.5 ha in size and supports regrowth woodland.

1.2 STUDY AIMS

The aims of this assessment are to:

- Describe the current local, state and federal environmental ordinances that apply to the study area;
- Describe existing ecological values of the study area, highlighting any significant values that present opportunities and/or constraints for future land use options; and
- Provide recommendations regarding the management of ecological values.



2.0 METHODOLOGY

2.1 DESKTOP REVIEW

The desktop review comprised a search of online databases and mapping and an analysis of information for conservation significant vegetation communities, flora and fauna species in the local area. For the purposes of this report, conservation significant vegetation communities and flora and fauna species include:

- Ecological communities listed as threatened ecological communities under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act);
- Flora and fauna species listed under the EPBC Act as critically endangered, endangered, vulnerable or migratory;
- Flora and fauna species listed as endangered, vulnerable or near threatened (EVNT) or Special Least Concern under the Queensland *Nature Conservation Act 1992* (NC Act);
- Critical habitat listed under the EPBC Act for which a register is maintained; and
- Regulated Vegetation and Essential Habitat under the Queensland *Vegetation Management Act 1999* (VM Act).

Reviewed information included:

- Commonwealth EPBC Protected Matters Search Tool (**Appendix 1**) results;
- Queensland Wildlife Online database (**Appendix 2**);
- State mapping of regulated vegetation, essential habitat, wetlands and Koala habitat (**Appendix 3**); and
- Redland City Council environmental overlay mapping (**Appendix 4**).
- Various preliminary design layouts
- The 28 South Ecological reports and documentation for the proposed Ausbuild development immediately north of the study area.

2.2 FIELD ASSESSMENT

The information presented in this report is informed through the desktop research and site investigations undertaken by Adrian Caneris, Dr. Jo Chambers and Shelley Trevaskis between September 2015 and July 2018 across the VPSPA which included numerous and repeated site visits (BAAM 2018).

The focus of the site investigations was to assess the overall ecological values and to ground truth the State-mapped Koala habitats within the study area.

All work was performed in accordance with BAAM's Scientific Purposes Permit and Animal Ethics Approval.

A targeted fauna survey was conducted by Adrian Caneris across the VPSPA over five days and four nights across between 26 February and 2 March. This survey included assessment of the subject lots and surrounds and trapping within Lot 801. The fauna survey involved four nights of small mammal trapping, two nights of spotlighting and frog surveys and four early morning bird surveys of 1.5 hrs duration per day. Birds species present were also recorded during all other aspects of site assessment. The fauna survey techniques employed are described in **Table 2.1**.

A targeted fauna survey was conducted by Adrian Caneris over five days and four nights across the VPSPA, which included assessment of the subject lots and surrounds and trapping within Lot 801, between February 26 and March 2, 2018 which. The fauna survey involved four nights small

mammal trapping, two nights spotlighting and frog surveys and four early morning bird surveys of 1.5 hrs duration per day. Birds were also censured during all other aspects of site visitation. Details of methodologies employed are provided in **Table 2.1**.

Table 2.1. Fauna survey techniques.

Technique	Purpose	Description
Diurnal Searches (general)	To determine the relative value of habitats for native fauna and compile a comprehensive fauna list.	This involves intensive investigation of ground layer (under logs, rocks and leaf litter), low vegetation (under bark and in tree stumps) for amphibians, reptiles, bats and animal signs, e.g. scats, owl pellets, remains and tracks.
Spotlighting (general)	To determine the relative value of habitats for native fauna and compile a comprehensive fauna list.	Undertaken on foot through representative habitats, at a leisurely pace using hand-held spotlights and/or head torches. This method samples nocturnal mammals (flying, arboreal and terrestrial), birds (owls and nightjars), reptiles (geckos) and frogs.
Bird Surveys (general)	To determine the relative value of habitats for native fauna and compile a comprehensive fauna list.	Bird species are recorded via their call, or visual observation. Surveys were conducted from dawn to early morning, dusk to early evening and during the night for nocturnal species.
Elliot Traps	To determine the relative value of habitats for native fauna and compile a comprehensive fauna list.	25 baited Elliot 'A' and 2 baited Elliot 'B' traps were laid on ground transects 10 or more metres apart. Trap placement is influenced by vegetation diversity, the size and shape of habitat patches and by naturally occurring features such as logs, rock outcrops, tree bases and clumping vegetation.
Targeted Feed Tree Search	To determine the extent and distribution of utilisation of an area by Glossy Black-Cockatoos and Koala.	This involves intensive investigation of the site for isolated specimens and groves of feed trees for Glossy Black Cockatoo and/or Koala.
Targeted Ground Search	To determine the presence of significant species, including cryptic or rare species.	This involves intensive investigation of ground layer (under logs, rocks and leaf litter), low vegetation (under bark and in tree stumps), and other habitat features.
Targeted Spotlighting	To determine the presence of significant species, including cryptic or rare species such as Greater Glider.	Undertaken on foot through representative habitats, at a leisurely pace using hand-held spotlights and/or head torches to search for target fauna. May include intermittent nocturnal voice playback to elicit a response from target species.
Electronic Bat Detectors	To determine the relative value of habitats for native fauna and compile a comprehensive fauna list, as well as the presence of significant microbat species.	Survey involve walking a predetermined transect, stopping to record calls detected, and remote/stationary detection at specific locations such as stag trees.
Opportunistic records	To supplement the systematic survey results and provide a more comprehensive listing of fauna present.	Covers all other fauna observations outside of systematic and targeted survey methodologies.

To inform potential Koala offset requirements, non-juvenile Koala habitat trees observed within the proposed development footprint has been undertaken.

A non-juvenile Koala habitat tree (NJKHT) is defined under the *Planning Regulation 2017* as:

- a food tree of the *Corymbia*, *Melaleuca*, *Lophostemon* or *Eucalyptus* genera, or a shelter tree species such as *Angophora*; and
- a height of more than four metres; or has a trunk circumference of >31.5 cm at 1.3 m above the ground.

Specific targeted assessments of all lots to inform site design and identification of Koala habitat were undertaken by Adrian Caneris, Lizzy Buckby and Jonny Pickvance between 10-14 August. The surveys included capture of GPS locations of Koala habitats to inform site design as well as targeted searches for Koala and Koala evidence. Weeds and other habitat value considerations were also observed, and incidental fauna records were captured. A survey of lot 801 was undertaken by Adrian Caneris and Lizzy Buckby on 14 September 2018 to plot NJKHT.

3.0 RESULTS

3.1 GENERAL ECOLOGICAL VALUES

3.1.1 Terrestrial Habitats

The subject lots support a mix of habitat values. There are individual old growth trees, patches of regrowth vegetation and grassy/weedy pastures (**Photos 1 and 2**). The forested portions of the study area are those currently mapped as remnant vegetation and or Koala bushland and are comprised predominantly of Scribbly Gum *Eucalyptus racemosa* woodland with Queensland Blue Gum *Eucalyptus tereticornis* and Broad-leaved Paperbark in the riparian habitats. These areas are retained outside of the development footprint.

There are patches of native vegetation in association with existing dams. These areas contain occasional large trees and regrowth dominated by Broad-leaved and Black wattle *Acacia leiocalyx*.

The vegetated portions of the study area are providing suitable foraging, roosting and breeding resources for avian species. Within the development footprint patches of regrowth vegetation are mostly devoid of native mid and ground storey species and support few values for native fauna.

Koala evidence was recorded from habitats associated with Moogurrapum Creek and Lot 801 in the form of scats.

The hollow-bearing trees within woodland habitats and those occurring as isolated paddock trees provide valuable nesting and refuge habitats for hollow dependant species.

The mown grasses provide food resources for wallabies that would utilise adjacent densely vegetated areas for daytime shelter.

Table 3.1 provides a list of fauna species recorded from the study area and immediate surrounds.

3.1.2 Aquatic Habitats

The Moogurrapum Creek waterway within lot 2 on RP169475 and Lot 7 RP57455 is identified on the State's vegetation management mapping as a watercourse and as a wetland (**Appendix 2**). The same waterway is identified on the City Plan Waterway and Wetlands Overlay.

There is an overland flow path entering the study area in Lot 5 on SP293881 and traversing south east although there are several dams present which limit the hydrological flows. These dams provide aquatic habitats of varying degrees, from large permanent deep impoundage areas through to relatively small shallow water storages that provide permanent water sources for native species (**Photo 3**).

Assessment of the dams has determined that the vertebrate aquatic species are dominated by the introduced Mosquito fish *Gambusia holbrooki*. Eastern Water dragon *Intellagama lesueurii* was also recorded in association with the dams, and there is high potential for native turtles and native eels to be present within the larger dams.



Photo 1. Lot 7 RP 57455 showing open pastoral areas on the edge of habitats to be retained within the open space network.



Photo 2. Lot 3RP1480004 Typical view of the mixed habitats of open pastoral areas and scattered vegetation.



Photo 3. Lot 5 RP 293881 showing one of the dams providing permanent water and aquatic habitats.

Table 3.1. Recorded fauna from the Study Area and immediate surrounds*.

Scientific Name	Common Name	Scientific Name	Common Name
Amphibians			
<i>Limnodynastes terraereginae</i>	Scarlet-sided Pobblebonk	<i>Litoria rubella</i>	Ruddy Treefrog
<i>Limnodynastes peronii</i>	Striped Marshfrog	<i>Litoria fallax</i>	Eastern Sedgefrog
<i>Crinia parinsignifera</i>	Beeping Froglet	<i>Rhinella marina</i> *	Cane Toad*
<i>Litoria caerulea</i>	Common Green Treefrog		
Reptiles			
<i>Intellagama lesueurii</i>	Eastern Water Dragon	<i>Cryptoblepharus pulcher</i>	Elegant Snake-eyed Skink
<i>Dendrelaphis punctulatus</i>	Green Tree Snake	<i>Lygisaurus foliorum</i>	Tree-base Litter-skink
<i>Hemidactylus frenatus</i> *	House Gecko	<i>Tiliqua scincoides</i>	Eastern Blue-tongue Lizard
<i>Ctenotus taeniolatus</i>	Copper-tailed Skink	<i>Pogona barbata</i>	Bearded Dragon
<i>Calypotis scutirostrum</i>	Scute-snouted Calypotis	<i>Carlia vivax</i>	Tussock Rainbow-Skink
<i>Lampropholis delicata</i>	Dark-flecked Garden Sunskink		
Birds			
<i>Gerygone olivacea</i>	White-throated Gerygone	<i>Taeniopygia bichenovii</i>	Double-barred Finch
<i>Sericornis frontalis</i>	White-browed Scrubwren	<i>Todiramphus sanctus</i>	Sacred Kingfisher
<i>Haliastur sphenurus</i>	Whistling Kite	<i>Dacelo novaeguineae</i>	Laughing Kookaburra
<i>Aviceda subcristata</i>	Pacific Baza	<i>Hirundo neoxena</i>	Welcome Swallow
<i>Anas superciliosa</i>	Pacific Black Duck	<i>Petrochelidon ariel</i>	Fairy Martin
<i>Chenonetta jubata</i>	Australian Wood Duck	<i>Malurus lamberti</i>	Variegated Fairy-Wren
<i>Egretta novaehollandiae</i>	White-faced Heron	<i>Malurus melanocephalus</i>	Red-backed Fairy-Wren
<i>Bibulous ibis</i>	Cattle Egret	<i>Alectura lathamii</i>	Australian Brush-turkey
<i>Egretta garzetta</i>	Little Egret	<i>Lichmera indistincta</i>	Brown Honeyeater
<i>Cracticus tibicen</i>	Australian Magpie	<i>Philemon corniculatus</i>	Noisy Friarbird
<i>Cracticus torquatus</i>	Grey Butcherbird	<i>Manorina melanocephala</i>	Noisy Miner
<i>Cracticus nigrogularis</i>	Pied Butcherbird	<i>Myzomela sanguinolenta</i>	Scarlet Honeyeater
<i>Cacatua galerita</i>	Sulphur-crested Cockatoo	<i>Entomyzon cyanotis</i>	Blue-faced Honeyeater
<i>Eolophus roseicapillus</i>	Galah	<i>Caligavis chrysops</i>	Yellow-faced Honeyeater
<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike	<i>Meliphaga lewinii</i>	Lewin's Honeyeater
<i>Vanellus miles</i>	Masked Lapwing	<i>Merops ornatus</i>	Rainbow Bee-eater
<i>Geopelia humeralis</i>	Bar-shouldered Dove	<i>Grallina cyanoleuca</i>	Magpie-lark
<i>Streptopelia chinensis</i> *	Spotted Dove*	<i>Dicaeum hirundinaceum</i>	Mistletoe Bird
<i>Columba livia</i> *	Rock Dove*	<i>Sphecotheres vieilloti</i>	Australasian Figbird
<i>Ocyphaps lophotes</i>	Crested Pigeon	<i>Pachycephala rufiventris</i>	Rufous Whistler
<i>Eurystomus orientalis</i>	Dollarbird	<i>Colluricincla harmonica</i>	Grey Shrike-thrush
<i>Corvus orru</i>	Torresian Crow	<i>Pardalotus striatus</i>	Striated Pardalote
<i>Centropus phasianinus</i>	Pheasant Coucal	<i>Eopsaltria australis</i>	Eastern Yellow Robin
<i>Scythrops novaehollandiae</i>	Channel-billed Cuckoo	<i>Podargus strigoides</i>	Tawny Frogmouth
<i>Dicrurus bracteatus</i>	Spangled Drongo	<i>Platycercus adscitus</i>	Pale-headed Rosella
<i>Trichoglossus haematodus moluccanus</i>	Rainbow Lorikeet	<i>Trichoglossus chlorolepidotus</i>	Scaly-breasted Lorikeet
<i>Porphyrio melanotus</i>	Purple Swanphen	<i>Acridotheres tristis</i> *	Common Myna*
<i>Rhipidura leucophrys</i>	Willie Wagtail	<i>Threskiornis molucca</i>	Australian White Ibis
Mammals			
<i>Vulpes vulpes</i> *	Red Fox*	<i>Rattus rattus</i> *	Black Rat*
<i>Lepus europaeus</i> *	European Brown Hare*	<i>Isodon macrourus</i>	Northern Brown Bandicoot
<i>Macropus rufogriseus</i>	Red-necked Wallaby	<i>Trichosurus vulpecula</i>	Common Brushtail Possum
<i>Tadarida australis</i>	White-striped Freetail Bat	<i>Phascogale carolinensis</i>	Koala
<i>Mus musculus</i> *	House Mouse*		

*A more comprehensive listing of fauna within the locality can be found in BAAM 2017.

3.1.3 Existing Corridors and Connectivity

The habitats associated with Moogurrapum Creek provide important ecological linkages within the local landscape. This riparian area holds the greatest value as fauna habitat and supports several species associated with the more complex habitat structure that were not recorded within in the more open, rural lands.

Woodland habitat within Lot 801 forms part of a well-vegetated corridor (40-100 m in width) associated with a drainage line and series of small dams between the Victoria Point Shopping Centre and Little Eprapah Creek which forms the western boundary of the Victoria Point Structure Plan Area. Currently there is no vegetated connection between this corridor and the habitats associated with Moogurrapum Creek.

Opportunities for fauna movement within the remainder of the study area are limited due to existing rural uses and prior vegetation clearing. Scattered trees and pastures are being utilised by birds, though the species present are comprised mostly of larger, gregarious species that thrive in disturbed bushland, parks gardens and are known to move through urbanised landscapes.

Native ground-mammal species are few, with the more common occurring species being Red-necked Wallaby and Northern Brown Bandicoot which are well-suited to the current conditions. No Koala evidence was recorded onsite although this species has been recorded immediately north and west of the site and is known to move relatively freely between isolated trees and woodland fragments, provided heavy weed infestations are not present and obstructing movement opportunities.

The study area includes components of the proposed VPSP Wildlife Corridor System described in BAAM (2017).

3.2 MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

The results from the EPBC Protected Matters Search completed for the study area and a 5km buffer is provided in **Appendix 1**. The relevant matters of national environmental significance are discussed in **Sections 3.2.1-3.2.4**.

Any actions that are likely to have a significant impact on a Matter of National Environmental Significance (MNES) are subject to assessment under the Commonwealth's EPBC Act approval process.

The study area development does not warrant a referral under the EPBC. Although no specific triggers for a referral have been identified, a referral of the overall structure plan would be prudent, due to the size of the development area and to provide project certainty for the separate proponents across the applicable lands.

The following comments are specific in respect to the study area and proposed development layout.

3.2.1 Listed Threatened Ecological Communities

Initial desktop assessment found three EPBC Act listed Threatened Ecological Communities (TECs) could potentially occur onsite: Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland (Endangered), Lowland Rainforest of Subtropical Australia (Critically Endangered) and Subtropical and Temperate Coastal Saltmarsh (Vulnerable) (**Appendix 2**).

No vegetation communities with species indicative of the three TECs are identified under the State vegetation mapping (refer to **Section 3.5.1**) and these TECs do not occur within, or in close proximity to, the study area.

3.2.2 Listed Threatened Terrestrial Species

No EPBC Act listed flora species were recorded during the survey and, based on the habitat present, none are considered likely to occur.

Appendix 4 provides an assessment of likelihood of occurrence of listed flora species.

Based on a consideration of likelihood of occurrence and knowledge of the study area, two EPBC Act listed threatened fauna species are known to occur within the site: Koala *Phascolarctos cinereus* (EPBC Act and Queensland *Nature Conservation Act 1992* [NC Act]: Vulnerable) and Grey-headed Flying-fox *Pteropus poliocephalus* (EPBC Act: Vulnerable).

Under the EPBC Act, an action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:

- lead to a long-term decrease in the size of an important population of a species;
- reduce the area of occupancy of an important population;
- fragment an existing important population into two or more populations;
- adversely affect habitat critical to the survival of a species;
- disrupt the breeding cycle of an important population;
- modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline;
- result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat;
- introduce disease that may cause the species to decline; or
- Interfere substantially with the recovery of the species (DotE 2013).

Koala

Koala is known to occur within the local landscape and there are many historical records. While no individual koalas were sighted during field assessments, Koala scats were recorded within the study area.

An assessment of the study areas importance as Koala habitat has been undertaken in accordance with the *EPBC Act referral guidelines for the vulnerable Koala* (DotE 2014) (**Table 3.2**). Based on the DoE criteria, the study area is not considered to contain habitat critical to the survival of the Koala (i.e. total score ≥ 5).

The study area does not contain habitat critical to the survival of the Koala as defined under the EPBC Act, the development plan does not affect the retention, protection and enhancement of the correctly mapped high value bushland which retains the higher Koala habitat values as recognised by the State of Queensland, and all Koala trees removed will be offset at a ratio of 3:1. As such, it is considered that the proposed actions will have no significant impacts to an important Koala population or to critical habitats and a referral to the Commonwealth would not be required.

Within the broader Structure Plan area, tracts and patches of existing Koala habitat are planned to be incorporated into the wildlife corridor network to facilitate and improve habitat connectivity. The corridors are proposed to be supplemented with Koala tree offset plantings.

Table 3.2. Koala habitat assessment tool (DoEE 2014) applied to the Structure Plan Area.

Attribute	Score	Assessment	
Koala occurrence	2	Desktop	The wildlife online database records 350 Koala sightings within a 2 km radius of the study area, since 1980. There are three records from Atlas of Living Australia within 2km of the study area in the past 5 years.
		On-ground	Koala evidence (scats) was observed during the site survey.
Vegetation composition	2	Desktop	The study area is not mapped as supporting remnant vegetation though there is remnant vegetation nearby. The forested habitats are suitable for Koala.
		On-ground	The study area supports two or more known Koala food tree species in either isolated stands of trees or in bushland blocks.
Habitat connectivity	0	The study area contains a mixture of rural/residential properties and agricultural lands that are bordered on all sides by relatively major roadways. Safe Koala	

Attribute	Score	Assessment	
		movements to large contiguous patches of bushland to the north and south west are severely compromised by the presence of barriers (double jump road, Bunker Road, Cleveland Redland bay road and Mt Cotton road as well as the presence of domestic and working dogs. The site does not have connectivity to or as part of part of a contiguous landscape ≥ 300 ha.	
Key existing threats	0	Desktop	There have been four Koala road hits within 1 km of the study area within the past five years, a further three hits along nearby Double Jump Road and one dog attack within 1 km within the past 10 years recorded by DEHP (Daisy Hill Koala Hospital).
		On-ground	Due to the increasing residential developments within the local area, it is considered that the threat of vehicle strike and dog attacks would be relatively high in this location.
Recovery value*	0	Due to the small size of the study area and tenuous connectivity, it is considered that the study area does not support the interim recovery objectives.	
Total	4	Decision: The habitat is not considered critical to the survival of the Koala.	

* Data from DEHP Daisy Hill Koala hospital.

** Interim recovery objective (s): Protect and conserve large, connected areas of koala habitat, particularly large, connected areas that support koalas that are – genetically diverse/distinct, or – free of disease or have a very low incidence of disease; or – breeding (i.e. presence of back young or juveniles).

Grey-headed Flying-fox

While no flying-fox camps were found to occur within or immediately adjoining the study area, Grey-headed Flying-fox is likely to occur as a regular visitor to flowering trees. Within the broader Structure Plan area, tracts and patches of existing habitat are planned to be incorporated into the wildlife corridor network. With the addition of Koala tree offset plantings in wildlife corridors, and streetscape and garden plantings, the proposed development will not remove a significant amount of feeding habitat for flying-foxes or discourage flying-foxes from foraging in the location.

3.2.3 Listed Migratory Species

A desktop assessment from the EPBC Act Online Protected Matters Search Tool (**Appendix 1**) identified a number of migratory EPBC-listed migratory bird species as having potential to occur within habitats on or adjacent to the study area.

It should be noted that while the EPBC Act Online Protected Matters Search Tool incorporates species records, it also relies on modelling of suitable habitats and is largely predictive.

Seven migratory bird species have been previously recorded within 5 km of the study area (**Appendix 1**). Whilst the two Plover species *Charadrius leschenaultii* and *Charadrius mongolus* are almost entirely restricted to the coastline inhabiting littoral and estuarine areas, both species occasionally use inland saltpans and brackish swamps. The study area does not support any suitable habitats for these two species. The study area does not support marine habitats for the other five migratory species previously recorded within 5 km of the study area (**Appendix 1**) and these species should not be considered relevant to the proposed development.

3.2.4 Wetlands of International Importance

The results from the EPBC Protected Matters Search completed for the study area indicate that the study area is within 10 km of the Moreton Bay Ramsar site.

Erosion and Sediment control and stormwater runoff will need to be managed appropriately to ensure no significant impacts on the ecological function of Moreton Bay occur as a result of the construction or operation of the proposed residential development.

3.2.5 Weeds of National Significance

Weeds of national significance (WONS) were recorded within or immediately adjoining the study area, but mainly within vegetation associated with Moogurrapum Creek. WONS recorded include:

- Asparagus fern *Asparagus aethiopicus*;
- Cats Claw Creeper *Dolichandra unguis-cati*;
- Fire Weed *Senecio madagascariensis*
- Madeira Vine *Anredera cordifolia*; and
- Lantana *Lantana camara*.

Appropriate management of these species by the landholder is legally required.

3.3 MATTERS OF STATE ENVIRONMENTAL SIGNIFICANCE

There are Matters of State Environmental Significance (MSES) identified within the study area. The State Planning Policy (SPP) defines the Queensland Government's policies for matters of state interest in land use planning and development. The SPP specifies that MSES are valued and protected, and the health and resilience of biodiversity is maintained or enhanced to support ecological integrity.

3.3.1 Regulated Vegetation/Essential Habitat

Regulated Vegetation and Essential Habitat are mapped in association with Moogurrapum Creek (**Appendix 2**). There is no regulated regrowth shown within the study area, and Property Maps of Assessable Vegetation (PMAVs) certified by DNRME have mapped the remainder of the study area as Category X (non-remnant/non-regrowth).

The proposed development retains the mapped vegetation. As such, there is no applicable purpose or code to be assessed in respect to the Queensland *Vegetation Management Act 1999*.

3.3.2 Threatened Species

In Queensland threatened species are listed as Extinct in the wild, Endangered, Vulnerable or Near Threatened (EVNT) under the *Nature Conservation Act 1992* (NC Act).

Flora

The study area does not occur within a high-risk area on the State's Protected Plants Flora Survey Trigger Map (**Appendix 2**) therefore an application to clear native vegetation will not be required under the NC Act.

The Wildlife online search (**Appendix 1**) for a 3 km radius of the study area did not identify any threatened flora species. A wider search, which was undertaken as part of the structure plan in 2017 returned records of *Marsdenia longiloba*, *Marsdenia coronata*, *Macadamia integrifolia*, *Macadamia tetraphylla* and *Corchorus cunninghamii* as having been recorded within 6 km of the study area since 1980. These five species are associated with habitats that do not occur within the study area. Most of these records relate to habitats associated with Mt Cotton and surrounds and have little to no relevance with the subject site.

Appendix 4 provides an assessment of the likelihood of occurrence of EVNT flora in the study area.

Based on the field assessments; prior disturbances, extant habitats and habitat condition, it is concluded that no EVNT flora species are present, or are likely to be present, within the study area.

Fauna

A search of the Department of Environment and Science (DES) Wildlife Online database provides a list of EVNT species that have previously been recorded as occurring within a 3 km radius of the study area (**Appendix 1**). These are Tusked Frog *Adelotus brevis* and Koala *Phascolarctos cinereus*. Of these, only evidence of Koala was recorded during the field survey.

There are some habitat values for Tusked Frog *Adelotus brevis*, and particular within the Moogurrapum Creek environs which hold suitable breeding habitats. Although not recorded during site assessment, this species is considered as having potential to occur within the waterway and/or dams/pondage areas. However, due the mostly open pastoral habitats, the study area should not be viewed as supporting important habitats for this species outside of Moogurrapum Creek.

While not listed within the database search results there is some, although low, potential for Glossy Black-Cockatoo *Calyptrorhynchus lathami* to feed within Lot 801 where there are food trees for the species present (*Allocasuarina littoralis*). No feeding signs were observed during the field assessments.

A list of all significant fauna within the local landscape and their potential to occur is provided as **Appendix 6**.

3.3.3 Wetlands and Waterways

Under the Development Assessment Mapping System (DAMS), administered by the Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP), the study area is not identified as holding any Wetlands under the Matters of State Environmental Significance State Planning Policy (**Appendix 3**).

The waterway associated with Moogurrapum Creek has sections identified as 'Low' and 'Moderate' waterways for waterway barrier works. This identification seeks to ensure any proposed actions do not result in a barrier for fish passage.

As the proposed development is entirely outside of the mapped waterways and no loss of fish passage will occur.

3.3.4 South East Queensland Koala Planning Framework

The DSDMIP DAMS mapping identifies that the study area within a Priority Koala Assessable Development Area (**Appendix 2**). Therefore, any future development will be subject to the provisions of Schedule 11 of the *Planning Regulation 2017* in relation to Koala habitat.

The study area is within the urban footprint under the *South East Queensland Regional Plan 2009 – 2031* and Emerging Community Zone of the City Plan.

The proposed development footprint has been informed by ecological, engineering and economic considerations, with all the land supporting mapped Koala Bushland being maintained. The entire footprint of the proposed development is contained within areas mapped as Medium Value Rehabilitation under the Koala SPRP Habitat Value Mapping.

A maximum of 982 NJKHT from the mapped Medium Value Rehabilitation area are within the development footprint (**Appendix 5**).

Unavoidable clearing of NJKHT in areas mapped as Medium Value Rehabilitation must be offset in accordance with the Queensland *Environmental Offset Policy*.

Under the Queensland *Environmental Offset Policy*, offsets for the removal of Koala habitat within south-east Queensland may be provided as a proponent-driven, land-based offset or a financial settlement offset, or a combination of both.

In terms of proponent-driven offsets, the policy requires that the rehabilitation, establishment and protection of Koala habitat is the only appropriate action to offset Koala habitat within south-east Queensland, based on the following requirements:

- *The offset must establish three new Koala habitat trees for every one 'non-juvenile' tree removed.*
- *Offset plantings must be within the same local government area as the impact site.*
- *The offset must be in an area identified as high value or medium value suitable for rehabilitation habitat. Where these are not available Koala offset sites should be located within low value suitable for rehabilitation habitat or where appropriate, within bushland habitat to enhance the quality of bushland within the local government area.*
- *Koala habitat trees to be established as an offset must be reflective of the species that are endemic to the site and be planted at densities that will produce a mature density reflective of the regional ecosystems present on the site.*

The removal of 982 non-juvenile Koala habitat trees which would require the establishment of 2946 new Koala habitat trees.

Furthermore, where an offset is delivered as a land-based offset, the site must be secured as a legally secured offset area as defined by section 29 of the *Environmental Offsets Act 2014* (other than as Environmental Offset Protection Area).

It is understood the proponent intends to establish the Koala offset requirements within the finalised wildlife corridor network of the VPSPA with the specific location and configuration to be determined when individual RAL applications are completed and offset delivery plans can be accurately completed.

The Koala trees within the development footprint are expected to be offset within the proposed wildlife corridors planned for the VPSPA (BAAM 2018). This will result in an overall increase in Koala habitat and habitat connections within the VPSPA.

Alternatively, a financial settlement option can be taken, calculated using the Queensland Government's web-based Financial Settlement Offset Calculator.

In this case, the removal of 982 NJKHTs would require a financial settlement of \$903,440.

There is also an option of combining the offset options and delivery part of the required offset as a proponent-driven offset and the balance as a financial offset.

3.3.5 Animal Breeding Places

Under the NC Act, activities that require tampering with a native animal breeding place must be undertaken in accordance with an approved Species Management Program (SMP).

Active animal breeding places were observed during the field survey, being the use of Hollow bearing trees by Rainbow Lorikeets and Galahs. As the time and season of proposed works commencing is unknown, it will be important that prior to any vegetation clearing being undertaken an ecologist or qualified fauna spotter/catcher should inspect all vegetation immediately prior to clearing, and if any confirmed active breeding places are recorded and need to be removed, an SMP application would need to be submitted to the Department of Environment and Science for approval.

3.3.6 Weeds of State Significance

Weed species listed as restricted, invasive plants under the Queensland *Biosecurity Act 2014* recorded on site include:

- Asparagus Fern *Asparagus aethiopicus*;
- Singapore Daisy *Sphagneticola trilobata*;
- Brazilian Pepper Tree *Schinus terebinthifolius*;
- Camphor Laurel *Cinnamomum camphora*;
- Chinese Celtis *Celtis sinensis*; and
- Lantana *Lantana camara*.

These Category 3 restricted invasive plants are species that are already established in Queensland and seriously threaten Queensland's primary industries, natural environment, livestock, human health and/or people's livelihoods.

In accordance with the *Biosecurity Act 2014*, Category 3 restricted matters must not be distributed (i.e. released into the environment) unless the distribution or disposal is authorised in a regulation or under a permit. More generally, landowners are responsible for taking all reasonable and practical steps to minimise the risks associated with invasive plants under their control. Contractors appointed to the project will also need to implement management controls and disposal in accordance with the *Biosecurity Act 2014*.

3.4 MATTERS OF LOCAL ENVIRONMENTAL SIGNIFICANCE

Redland City Council City Plan 2018 provides *Planning Scheme Policy 1 - Environmental Significance* which identifies the relevant values of Environmental Significance which are identified as matters of Local Environmental Significance (MLES).

Of relevance to the study area are the Environmental Significance Overlay (Overlay Map - OM-007) and the Waterway Corridors and Wetlands Overlay (Overlay Map – OM-2013). Both overlays within the VPSPA are provided in Appendix 3.

3.4.1 Environmental Significance Overlay

The stated purpose of the Environmental Significance Overlay Code is to manage development to avoid or minimise and mitigate significant impacts on Matters of National, State and Local environmental significance.

The purpose of the code is achieved through the following overall outcomes:

- a) areas of high biodiversity or environmental significance are retained and protected;
- b) development maximises the retention of native vegetation and significant habitat features;
- c) development minimises the loss of koala habitat trees;
- d) impacts on matters of state or local environmental significance are minimised and mitigated;
- e) development does not cause substantial fragmentation of habitat areas;
- f) opportunities for safe and viable wildlife movement within and between habitat areas are facilitated;
- g) landscaping and planting is undertaken in a manner that contributes to the ecological values of the site; and

- h) where they occur, significant residual impacts on matters of local environmental significance or another prescribed environmental matter in accordance with section 15(4) of the Environmental Offsets Act 2014, may need to be offset.

Those outcomes relating to matters of National and State environmental significance are addressed in **Sections 3.2 and 3.3** respectively. The specific benchmarks for assessable development within the Environmental Significance Overlay Code are addressed in **Table 3.4.1**. Code responses provided in respect to water quality have been provided by Water Technology Pty Ltd.

Table 3.4.1—Benchmarks for development that is accepted subject to requirements and assessable development

Performance Outcomes	Acceptable Outcomes	Response
For development that is accepted subject to requirements		
PO1 Development does not result in a significant reduction in the level or condition of biodiversity and ecological functions and processes in the locality.	AO1.1 Compensatory planting is undertaken on-site that is equal in area to the area of the vegetation cleared.	N/A – the application is assessable development.
For assessable development		
Values to be protected		
PO2 Development does not result in a significant reduction in the level or condition of biodiversity and ecological functions and processes in the locality.	No acceptable outcome is nominated.	The habitats mapped as MLES are primarily Koala habitats and remnant vegetation associated with Moogurrapum Creek. There will be a loss of Koala habitat trees within the urbanised portion of study area. Any non-juvenile Koala habitat trees removed are required to be offset at the rate of 3:1 in accordance with the Environmental Offset Policy (the same ratio as for MLES) to provide a net gain in Koala habitat within the local area. Due to the retention of all the bushland habitats, provision of vegetated linkages between these areas and the offsetting of all koala habitat trees removed there will be no significant reduction in the level or condition of biodiversity and ecological functions and processes in the locality.
PO3 Development does not cause substantial fragmentation of habitat areas.	No acceptable outcome is nominated.	No substantial fragmentation is proposed. The provision of the designated linkages will result in an overall increase in vegetated habitat connections.
PO4 Connections between habitat areas are retained, so that movement of key species and normal gene flow between populations is not inhibited or made less safe. Connections may include both continuous corridors and “stepping stone” patches and refuges.	No acceptable outcome is nominated.	Connections between existing core habitats are planned that provide suitable fauna movement opportunities as part of the proposed VPSPA Wildlife Corridor System (BAAM 2017). There is a minor reduction in the size of the secondary corridor (3 m reduction to provide an access driveway to the proposed allotment on lot 801) at the south eastern corner of Lot 801. Although a small decrease in the 60m width is proposed, this is a very narrow intrusion and is adjoined by a wider portion of the corridor. This minor reduction in size will not form a barrier to fauna movement and is not viewed as compromising the overall wildlife movement network.

Performance Outcomes	Acceptable Outcomes	Response
Minimising and mitigating impacts		
PO5 Edge effects on retained habitat areas are minimised by providing the smallest possible perimeter to area ratio.	No acceptable outcome is nominated.	The retained bushland habitat comprises relatively large areas in the north (Lot 801) and east (Moogurrapum Creek) of the proposed development area. The existing perimeter to area ratio of these areas is will not be substantially altered as a result of the development. The proposed corridors will be exposed to edge effects though these will be at a level lower than any existing movement option. Roadways and associated verges provide additional buffering.
PO6 The design, scale and intensity of development minimises impacts on retained habitat.	No acceptable outcome is nominated.	The proposed layout retains all the mapped Koala bushland and Moogurrapum Creek riparian habitats. The scale and intensity of development has been determined in consideration of other design constraints and the overall structure plan to result in an effective land use design for the emerging community zone.
PO7 Retained habitat is protected to ensure its on- going health and resilience, and to avoid degradation as a result of edge effects.	No acceptable outcome is nominated.	It is understood that the open space and associated habitats are to be dedicated to RCC for ongoing protection. Corridors will contain Koala offset plantings which require protection under the Qld <i>Environmental Offsets Act 2014</i> .
PO8 Barriers restricting the movement and dispersal of wildlife are removed, except where they are necessary for the safety of people or animals.	No acceptable outcome is nominated. Editor's note— Guidance on fencing design, fauna movement structure and the like is provided in Planning Scheme Policy 1 – Environmental significance.	Site design has been developed to minimise road crossings within the proposed habitat linkages. The proposed development provides a design that does not result in any unnecessary severing of proposed habitat linkages designed for the VPSPA. There are dedicated fauna crossing facilities to be provided where corridors intersect with roadways.
PO9 Development does not result in the introduction of pest species (plant or animal), that pose a risk to ecological integrity or disturbance to native fauna.	No acceptable outcome is nominated. Editor's note— Weed species are identified in Council's Pest Management Plan 2012 – 2016, Part B.	The weeds present on site and surrounding lands are all common in the local landscape. No new introduction of pest species (plant or animal), are expected or are likely to pose a risk to the areas ecological integrity.
PO10 Development minimises alterations to natural landforms, flow regimes, groundwater recharge and surface water drainage patterns.	No acceptable outcome is nominated.	There are minimal changes expected to the landform or flow regimes. The aesthetic spine will improve ecological flows and result in a more natural watercourse configuration through the removal of existing dams. Drainage has been designed to ultimately result in the outflows entering waterways in the same locations.
PO11 Development minimises potential for disturbance of	No acceptable outcome is nominated.	The layout has minimised potential for disturbance of wildlife as a result of noise, light, vibration or other sources wherever practical

Performance Outcomes	Acceptable Outcomes	Response
wildlife as a result of noise, light, vibration or other source.		within the requirement to have an effective land use design. The layout provides road frontages to retained habitats and corridors to limit disturbances. The impacts of construction and habitation of the proposed residential dwellings will be typical of residential development within an emerging community zone.
PO12 Roads and public access within and adjacent to areas of ecological significance are located and designed to avoid disturbance of ecological values or danger to wildlife.	No acceptable outcome is nominated.	The roadways and public areas are located outside of those areas identified as holding high ecological significance. The VPSPA has been designed to limit road crossings and these have been designed to incorporate fauna crossings where they intersect with proposed corridors.
Corridors and enhancement planting		
PO13 Development contributes to the restoration of waterway or land based ecological corridors, where they would significantly enhance the health and resilience of habitat and wildlife on and near the site.	No acceptable outcome is nominated.	The site design has retained the core habitat values and riparian areas. These will be subjected to a vegetation management and wildlife habitat management to enhance the health and resilience of habitat values present. The proposed development and associated actions will contribute to the restoration of the waterway and proposed wildlife corridors.
PO14 Corridors have sufficient width to maintain viable wildlife or habitat linkages.	AO14.1 Ecological corridors have a minimum width of 100m.	The proposed development retains and completely avoids the key ecological corridor being Moogurrapum Creek and associated vegetated habitats which are over 100 m wide. The design retains the bushland habitat in the north of the study area (Lot 801) which plays also an important role in the overall viability of wildlife habitat within the development area. The secondary linkages have been designed to provide appropriate width for all fauna known or predicted to occur within the local landscape (BAAM 2017).
PO15 Development incorporates opportunities for revegetation to enhance habitat condition, biodiversity and wildlife movement.	No acceptable outcome is nominated.	There will be provision of offset plantings or financial contributions to provide revegetation to enhance habitat condition, biodiversity and wildlife movement. The proposed corridors will be revegetated. The proposed development will enhance habitat condition, biodiversity values and wildlife movement options and result in an overall increase in connected vegetated Koala habitats.
PO16 Enhancement plantings and landscaping utilise endemic native species which replicate or complement the composition of the habitat it is connected to, unless this would increase bushfire risk.	No acceptable outcome is nominated. Editors note— Guidance to assist applicants is contained within the Queensland Government's Regional Ecosystem Mapping	All revegetation will incorporate appropriate endemic native species to replicate or complement the composition of the habitat values of the landscape. All plantings will be reflective of the species that are endemic to the site and be planted at densities that will produce a mature density reflective of the regional ecosystems which would naturally occur in the location.
PO17	No acceptable	The development is proposed to occur in stages.

Performance Outcomes	Acceptable Outcomes	Response
Where clearing occurs, it is sequenced and undertaken in a manner that provides opportunities for fauna to vacate affected land.	outcome is nominated. Editor's note—It is likely that a wildlife habitat management plan, prepared by an ecologist with suitable experience may be needed to address survival and ongoing access to habitat trees during construction and operation of the development.	Clearing will be conducted in accordance with the Qld Planning Regulation Schedule 11 benchmarks. All clearing will be directed from the outer edges and towards retained habitats to facilitate fauna movement into retained areas. All clearing will be conducted under the guidance of a fauna spotter catcher.
Offsets		
PO18 Where development results in, or is likely to result in, a significant residual impact on matters of local environmental significance, despite all reasonable on-site mitigation measures, the impact will be offset.	AO18.1 Offsets are provided in accordance with offset arrangements set out in Planning Scheme Policy 1 – Environmental significance.	Due to the offsetting of MSES (Koala habitat) and based on our review of the locally significant species listed in Appendix A of RCC City Plan 2018 Policy 1, there is no potential for any significant residual impacts on the species identified as being locally significant.

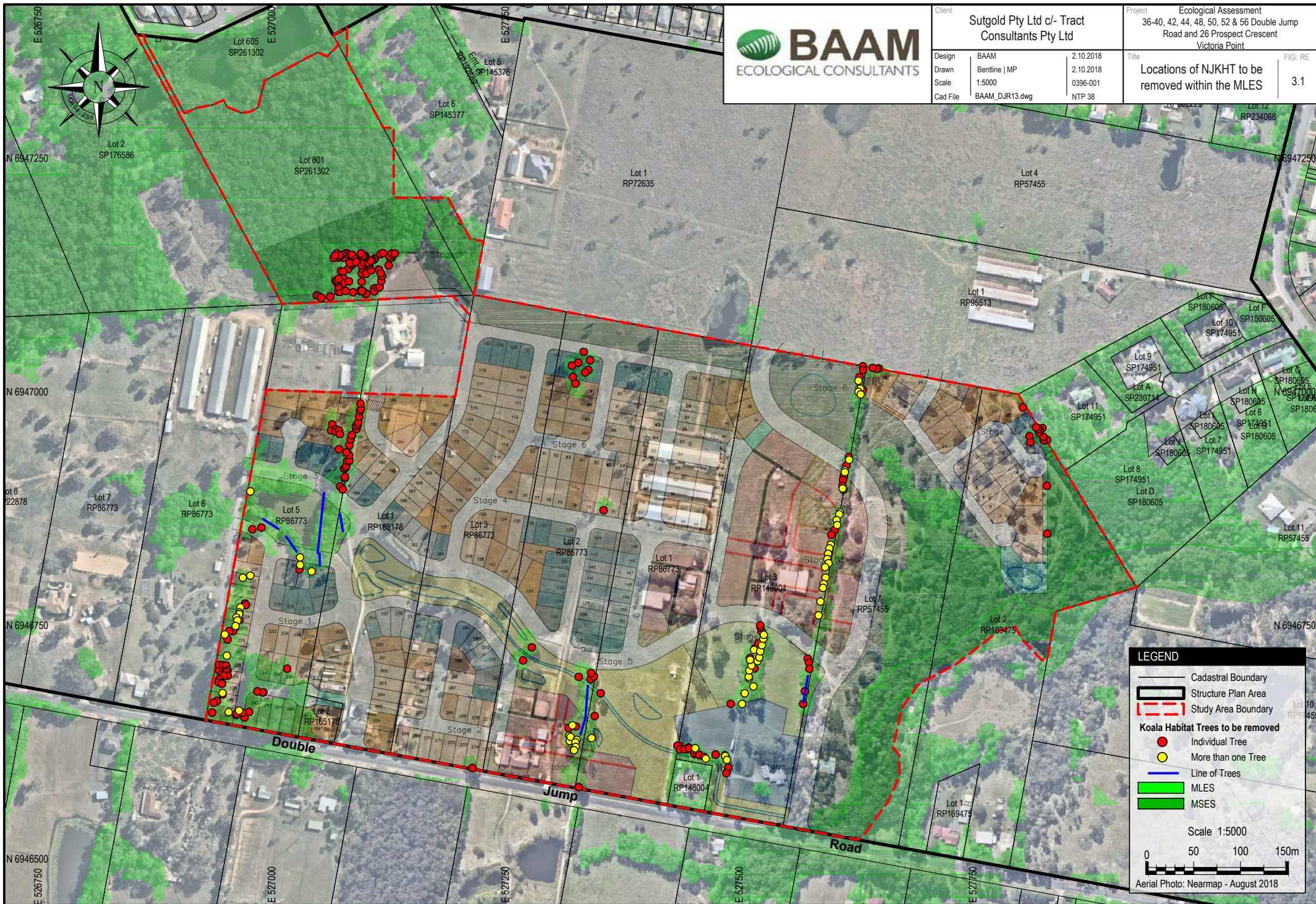
The study area forms a component of the VPSPA Wildlife Corridor System.

The objective of the VPSPA Wildlife Corridor System (BAAM 2017) focuses on providing habitat connectivity to facilitate safe wildlife movements to and from the retained bushland habitats within the VPSP, whilst having regard to where suitable linkages exist in the wider landscape (refer: Figure 3.2, BAAM 2017). The VPSP corridor network interlinks within a broader network as shown on and is primarily located in accordance with the RCC Wildlife Connections Plan. Layout and concepts for development within the VPSP were reviewed in a workshop with RCC officers on 11 September 2018.

The location of the NJKHT within the mapped MLES areas is shown on **Figure 3-1**. There is a total of 611 NJKHT to be removed from the MLES areas. These comprise a mix of individual large hollow bearing trees, patches of mixed regrowth eucalyptus species and numerous Broad-leaved Paperback trees around existing dams. As noted in City Plan Policy 1, s1.6.1 areas mapped as MLES in the overlay may be found to have the attributes of MSES and these values should be treated as MSES. Vegetation within the mapped MLES is dominated by NJKHT and therefore will be offset as MSES as required by the *Planning Regulation 2017*.

In respect to overall MLES the state requirement to offset all NJKHT removed ensures that the Koala trees that occur within the MLES mapping in the study area are to be replaced at a ratio of 3:1 which mitigates any potential long term residual impact.

In regard to MLES significant species, these are listed in Appendix A of City Plan Policy 1. There is no significant habitat for MLES species within the study area, and no significant residual impact for any these species is predicted.



3.4.2 Waterway Corridors and Wetlands Overlay

One area of Waterway Corridor and Wetlands is identified within the study area (**Appendix 3**) in association with Moogurrapum Creek. The proposed development layout avoids and provides increased buffers to the mapped values, other than a very minor incursion within the nominated waterway buffer in the very southernmost portion of the study area for the entrance roadway. The roadway location has been determined through detailed design, particularly the transport and traffic study, within the overall VPSPA layout and provides the only acceptable entrance point for the south-eastern portion of the development. This location currently has an existing driveway and is dominated by exotic vegetation and a dwelling and no loss of ecological or riparian values will result. A vegetation management plan will be developed to provide increased habitat values within the buffer which will include detailed screen and buffer planting for this location.

A Flood and Stormwater Management Plan has been prepared by Water Technology Pty Ltd which addresses all aspects of hydrological flows and water quality (Water Technology 2018). The specific benchmarks for assessable development within the Waterway Corridors and Wetlands Overlay are addressed in **Table 3.4.2**

Table 3.4.2—Benchmarks for development that is accepted subject to requirements and assessable development

Performance Outcomes	Acceptable Outcomes	Response
For assessable development		
PO1 Development does not adversely impact on the hydrological regime or recharge of a wetland or waterway.	No acceptable outcome is nominated.	Complies. Existing hydrologic regimes are retained as described in sites Flood and Stormwater Management Plan (Water Technology 2018)
PO2 A core riparian buffer is maintained along and around waterways and wetlands that is vegetated, development free, and is of a sufficient width to: (1) protect water quality; (2) protect the stability of stream bank and bed; (3) allow for natural hydrological and geomorphological processes; (4) minimise erosion; (5) maintain or achieve healthy water temperatures and in-stream conditions; and (6) support viable wildlife habitat and movement.	AO2.1 A development free, vegetated buffer area is provided in accordance with Table 8.2.11.3.2.	There is a minor incursion within the nominated buffer by the proposed entrance roadway. This location currently has an existing driveway and is dominated by exotic vegetation and a dwelling as shown in photo below. The roadway location has been determined through the traffic study and within the overall VPSPA layout and provides the only acceptable entrance point in the eastern portion of the development. The roadway will provide some buffering of the waterway and detailed screen planting and waterway management actions within the retained buffer will result in an overall increased ecological outcome.
	AO2.2	Development is generally located



Performance Outcomes	Acceptable Outcomes	Response
	No clearing occurs within the buffer area provided in accordance with Table 8.2.11.3.2.	outside of riparian buffer. Proposed development intersects the waterway buffer flood overlay in the South East portion of the site. This is not considered significant given: A significant portion of the waterway buffer is retained and will be subject to detailed vegetation management plan to increase ecological values; - The existing vegetation is dominated by vegetation exotic species and numerous recognised environmental weeds. - The location currently has low ecological values and contains an existing driveway and dwelling.
PO3 Riparian vegetation provides sufficient shade over the stream to protect in-stream habitat, biodiversity and ecological processes.	AO3.1 Vegetation achieves 70% canopy cover over streams 10m or less in width and 70% canopy cover over near-bank areas along other streams.	There will be a detailed vegetation management plan and habitat management plan to guide ecological restoration. The existing riparian vegetation is fully retained by the layout.
PO4 Development maximises opportunities for natural filtration of sediments, nutrients and other pollutants, and slowing of overland flow.	No acceptable outcome is nominated.	Stormwater quantity devices exceed required reduction targets. Refer to the Flood and Stormwater Management Plan for the Site (Water Technology 2018). Full details of detailed design of natural filtration areas are to be provided as part of operational works and design.
PO5 The development is designed to avoid any worsening of water quality in a waterway or wetland. Editor's note—Applicants must also have regard to the Healthy waters code.	No acceptable outcome is nominated.	Stormwater quantity devices exceed required reduction targets. Refer to the Flood and Stormwater Management Plan for the Site (Water Technology 2018).
PO6 Bank erosion and slumping is avoided and hydrological and geomorphological processes of a waterway or wetland are maintained by: (1) providing an area either side of the existing channel to allow for natural lateral and longitudinal movement; (2) restoring bank vegetation and large woody debris within the channel; (3) implementing bank and bed stabilisation measures; and	No acceptable outcome is nominated. Editor's note—An environmental management plan may be required to support any proposed hydrology re-instatement works.	No bank erosion or slumping is expected. The design retains the existing hydrological flows and no loss of geomorphological processes; refer to the Flood and Stormwater Management Plan for the Site (Water Technology 2018). Detailed design will be provided as part of operational works.

Performance Outcomes	Acceptable Outcomes	Response
(4) reinstating a stable hydrology and geomorphology where it is modified or unstable.		
P07 Barriers to in-stream or land based wildlife movement are removed unless they are naturally occurring or necessary for the safety of wildlife.	No acceptable outcome is nominated.	The removal of the existing dwelling, rural structures and fences within the southern portion of Lot 7 RP57455 will reduce barriers. The retained habitats east of the entry road provide uninterrupted wildlife movement. No loss of instream movement will result
P08 Development incorporates opportunities for revegetation to enhance stream and habitat condition, biodiversity and wildlife movement wherever possible.	No acceptable outcome is nominated.	The removal of exotic vegetation (e.g. pines, celtis, lantana) and replacement will improve existing values. All revegetation/restoration works will incorporate appropriate endemic native species to replicate or complement the composition of the habitat values of the landscape. All plantings will be reflective of the species that are endemic to the site and be planted at densities that will produce a mature density reflective of the regional ecosystems which would naturally occur in the location.
P09 Enhancement plantings and landscaping utilise endemic native species which replicate or complement the composition of the habitat it is connected to.	No acceptable outcome is nominated.	All revegetation will incorporate appropriate endemic native species to replicate or complement the composition of the habitat values of the landscape. All plantings will be reflective of the species that are endemic to the site and be planted at densities that will produce a mature density reflective of the regional ecosystems which would naturally occur in the location.
P010 Development does not result in the introduction of non-native pest species (plant or animal) and removes existing pest species that pose a risk to ecological or stream integrity.	No acceptable outcome is nominated. Editor's note— Weed species are identified in Council's Pest Management Plan 2012–2016, Part B.	The weeds present on site and surrounding lands are all common in the local landscape. No new introduction of pest species (plant or animal), are expected or are likely to pose a risk to the areas ecological integrity. The proposed restoration actions will reduce their presence and provide increased habitat values.
P011 Disturbance or predation of native fauna by domestic pets and livestock is prevented.	No acceptable outcome is nominated.	The entrance roadway provides an effective buffer and delineation of the retained habitats. The proposed layout removes existing domestic pets and livestock from the waterway and replaces these with native vegetation.
P012 Development minimises potential for disturbance of wildlife as a result of noise, light, vibration or other source.	No acceptable outcome is nominated.	The entrance roadway provides a buffer to the proposed urbanised areas. Detailed design will seek to limit any light spillage into retained habitats. Screen plantings will provide additional buffering.
P013	No acceptable	Access within the open space

Performance Outcomes	Acceptable Outcomes	Response
Public access to or along waterways and wetlands is located and designed to minimise disturbance of environmental values.	outcome is nominated.	network will be outside of the mapped waterways. No crossing of the waterway is sought.

Overall, the proposed layout protects the mapped Waterway Corridors and Wetlands and provides an increased buffer to these values. In combination with the proposed corridor revegetation and restoration works within the retained habitats, there will be a net increase in the overall ecological values of the riparian habitats associated with Moogurrapum Creek.

4.0 WILDLIFE HABITAT MANAGEMENT

Habitat condition and fauna movement opportunities are proposed to be protected and enhanced within the proposed development area through the implementation of a Vegetation Management Plan (VMP) and a Wildlife Habitat Management Plan (WHMP). These plans are to be integrated to form a coordinated approach to the overall management of the site's ecological values.

Appropriate management strategies and techniques are to be guided by the South East Queensland Ecological Restoration Framework Guideline (Chenoweth EPLA and Bushland Restoration Services 2012).

The aim of the VMP will be to ensure the retained and restored habitat areas are treated through ongoing assisted restoration/regeneration to ensure full restoration of the structure, composition, and function of the pre-existing ecological communities. This will be achieved through weed removal and planting of appropriate endemic species.

The restoration activities will utilise a planting palette of native species that are endemic to the locality and primarily reflective of the regional ecosystems found in the local landscape.

Eucalyptus tereticornis and *E. microcorys*, recognised as the primary Koala food trees in the local area, will be used wherever appropriate. Other species of habitat value for Koala as food trees include *Eucalyptus seeana*, *E. siderophloia*, *E. tindaliae* and *Corymbia intermedia*.

To improve habitat condition, management of ongoing edge influences will be specifically addressed within the WHMP and will specify:

- The removal and continued maintenance of environmental weeds;
- The re-establishment of a natural ground layer and incorporation of fallen timber to shelter ground-dwelling species;
- The use of local ground layer, shrub and tree species that exhibit tolerance to remnant edges; and
- Denser planting along corridor edges to reduce temperatures and increase moisture levels in the central portions of the corridors

The aim of the WHMP will be to ensure that activities associated with construction and operation of the development does not cause any undue negative impacts on native fauna.

The WHMP will address the long-term management of fauna species and fauna habitat values on and will include measures to minimise and mitigate impacts on those species during all phases of development and operation.

The objectives of the WHMP will be to provide:

- A consistent and uniform approach which assures that the required standards of environmental protection, maintenance and Habitat Linkage are achieved;
- Procedures for the minimisation of disturbance to existing fauna in areas to be retained;
- An integrated approach to responsible management of the site's ecology and the maintenance or enhancement of ecosystem function in retained or rehabilitated areas; and
- A schedule of monitoring to be undertaken with appropriate feedback loops for active management.

The VMP and WHMP will be finalised upon the completion of the development assessment process and a finalised development footprint, and following establishment of final approval conditions.

5.0 REFERENCES

- BAAM (2018).** Victoria Point Structure Plan Area Ecological Matters Report. Report prepared for Fiteni Homes. Biodiversity Assessment and Management Pty Ltd, September 2018.
- Chenoweth EPLA (2012).** South East Queensland Ecological Restoration Framework Guideline.
- Department of the Environment (DotE) (2013).** Matters of National Environmental Significance: Significant Impact Guidelines 1.1. Commonwealth of Australia, Canberra.
- DotE (2014).** *EPBC Act referral guidelines for the vulnerable koala (combined populations of Queensland, New South Wales and the Australian Capital Territory).* Department of the Environment, Canberra.
- Water Technology (2018).** Flood and Stormwater Management Plan -36-40, 42, 44, 48, 50, 52, 56 Double Jump Road, 26 Prospect Crescent & 27 Brendan Way, Victoria Point. Water Technology Pty Ltd, October 2018.

APPENDIX 1
EPBC Act Protect Matters Online Search Tool
and Wildlife Online Database Results



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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 13/09/18 15:12:20

[Summary](#)

[Details](#)

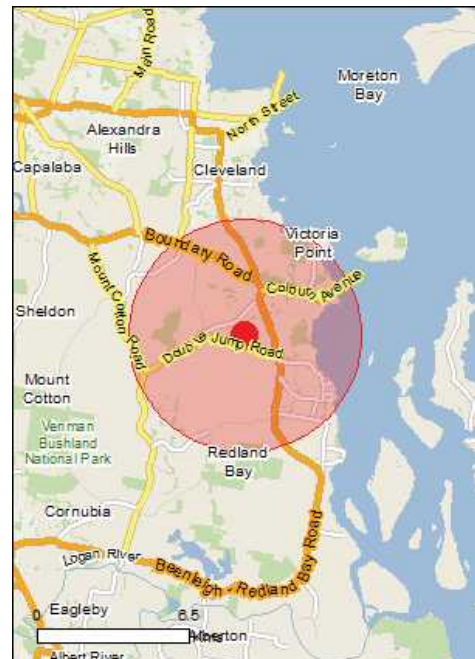
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



This map may contain data which are
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[Coordinates](#)

Buffer: 5.0Km



Summary

Matters of National Environmental Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
Listed Threatened Species:	67
Listed Migratory Species:	76

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 <http://www.environment.gov.au/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 Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	109
Whales and Other Cetaceans:	13
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	1
Regional Forest Agreements:	None
Invasive Species:	34
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar)		[Resource Information]
Name	Proximity	
Moreton bay	Within Ramsar site	

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.

Name	Status	Type of Presence
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community likely to occur within area
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occur within area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area

Listed Threatened Species

 [Resource Information]

Name	Status	Type of Presence
Birds		
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Roosting known to occur within area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Roosting known to occur within area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area
Dasyornis brachypterus Eastern Bristlebird [533]	Endangered	Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Species or species

Name	Status	Type of Presence
Diomedea exulans Wandering Albatross [89223]	Vulnerable	habitat may occur within area Species or species habitat may occur within area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within 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
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat may occur within area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area
Limosa lapponica baueri Bar-tailed Godwit (baueri), Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat known to occur within area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [86432]	Critically Endangered	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
Poephila cincta cincta Southern Black-throated Finch [64447]	Endangered	Species or species habitat may occur within area
Pterodroma neglecta neglecta Kermadec Petrel (western) [64450]	Vulnerable	Foraging, feeding or related behaviour may occur within area
Rostratula australis Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within

Name	Status	Type of Presence area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area
Turnix melanogaster Black-breasted Button-quail [923]	Vulnerable	Species or species habitat likely to occur within area
Fish		
Epinephelus daemeli Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat may occur within area
Insects		
Argynnis hyperbius inconstans Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area
Mammals		
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat may occur within area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat likely to occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Petauroides volans Greater Glider [254]	Vulnerable	Species or species habitat may occur within area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat known to occur within area
Potorous tridactylus tridactylus Long-nosed Potoroo (SE mainland) [66645]	Vulnerable	Species or species habitat may occur within area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area
Xeromys myoides Water Mouse, False Water Rat, Yirrkoo [66]	Vulnerable	Species or species habitat likely to occur within area
Plants		
Arthraxon hispidus Hairy-joint Grass [9338]	Vulnerable	Species or species habitat may occur within area
Baloghia marmorata Marbled Baloghia, Jointed Baloghia [8463]	Vulnerable	Species or species habitat may occur within area

Name	Status	Type of Presence
Bosistoa transversa Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat likely to occur within area
Corchorus cunninghamii Native Jute [14659]	Endangered	Species or species habitat likely to occur within area
Cryptocarya foetida Stinking Cryptocarya, Stinking Laurel [11976]	Vulnerable	Species or species habitat may occur within area
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area
Endiandra floydii Floyd's Walnut [52955]	Endangered	Species or species habitat likely to occur within area
Macadamia integrifolia Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat likely to occur within area
Macadamia tetraphylla Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia, Rough-leaved Queensland Nut [6581]	Vulnerable	Species or species habitat may occur within area
Phaius australis Lesser Swamp-orchid [5872]	Endangered	Species or species habitat likely to occur within area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Delma torquata Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Saiphos reticulatus Three-toed Snake-tooth Skink [88328]	Vulnerable	Species or species habitat may occur within area
Sharks		

Name	Status	Type of Presence
Carcharias taurus (east coast population) Grey Nurse Shark (east coast population) [68751]	Critically Endangered	Species or species habitat likely to occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Breeding may occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area

Listed Migratory Species [[Resource Information](#)]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Marine Birds		
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
Balaena glacialis australis Southern Right Whale [75529]	Endangered*	Species or species habitat likely to occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Dugong dugon Dugong [28]		Species or species habitat known to occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area
Manta alfredi Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
Manta birostris Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Orcaella brevirostris Irrawaddy Dolphin [45]		Species or species habitat likely to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Breeding may occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Sousa chinensis Indo-Pacific Humpback Dolphin [50]		Breeding known to occur within area
Migratory Terrestrial Species		
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat known to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat known to occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Monarcha trivirgatus Spectacled Monarch [610]		Species or species habitat likely to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Arenaria interpres Ruddy Turnstone [872]		Roosting known to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Roosting known to occur within area
Calidris alba Sanderling [875]		Roosting known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Roosting known to occur within area
Charadrius bicinctus Double-banded Plover [895]		Roosting known to occur within area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Roosting known to occur within area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Roosting known to occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Roosting known to occur within area
Gallinago megala Swinhoe's Snipe [864]		Roosting likely to occur within area
Gallinago stenura Pin-tailed Snipe [841]		Roosting likely to occur within area
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area
Limnodromus semipalmatus Asian Dowitcher [843]		Roosting known to occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Limosa limosa Black-tailed Godwit [845]		Roosting known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
Numenius minutus Little Curlew, Little Whimbrel [848]		Roosting known to occur within area
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur within area
Philomachus pugnax Ruff (Reeve) [850]		Roosting known to occur within area
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area
Pluvialis squatarola Grey Plover [865]		Roosting known to occur within area
Tringa brevipes Grey-tailed Tattler [851]		Roosting known to occur within area
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area
Tringa incana Wandering Tattler [831]		Roosting known to occur within area

Name	Threatened	Type of Presence
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area
Xenus cinereus Terek Sandpiper [59300]		Roosting known to occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species	[Resource Information]	
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area
Anseranas semipalmata Magpie Goose [978]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Breeding known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Arenaria interpres Ruddy Turnstone [872]		Roosting known to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Roosting known to occur within area
Calidris alba Sanderling [875]		Roosting known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Roosting known to occur within area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area
Charadrius bicinctus Double-banded Plover [895]		Roosting known to occur within area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Roosting known to occur within area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area
Charadrius ruficapillus Red-capped Plover [881]		Roosting known to occur within area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Roosting known to occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area
Diomedea gibsoni Gibson's Albatross [64466]	Vulnerable*	Species or species habitat may occur within area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat known to occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Roosting known to occur within area
Gallinago megala Swinhoe's Snipe [864]		Roosting likely to occur within area
Gallinago stenura Pin-tailed Snipe [841]		Roosting likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Heteroscelus brevipes Grey-tailed Tattler [59311]		Roosting known to occur within area
Heteroscelus incanus Wandering Tattler [59547]		Roosting known to occur within area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Roosting known to occur within area

Name	Threatened	Type of Presence
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat known to occur within area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area
Limnodromus semipalmatus Asian Dowitcher [843]		Roosting known to occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Limosa limosa Black-tailed Godwit [845]		Roosting known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Monarcha trivirgatus Spectacled Monarch [610]		Species or species habitat likely to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
Numenius minutus Little Curlew, Little Whimbrel [848]		Roosting known to occur within area
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur within area
Philomachus pugnax Ruff (Reeve) [850]		Roosting known to occur within area
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area
Pluvialis squatarola Grey Plover [865]		Roosting known to occur within area

Name	Threatened	Type of Presence
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Species or species habitat likely to occur within area
Recurvirostra novaehollandiae Red-necked Avocet [871]		Roosting known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Sterna albifrons Little Tern [813]		Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area
Xenus cinereus Terek Sandpiper [59300]		Roosting known to occur within area
Fish		
Acentronura tentaculata Shortpouch Pygmy Pipehorse [66187]		Species or species habitat may occur within area
Campichthys tryoni Tryon's Pipefish [66193]		Species or species habitat may occur within area
Corythoichthys amplexus Fijian Banded Pipefish, Brown-banded Pipefish [66199]		Species or species habitat may occur within area
Corythoichthys ocellatus Orange-spotted Pipefish, Ocellated Pipefish [66203]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area
Halicampus grayi Mud Pipefish, Gray's Pipefish [66221]		Species or species habitat may occur within area
Hippichthys cyanospilos Blue-speckled Pipefish, Blue-spotted Pipefish [66228]		Species or species habitat may occur within area
Hippichthys heptagonus Madura Pipefish, Reticulated Freshwater Pipefish [66229]		Species or species habitat may occur within area
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area
Hippocampus kelloggi Kellogg's Seahorse, Great Seahorse [66723]		Species or species habitat may occur within area
Hippocampus kuda Spotted Seahorse, Yellow Seahorse [66237]		Species or species habitat may occur within area
Hippocampus planifrons Flat-face Seahorse [66238]		Species or species habitat may occur within area
Hippocampus trimaculatus Three-spot Seahorse, Low-crowned Seahorse, Flat-faced Seahorse [66720]		Species or species habitat may occur within area
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]		Species or species habitat may occur within area
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area
Micrognathus andersonii Anderson's Pipefish, Shortnose Pipefish [66253]		Species or species habitat may occur within area
Micrognathus brevirostris thorntail Pipefish, Thorn-tailed Pipefish [66254]		Species or species habitat may occur within area
Microphis manadensis Manado Pipefish, Manado River Pipefish [66258]		Species or species habitat may occur within area
Solegnathus dunckeri Duncker's Pipehorse [66271]		Species or species habitat may occur within area
Solegnathus hardwickii Pallid Pipehorse, Hardwick's Pipehorse [66272]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area
Solenostomus paradoxus Ornate Ghostpipefish, Harlequin Ghost Pipefish, Ornate Ghost Pipefish [66184]		Species or species habitat may occur within area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area
Mammals		
Dugong dugon Dugong [28]		Species or species habitat known to occur within area
Reptiles		
Aipysurus laevis Olive Seasnake [1120]		Species or species habitat may occur within area
Astrotia stokesii Stokes' Seasnake [1122]		Species or species habitat may occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Hydrophis elegans Elegant Seasnake [1104]		Species or species habitat may occur within area
Laticauda laticaudata a sea krait [1093]		Species or species habitat may occur within area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Pelamis platurus Yellow-bellied Seasnake [1091]		Species or species habitat may occur within area

Whales and other Cetaceans [Resource Information]

Name	Status	Type of Presence
Mammals		

Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Orcaella brevirostris Irrawaddy Dolphin [45]		Species or species habitat likely to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area
Sousa chinensis Indo-Pacific Humpback Dolphin [50]		Breeding known to occur within area
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area

Extra Information

State and Territory Reserves		[Resource Information]
Name	State	
Bayview	QLD	

Invasive Species [\[Resource Information \]](#)

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
Birds		
Acridotheres tristis Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis European Goldfinch [403]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Lonchura punctulata Nutmeg Mannikin [399]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Frogs		
Rhinella marina Cane Toad [83218]		Species or species habitat known to occur within area
Mammals		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species

Name	Status	Type of Presence
		habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Alternanthera philoxeroides Alligator Weed [11620]		Species or species habitat likely to occur within area
Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425]		Species or species habitat likely to occur within area
Cabomba caroliniana Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171]		Species or species habitat likely to occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. rotundata Bitou Bush [16332]		Species or species habitat likely to occur within area
Cryptostegia grandiflora Rubber Vine, Rubbervine, India Rubber Vine, India Rubbervine, Palay Rubbervine, Purple Allamanda [18913]		Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]		Species or species habitat likely to occur within area
Hymenachne amplexicaulis Hymenachne, Olive Hymenachne, Water Stargrass, West Indian Grass, West Indian Marsh Grass [31754]		Species or species habitat likely to occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat likely to occur within area
Parthenium hysterophorus Parthenium Weed, Bitter Weed, Carrot Grass, False Ragweed [19566]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Senecio madagascariensis		
Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]		Species or species habitat likely to occur within area

Reptiles

Hemidactylus frenatus		
Asian House Gecko [1708]		Species or species habitat likely to occur within area
Ramphotyphlops braminus		
Flowerpot Blind Snake, Brahminy Blind Snake, Cacing Besi [1258]		Species or species habitat likely to occur within area

Nationally Important Wetlands

[Resource Information]

Name	State
Moreton Bay	QLD

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

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.

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

Where very little information is available for 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 reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-27.59998 153.27572

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.



Queensland Government

Wildlife Online Extract

Search Criteria: Species List for a Specified Point
Species: All
Type: All
Status: All
Records: Confirmed
Date: Since 1980
Latitude: -27.6000
Longitude: 153.2758
Distance: 3
Email: adrian@baamecology.com
Date submitted: Thursday 13 Sep 2018 16:11:13
Date extracted: Thursday 13 Sep 2018 16:20:06

The number of records retrieved = 247

Disclaimer

As the DSITIA is still in a process of collating and vetting data, it is possible the information given is not complete. The information provided should only be used for the project for which it was requested and it should be appropriately acknowledged as being derived from Wildlife Online when it is used.

The State of Queensland does not invite reliance upon, nor accept responsibility for this information. Persons should satisfy themselves through independent means as to the accuracy and completeness of this information.

No statements, representations or warranties are made about the accuracy or completeness of this information. The State of Queensland disclaims all responsibility for this information and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs you may incur as a result of the information being inaccurate or incomplete in any way for any reason.

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians	Bufonidae	<i>Rhinella marina</i>	cane toad	Y			14
animals	amphibians	Hylidae	<i>Litoria caerulea</i>	common green treefrog		C		2
animals	amphibians	Hylidae	<i>Litoria gracilentia</i>	graceful treefrog		C		2
animals	amphibians	Hylidae	<i>Litoria fallax</i>	eastern sedgefrog		C		6
animals	amphibians	Hylidae	<i>Litoria tyleri</i>	southern laughing treefrog		C		2
animals	amphibians	Limnodynastidae	<i>Adelotus brevis</i>	tusked frog		V		2
animals	amphibians	Limnodynastidae	<i>Limnodynastes peronii</i>	striped marshfrog		C		6
animals	amphibians	Myobatrachidae	<i>Mixophyes fasciolatus</i>	great barred frog		C		2
animals	amphibians	Myobatrachidae	<i>Crinia parinsignifera</i>	beeping froglet		C		6
animals	amphibians	Myobatrachidae	<i>Pseudophryne raveni</i>	copper backed broodfrog		C		4
animals	birds	Acanthizidae	<i>Sericornis frontalis</i>	white-browed scrubwren		C		7
animals	birds	Acanthizidae	<i>Smicronis brevirostris</i>	weebill		C		2
animals	birds	Acanthizidae	<i>Acanthiza lineata</i>	striated thornbill		C		2
animals	birds	Acanthizidae	<i>Acanthiza pusilla</i>	brown thornbill		C		13
animals	birds	Acanthizidae	<i>Gerygone olivacea</i>	white-throated gerygone		C		12
animals	birds	Acanthizidae	<i>Gerygone levigaster</i>	mangrove gerygone		C		1
animals	birds	Accipitridae	<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle		C		4
animals	birds	Accipitridae	<i>Accipiter novaehollandiae</i>	grey goshawk		C		2
animals	birds	Accipitridae	<i>Aquila audax</i>	wedge-tailed eagle		C		1
animals	birds	Accipitridae	<i>Haliastur indus</i>	brahmny kite		C		1
animals	birds	Accipitridae	<i>Elanus axillaris</i>	black-shouldered kite		C		1
animals	birds	Accipitridae	<i>Pandion cristatus</i>	eastern osprey		SL		1
animals	birds	Accipitridae	<i>Accipiter fasciatus</i>	brown goshawk		C		4
animals	birds	Accipitridae	<i>Aviceda subcristata</i>	Pacific baza		C		5
animals	birds	Accipitridae	<i>Haliastur sphenurus</i>	whistling kite		C		7
animals	birds	Aegothelidae	<i>Aegotheles cristatus</i>	Australian owl-nightjar		C		1
animals	birds	Alcedinidae	<i>Ceyx azureus</i>	azure kingfisher		C		2
animals	birds	Anatidae	<i>Anas superciliosa</i>	Pacific black duck		C		16
animals	birds	Anatidae	<i>Aythya australis</i>	hardhead		C		8
animals	birds	Anatidae	<i>Cygnus atratus</i>	black swan		C		6
animals	birds	Anatidae	<i>Anas castanea</i>	chestnut teal		C		2
animals	birds	Anatidae	<i>Dendrocygna arcuata</i>	wandering whistling-duck		C		3
animals	birds	Anatidae	<i>Anas platyrhynchos</i>	northern mallard	Y			2
animals	birds	Anatidae	<i>Chenonetta jubata</i>	Australian wood duck		C		15
animals	birds	Anhingidae	<i>Anhinga novaehollandiae</i>	Australasian darter		C		9
animals	birds	Anseranatidae	<i>Anseranas semipalmata</i>	magpie goose		C		3
animals	birds	Apodidae	<i>Hirundapus caudacutus</i>	white-throated needletail		SL		4
animals	birds	Ardeidae	<i>Bubulcus ibis</i>	cattle egret		C		6
animals	birds	Ardeidae	<i>Ardea intermedia</i>	intermediate egret		C		4
animals	birds	Ardeidae	<i>Egretta garzetta</i>	little egret		C		8
animals	birds	Ardeidae	<i>Ardea alba modesta</i>	eastern great egret		C		3
animals	birds	Ardeidae	<i>Nycticorax caledonicus</i>	nankeen night-heron		C		2
animals	birds	Ardeidae	<i>Egretta novaehollandiae</i>	white-faced heron		C		6
animals	birds	Artamidae	<i>Cracticus nigrogularis</i>	pied butcherbird		C		19
animals	birds	Artamidae	<i>Artamus leucorhynchus</i>	white-breasted woodswallow		C		10
animals	birds	Artamidae	<i>Cracticus torquatus</i>	grey butcherbird		C		13

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Artamidae	<i>Cracticus tibicen</i>	Australian magpie		C		13
animals	birds	Burhinidae	<i>Burhinus grallarius</i>	bush stone-curlew		C		4
animals	birds	Cacatuidae	<i>Cacatua galerita</i>	sulphur-crested cockatoo		C		7
animals	birds	Cacatuidae	<i>Eolophus roseicapilla</i>	galah		C		11
animals	birds	Cacatuidae	<i>Cacatua sanguinea</i>	little corella		C		4
animals	birds	Campephagidae	<i>Coracina novaehollandiae</i>	black-faced cuckoo-shrike		C		17
animals	birds	Campephagidae	<i>Lalage leucomela</i>	varied triller		C		9
animals	birds	Campephagidae	<i>Coracina tenuirostris</i>	cicadabird		C		4
animals	birds	Charadriidae	<i>Vanellus miles</i>	masked lapwing		C		1
animals	birds	Charadriidae	<i>Charadrius ruficapillus</i>	red-capped plover		C		1
animals	birds	Charadriidae	<i>Vanellus miles novaehollandiae</i>	masked lapwing (southern subspecies)		C		10
animals	birds	Cisticolidae	<i>Cisticola exilis</i>	golden-headed cisticola		C		8
animals	birds	Climacteridae	<i>Climacteris affinis</i>	white-browed treecreeper		C		3
animals	birds	Climacteridae	<i>Cormobates leucophaea metastasis</i>	white-throated treecreeper (southern)		C		10
animals	birds	Columbidae	<i>Ocyphaps lophotes</i>	crested pigeon		C		12
animals	birds	Columbidae	<i>Macropygia amboinensis</i>	brown cuckoo-dove		C		1
animals	birds	Columbidae	<i>Streptopelia chinensis</i>	spotted dove	Y			10
animals	birds	Columbidae	<i>Columba livia</i>	rock dove	Y			4
animals	birds	Columbidae	<i>Geopelia striata</i>	peaceful dove		C		13
animals	birds	Columbidae	<i>Phaps chalcoptera</i>	common bronzewing		C		1
animals	birds	Columbidae	<i>Geopelia humeralis</i>	bar-shouldered dove		C		8
animals	birds	Coraciidae	<i>Eurystomus orientalis</i>	dollarbird		C		8
animals	birds	Corvidae	<i>Corvus orru</i>	Torresian crow		C		15
animals	birds	Cuculidae	<i>Chalcites basalis</i>	Horsfield's bronze-cuckoo		C		3
animals	birds	Cuculidae	<i>Chalcites lucidus</i>	shining bronze-cuckoo		C		10
animals	birds	Cuculidae	<i>Eudynamys orientalis</i>	eastern koel		C		4
animals	birds	Cuculidae	<i>Cacomantis variolosus</i>	brush cuckoo		C		2
animals	birds	Cuculidae	<i>Centropus phasianinus</i>	pheasant coucal		C		5
animals	birds	Cuculidae	<i>Cacomantis flabelliformis</i>	fan-tailed cuckoo		C		10
animals	birds	Cuculidae	<i>Scythrops novaehollandiae</i>	channel-billed cuckoo		C		4
animals	birds	Cuculidae	<i>Chalcites minutillus barnardi</i>	little bronze-cuckoo		C		1
animals	birds	Dicruridae	<i>Dicrurus bracteatus</i>	spangled drongo		C		13
animals	birds	Estrildidae	<i>Neochmia temporalis</i>	red-browed finch		C		9
animals	birds	Estrildidae	<i>Lonchura castaneothorax</i>	chestnut-breasted mannikin		C		4
animals	birds	Estrildidae	<i>Taeniopygia bichenovii</i>	double-barred finch		C		12
animals	birds	Eurostopodidae	<i>Eurostopodus mystacalis</i>	white-throated nightjar		C		2
animals	birds	Fringillidae	<i>Carduelis carduelis</i>	European goldfinch	Y			1
animals	birds	Halcyonidae	<i>Todiramphus macleayii</i>	forest kingfisher		C		11
animals	birds	Halcyonidae	<i>Todiramphus sanctus</i>	sacred kingfisher		C		12
animals	birds	Halcyonidae	<i>Dacelo novaeguineae</i>	laughing kookaburra		C		19
animals	birds	Hirundinidae	<i>Petrochelidon nigricans</i>	tree martin		C		1
animals	birds	Hirundinidae	<i>Petrochelidon ariel</i>	fairy martin		C		3
animals	birds	Hirundinidae	<i>Hirundo neoxena</i>	welcome swallow		C		12
animals	birds	Jacanidae	<i>Irediparra gallinacea</i>	comb-crested jacana		C		3
animals	birds	Laridae	<i>Sternula albifrons</i>	little tern		SL		1
animals	birds	Laridae	<i>Gygis alba</i>	white tern		C		1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Maluridae	<i>Malurus melanocephalus</i>	red-backed fairy-wren		C		11
animals	birds	Maluridae	<i>Malurus lamberti</i>	variegated fairy-wren		C		12
animals	birds	Megaluridae	<i>Megalurus timoriensis</i>	tawny grassbird		C		4
animals	birds	Megapodiidae	<i>Alectura lathami</i>	Australian brush-turkey		C		4
animals	birds	Meliphagidae	<i>Philemon corniculatus</i>	noisy friarbird		C		14
animals	birds	Meliphagidae	<i>Plectorhyncha lanceolata</i>	striped honeyeater		C		3
animals	birds	Meliphagidae	<i>Melithreptus albogularis</i>	white-throated honeyeater		C		13
animals	birds	Meliphagidae	<i>Gavicalis fasciogularis</i>	mangrove honeyeater		C		1
animals	birds	Meliphagidae	<i>Anthochaera chrysoptera</i>	little wattlebird		C		5
animals	birds	Meliphagidae	<i>Myzomela sanguinolenta</i>	scarlet honeyeater		C		13
animals	birds	Meliphagidae	<i>Meliphaga lewinii</i>	Lewin's honeyeater		C		14
animals	birds	Meliphagidae	<i>Caligavis chrysops</i>	yellow-faced honeyeater		C		10
animals	birds	Meliphagidae	<i>Entomyzon cyanotis</i>	blue-faced honeyeater		C		7
animals	birds	Meliphagidae	<i>Lichmera indistincta</i>	brown honeyeater		C		14
animals	birds	Meliphagidae	<i>Manorina melanocephala</i>	noisy miner		C		14
animals	birds	Meropidae	<i>Merops ornatus</i>	rainbow bee-eater		C		11
animals	birds	Monarchidae	<i>Myiagra rubecula</i>	leaden flycatcher		C		11
animals	birds	Monarchidae	<i>Grallina cyanoleuca</i>	magpie-lark		C		15
animals	birds	Monarchidae	<i>Monarcha melanopsis</i>	black-faced monarch		SL		4
animals	birds	Monarchidae	<i>Symposiachrus trivirgatus</i>	spectacled monarch		SL		1
animals	birds	Motacillidae	<i>Anthus novaeseelandiae</i>	Australasian pipit		C		3
animals	birds	Nectariniidae	<i>Dicaeum hirundinaceum</i>	mistletoebird		C		11
animals	birds	Neosittidae	<i>Daphoenositta chrysoptera</i>	varied sittella		C		3
animals	birds	Oriolidae	<i>Sphecotheres vieilloti</i>	Australasian figbird		C		6
animals	birds	Oriolidae	<i>Oriolus sagittatus</i>	olive-backed oriole		C		8
animals	birds	Pachycephalidae	<i>Colluricincla harmonica</i>	grey shrike-thrush		C		17
animals	birds	Pachycephalidae	<i>Pachycephala pectoralis</i>	golden whistler		C		7
animals	birds	Pachycephalidae	<i>Pachycephala rufiventris</i>	rufous whistler		C		19
animals	birds	Pachycephalidae	<i>Colluricincla megarhyncha</i>	little shrike-thrush		C		4
animals	birds	Pardalotidae	<i>Pardalotus punctatus</i>	spotted pardalote		C		1
animals	birds	Pardalotidae	<i>Pardalotus striatus</i>	striated pardalote		C		16
animals	birds	Passeridae	<i>Passer domesticus</i>	house sparrow	Y			9
animals	birds	Pelecanidae	<i>Pelecanus conspicillatus</i>	Australian pelican		C		2
animals	birds	Petroicidae	<i>Petroica rosea</i>	rose robin		C		2
animals	birds	Petroicidae	<i>Eopsaltria australis</i>	eastern yellow robin		C		17
animals	birds	Phalacrocoracidae	<i>Phalacrocorax sulcirostris</i>	little black cormorant		C		5
animals	birds	Phalacrocoracidae	<i>Microcarbo melanoleucos</i>	little pied cormorant		C		5
animals	birds	Phalacrocoracidae	<i>Phalacrocorax carbo</i>	great cormorant		C		1
animals	birds	Phasianidae	<i>Coturnix ypsilophora</i>	brown quail		C		6
animals	birds	Podargidae	<i>Podargus strigoides</i>	tawny frogmouth		C		13
animals	birds	Podicipedidae	<i>Tachybaptus novaehollandiae</i>	Australasian grebe		C		7
animals	birds	Psittacidae	<i>Platycercus adscitus palliceps</i>	pale-headed rosella (southern form)		C		4
animals	birds	Psittacidae	<i>Trichoglossus haematodus moluccanus</i>	rainbow lorikeet		C		16
animals	birds	Psittacidae	<i>Platycercus adscitus</i>	pale-headed rosella		C		12
animals	birds	Psittacidae	<i>Parvipsitta pusilla</i>	little lorikeet		C		4
animals	birds	Psittacidae	<i>Trichoglossus chlorolepidotus</i>	scaly-breasted lorikeet		C		7

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Psophodidae	<i>Psophodes olivaceus</i>	eastern whipbird		C		11
animals	birds	Rallidae	<i>Fulica atra</i>	Eurasian coot		C		3
animals	birds	Rallidae	<i>Gallinula tenebrosa</i>	dusky moorhen		C		12
animals	birds	Rallidae	<i>Lewinia pectoralis</i>	Lewin's rail		C		1
animals	birds	Rallidae	<i>Porphyrio melanotus</i>	purple swamphen		C		13
animals	birds	Rhipiduridae	<i>Rhipidura leucophrys</i>	willie wagtail		C		10
animals	birds	Rhipiduridae	<i>Rhipidura rufifrons</i>	rufous fantail		SL		2
animals	birds	Rhipiduridae	<i>Rhipidura albiscapa</i>	grey fantail		C		15
animals	birds	Strigidae	<i>Ninox boobook</i>	southern boobook		C		3
animals	birds	Sturnidae	<i>Acridotheres tristis</i>	common myna	Y			6
animals	birds	Sturnidae	<i>Sturnus vulgaris</i>	common starling	Y			3
animals	birds	Threskiornithidae	<i>Platalea regia</i>	royal spoonbill		C		6
animals	birds	Threskiornithidae	<i>Plegadis falcinellus</i>	glossy ibis		SL		1
animals	birds	Threskiornithidae	<i>Threskiornis molucca</i>	Australian white ibis		C		8
animals	birds	Threskiornithidae	<i>Threskiornis spinicollis</i>	straw-necked ibis		C		5
animals	birds	Timaliidae	<i>Zosterops lateralis</i>	silveryeye		C		16
animals	malacostracans	Parastacidae	<i>Cherax depressus</i>					1
animals	mammals	Canidae	<i>Vulpes vulpes</i>	red fox	Y			4
animals	mammals	Dasyuridae	<i>Antechinus flavipes flavipes</i>	yellow-footed antechinus (south-east Queensland)		C		3
animals	mammals	Dasyuridae	<i>Planigale maculata</i>	common planigale		C		2
animals	mammals	Dasyuridae	<i>Sminthopsis murina</i>	common dunnart		C		2
animals	mammals	Felidae	<i>Felis catus</i>	cat	Y			2
animals	mammals	Leporidae	<i>Lepus europaeus</i>	European brown hare	Y			4
animals	mammals	Macropodidae	<i>Macropus rufogriseus</i>	red-necked wallaby		C		4
animals	mammals	Macropodidae	<i>Wallabia bicolor</i>	swamp wallaby		C		5
animals	mammals	Molossidae	<i>Mormopterus norfolkensis</i>	east coast freetail bat		C		2
animals	mammals	Molossidae	<i>Tadarida australis</i>	white-striped freetail bat		C		4
animals	mammals	Muridae	<i>Hydromys chrysogaster</i>	water rat		C		4
animals	mammals	Muridae	<i>Mus musculus</i>	house mouse	Y			4
animals	mammals	Muridae	<i>Rattus rattus</i>	black rat	Y			3
animals	mammals	Muridae	<i>Rattus lutreolus</i>	swamp rat		C		2
animals	mammals	Peramelidae	<i>Isoodon macrourus</i>	northern brown bandicoot		C		7
animals	mammals	Petauridae	<i>Petaurus norfolcensis</i>	squirrel glider		C		4
animals	mammals	Phalangeridae	<i>Trichosurus vulpecula</i>	common brushtail possum		C		11
animals	mammals	Phascolarctidae	<i>Phascolarctos cinereus</i>	koala		V	V	982
animals	mammals	Pseudocheiridae	<i>Pseudocheirus peregrinus</i>	common ringtail possum		C		5
animals	mammals	Pteropodidae	<i>Pteropus alecto</i>	black flying-fox		C		24
animals	mammals	Pteropodidae	<i>Pteropus scapulatus</i>	little red flying-fox		C		1
animals	mammals	Pteropodidae	<i>Pteropus poliocephalus</i>	grey-headed flying-fox		C	V	18
animals	mammals	Suidae	<i>Sus scrofa</i>	pig	Y			3
animals	mammals	Tachyglossidae	<i>Tachyglossus aculeatus</i>	short-beaked echidna		SL		2
animals	mammals	Vespertilionidae	<i>Myotis macropus</i>	large-footed myotis		C		1
animals	ray-finned fishes	Anguillidae	<i>Anguilla australis</i>	southern shortfin eel				35
animals	ray-finned fishes	Anguillidae	<i>Anguilla reinhardtii</i>	longfin eel				49
animals	ray-finned fishes	Cichlidae	<i>Oreochromis mossambica</i>	Mozambique mouthbrooder	Y			3

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	ray-finned fishes	Eleotridae	<i>Hypseleotris galii</i>	firetail gudgeon				71
animals	ray-finned fishes	Eleotridae	<i>Gobiomorphus australis</i>	striped gudgeon				50
animals	ray-finned fishes	Eleotridae	<i>Hypseleotris compressa</i>	empire gudgeon				66
animals	ray-finned fishes	Hemiramphidae	<i>Arrhamphus sclerolepis</i>	snubnose garfish				1
animals	ray-finned fishes	Kuhliidae	<i>Kuhlia rupestris</i>	jungle perch				1
animals	ray-finned fishes	Megalopidae	<i>Megalops cyprinoides</i>	oxeye herring				1
animals	ray-finned fishes	Melanotaeniidae	<i>Melanotaenia duboulayi</i>	crimsonspotted rainbowfish				13
animals	ray-finned fishes	Melanotaeniidae	<i>Rhadinocentrus ornatus</i>	ornate rainbowfish				42
animals	ray-finned fishes	Mugilidae	<i>Mugil cephalus</i>	sea mullet				3
animals	ray-finned fishes	Percichthyidae	<i>Macquaria novemaculeata</i>	Australian bass				3
animals	ray-finned fishes	Plotosidae	<i>Tandanus tandanus</i>	freshwater catfish				12
animals	ray-finned fishes	Poeciliidae	<i>Gambusia holbrooki</i>	mosquitofish	Y			68
animals	ray-finned fishes	Poeciliidae	<i>Xiphophorus hellerii</i>	swordtail	Y			54
animals	ray-finned fishes	Synbranchidae	<i>Ophisternon gutturale</i>	swamp eel				2
animals	reptiles	Agamidae	<i>Intellagama lesueurii</i>	eastern water dragon			C	7
animals	reptiles	Agamidae	<i>Diporiphora australis</i>	tommy roundhead			C	1
animals	reptiles	Agamidae	<i>Pogona barbata</i>	bearded dragon			C	4
animals	reptiles	Boidae	<i>Morelia spilota</i>	carpet python			C	1
animals	reptiles	Chelidae	<i>Chelodina longicollis</i>	eastern snake-necked turtle			C	2
animals	reptiles	Chelidae	<i>Wollumbinia latisternum</i>	saw-shelled turtle			C	3
animals	reptiles	Chelidae	<i>Emydura macquarii macquarii</i>	Murray turtle			C	1
animals	reptiles	Colubridae	<i>Tropidonophis mairii</i>	freshwater snake			C	1
animals	reptiles	Colubridae	<i>Boiga irregularis</i>	brown tree snake			C	1
animals	reptiles	Elapidae	<i>Cryptophis nigrescens</i>	eastern small-eyed snake			C	3
animals	reptiles	Elapidae	<i>Demansia psammophis</i>	yellow-faced whipsnake			C	5
animals	reptiles	Gekkonidae	<i>Hemidactylus frenatus</i>	house gecko	Y			4
animals	reptiles	Scincidae	<i>Ctenotus spaldingi</i>	straight-browed ctenotus			C	3
animals	reptiles	Scincidae	<i>Eulamprus quoyii</i>	eastern water skink			C	4
animals	reptiles	Scincidae	<i>Carlia vivax</i>	tussock rainbow-skink			C	4
animals	reptiles	Scincidae	<i>Tiliqua scincoides</i>	eastern blue-tongued lizard			C	4
animals	reptiles	Scincidae	<i>Lampropholis amacula</i>	friendly sunskink			C	1
animals	reptiles	Scincidae	<i>Cryptoblepharus pulcher pulcher</i>	elegant snake-eyed skink			C	6
animals	reptiles	Scincidae	<i>Anomalopus verreauxii</i>	three-clawed worm-skink			C	4
animals	reptiles	Scincidae	<i>Lampropholis delicata</i>	dark-flecked garden sunskink			C	8
animals	reptiles	Scincidae	<i>Calyptotis scutirostrum</i>	scute-snouted calyptotis			C	7
animals	reptiles	Varanidae	<i>Varanus varius</i>	lace monitor			C	4
fungi		Basidiomycota	<i>Tylopilus</i>				C	1/1
plants	ferns	Nephrolepidaceae	<i>Nephrolepis cordifolia</i>	fishbone fern			C	1/1
plants	ferns	Schizaeaceae	<i>Schizaea bifida</i>	forked comb fern			C	1/1
plants	higher dicots	Asteraceae	<i>Gymnocoronis spilanthoides</i>		Y			2/2
plants	higher dicots	Campanulaceae	<i>Lobelia gibbosa</i>	native lobelia			C	1/1
plants	higher dicots	Celastraceae	<i>Elaeodendron melanocarpum</i>				C	1/1
plants	higher dicots	Chenopodiaceae	<i>Suaeda australis</i>				C	1/1
plants	higher dicots	Crassulaceae	<i>Bryophyllum fedtschenkoi</i>		Y			1/1
plants	higher dicots	Euphorbiaceae	<i>Croton acronychioides</i>	thick-leaved croton			C	1/1
plants	higher dicots	Malvaceae	<i>Malvaviscus arboreus</i>		Y			2/2

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	higher dicots	Myrtaceae	<i>Lophostemon confertus</i> x <i>L.suaveolens</i>			C		1/1
plants	higher dicots	Myrtaceae	<i>Rhodomyrtus psidioides</i>	native guava		C		1/1
plants	higher dicots	Oleaceae	<i>Chionanthus ramiflorus</i>	northern olive		C		1/1
plants	higher dicots	Plantaginaceae	<i>Bacopa lanigera</i>		Y			1/1
plants	higher dicots	Rhizophoraceae	<i>Ceriops australis</i>			C		1/1
plants	higher dicots	Rutaceae	<i>Acronychia laevis</i>	glossy acronychia		C		1/1
plants	higher dicots	Urticaceae	<i>Urtica urens</i>	small nettle	Y			1/1
plants	liverworts	Frullaniaceae	<i>Frullania</i>			C		1/1
plants	lower dicots	Apocynaceae	<i>Catharanthus roseus</i>	pink periwinkle	Y			1/1
plants	lower dicots	Monimiaceae	<i>Wilkia macrophylla</i>	large-leaved wilkiea		C		1/1
plants	monocots	Asparagaceae	<i>Asparagus aethiopicus</i> cv. <i>Sprengeri</i>	basket asparagus fern	Y			1/1
plants	monocots	Cyperaceae	<i>Cyperus aquatilis</i>			C		1/1
plants	monocots	Cyperaceae	<i>Gahnia clarkei</i>	tall sawsedge		C		1/1
plants	monocots	Cyperaceae	<i>Isolepis cernua</i>	nodding club rush		C		1/1
plants	monocots	Hemerocallidaceae	<i>Dianella caerulea</i> var. <i>producta</i>			C		1/1
plants	monocots	Marantaceae	<i>Thalia geniculata</i>		Y			1/1
plants	monocots	Poaceae	<i>Entolasia stricta</i>	wiry panic		C		1/1
plants	mosses	Sematophyllaceae	<i>Sematophyllum subhumile</i>			C		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 in the Wild (PE), Endangered (E), Vulnerable (V), Near Threatened (NT), Least Concern (C) or Not Protected ().

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

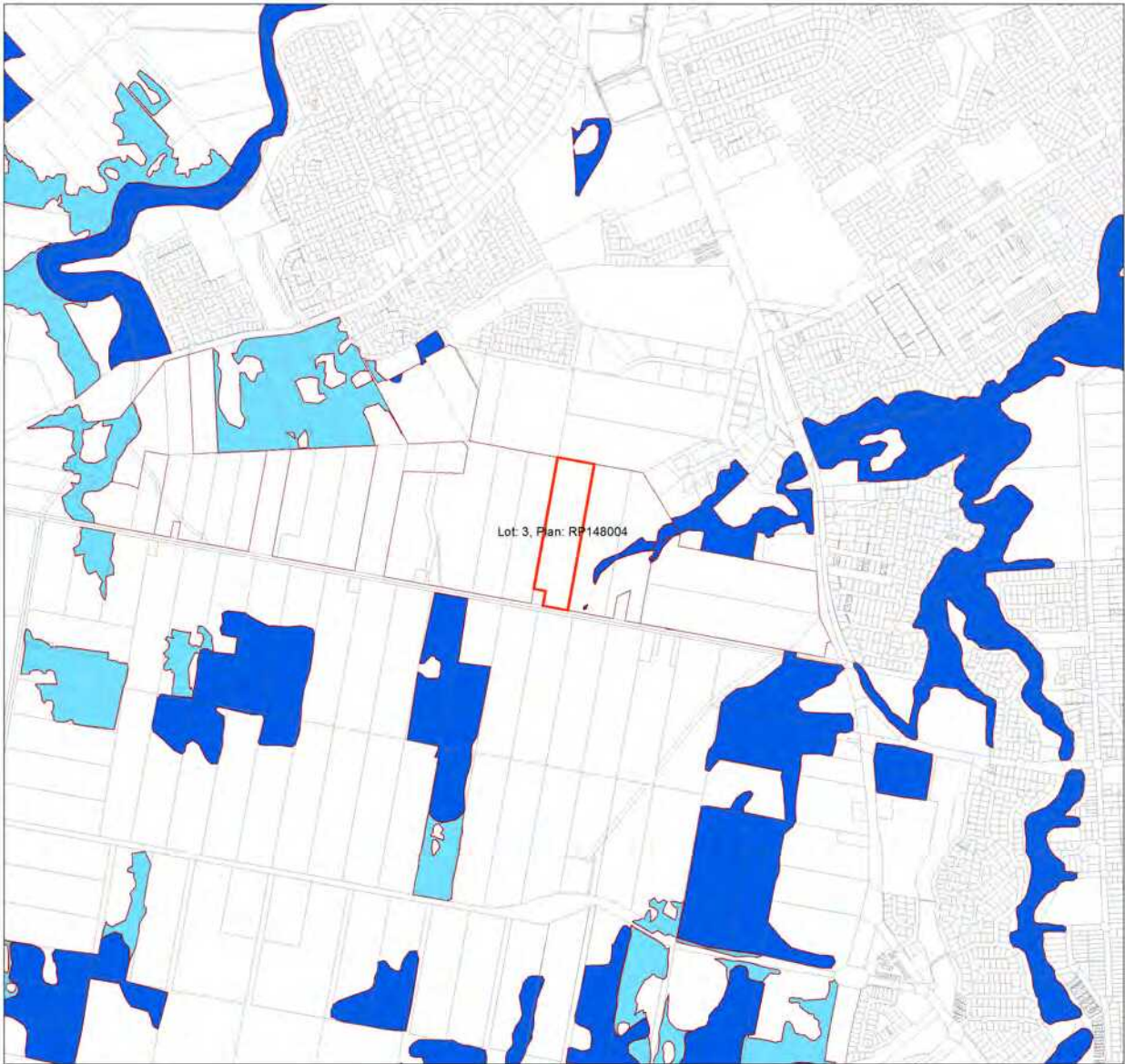
Records – The first number indicates the total number of records of the taxon for the record option selected (i.e. All, Confirmed or Specimens).

This number is output as 99999 if it equals or exceeds this value. The second number located after the / indicates the number of specimen records for the taxon.

This number is output as 999 if it equals or exceeds this value.

APPENDIX 2

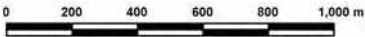
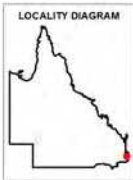
Matters of State Environmental Significance



Regulated Vegetation Management Map

Legend

- Lot and Plan
- 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
- Area not categorised
- Cadastral line
- Property boundaries shown are provided as a locational aid only



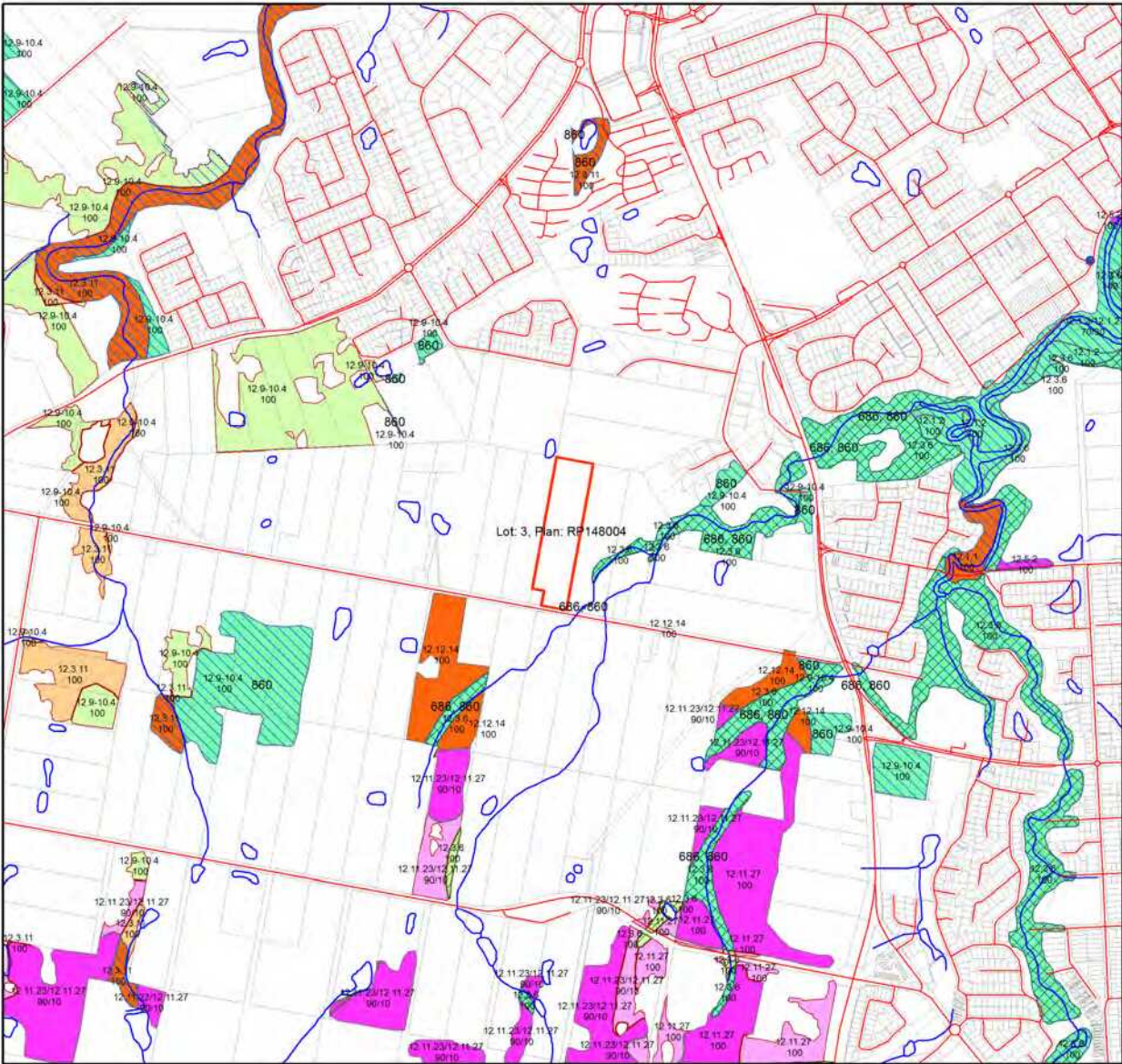
Disclaimer:
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Additional information required for the assessment of vegetation values is provided in the accompanying "Vegetation Management Supporting map". For further information go to the web site: www.dnrm.qld.gov.au or contact the Department of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

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

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

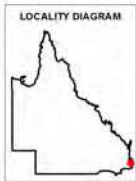




Vegetation Management Supporting Map

Legend

- Lot and Plan
- 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 A or B area under Section 20AH
These areas are edged in yellow and filled with the remnant RE Status
- Category C area containing endangered regional ecosystems
- Category C area containing of concern regional ecosystems
- Category C area that is a least concern regional ecosystem
- Category C area under Section 20AI
These areas are edged in purple and filled with the remnant RE Status
- Non Remnant
- 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)
- Roads
- National Parks, State Forest and other reserves
- Cadastral line
- Property boundaries shown are provided as a locational aid only



0 140 280 420 560 700 m

This product is projected into:
GDA 1994 MGA Zone 56

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.

Disclaimer:
While every care is taken to ensure the accuracy of this product, the Department of Natural Resources, Mines and Energy makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or incomplete in any way and for any reason.

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.dnrm.qld.gov.au or contact the Department of Natural Resources, Mines and Energy.

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/>



Vegetation Management Act 1999 - Extract from the essential habitat database

Essential habitat is required for assessment under the:

- State Development Assessment Provisions - State Code 16: Native vegetation clearing which sets out the matters of interest to the state for development assessment under the *Planning Act 2016*; and
- Accepted development vegetation clearing codes made under the *Vegetation Management Act 1999*

Essential habitat for one or more of the following species is found on and within 1.1 km of the identified subject lot/s on the accompanying essential habitat map.

This report identifies essential habitat in Category A, B and Category C areas.

The numeric labels on the essential habitat map can be cross referenced with the database below to determine which essential habitat factors might exist for a particular species.

Essential habitat is compiled from a combination of species habitat models and buffered species records.

The Department of Natural Resources, Mines and Energy website (<http://www.dnrme.qld.gov.au>) has more information on how the layer is applied under the State Development Assessment Provisions - State Code 16: Native vegetation clearing and the *Vegetation Management Act 1999*.

Regional ecosystem is a mandatory essential habitat factor, unless otherwise stated.

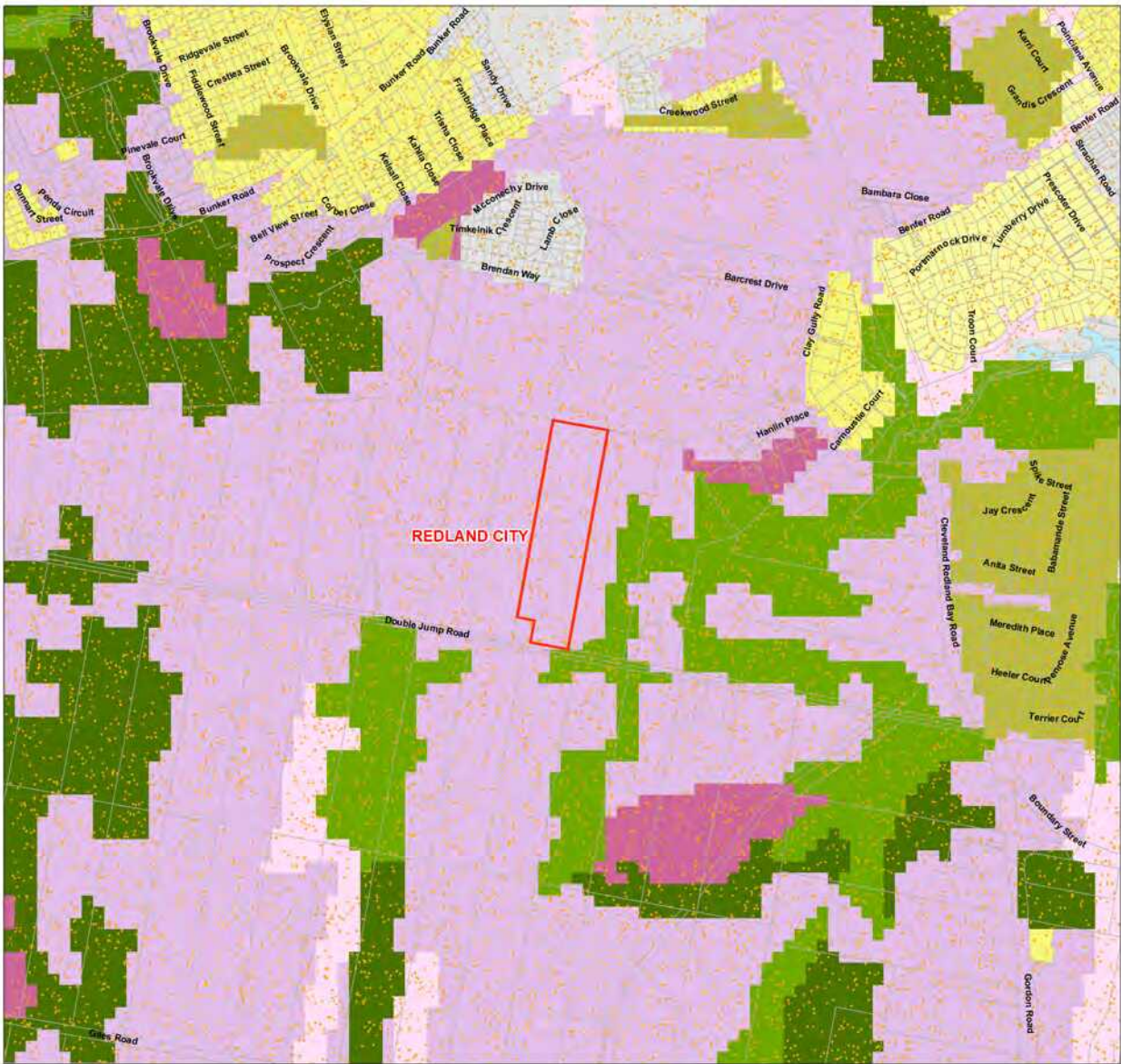
Essential habitat, for protected wildlife, means a category A area, a category B area or category C area shown on the regulated vegetation management map-

- 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; or
- 2) in which the protected wildlife, at any stage of its life cycle, is located.

Protected wildlife includes endangered, vulnerable or near-threatened native wildlife prescribed under the *Nature Conservation Act 1992*.

Essential habitat in Category A and/or Category B and/or Category C

No records



Koala Conservation in South East Queensland State Planning Regulatory Provisions

- Lot and Plan
- Priority Koala Assessable Development Areas
- Koala Assessable Development Areas
- Outside SPRP Koala Assessable Development Areas
- Koala SPRP - Identified Broad-Hectare Areas
- Koala SPRP - Identified Broad-Hectare Areas
- Koala SPRP - Habitat Values
- Bushland Habitat
 - High Value Bushland
 - Medium Value Bushland
 - Low Value Bushland
- Suitable for Rehabilitation
 - High Value Rehabilitation
 - Medium Value Rehabilitation
 - Low Value Rehabilitation
- Other Areas of Value
 - High Value Other
 - Medium Value Other
 - Low Value Other
 - Generally not suitable
 - Water
 - Cadastral Boundaries
 - Local Government Boundaries



This product is projected into GDA 1994 MGA Zone 56

While every care is taken to ensure the accuracy of this data, the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the data being inaccurate or incomplete in any way and for any reason. Due to varying sources of data, spatial locations may not coincide when overlaid.

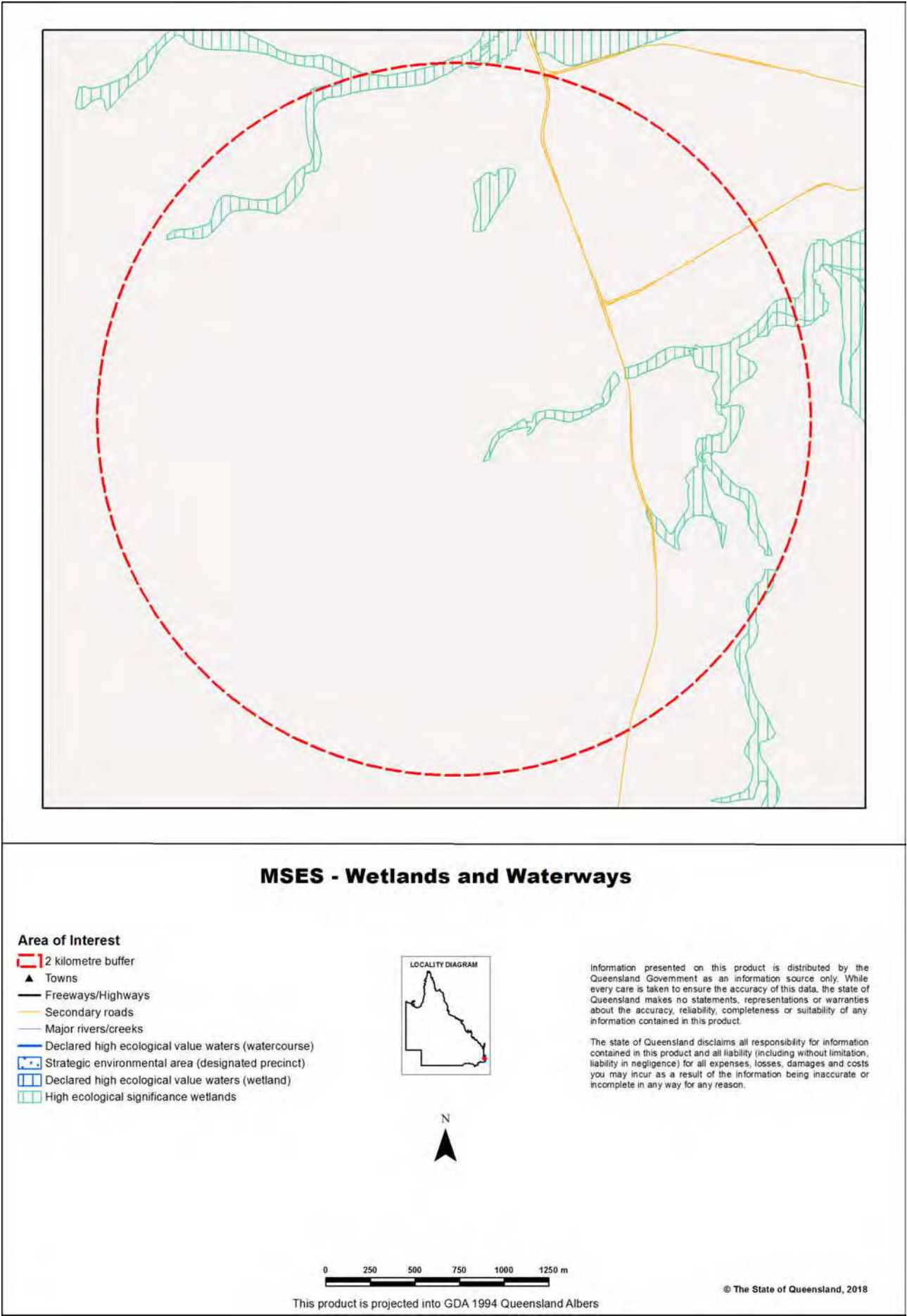
In consideration of the State permitting use of this data you acknowledge and agree that the State gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws.

Based on or contains data provided by the State of Queensland 2010.

Note - These maps are not regulatory. Regulatory maps and requirements can be downloaded from the DES website. Further information in relation to regulatory requirements for development and planning activities should be sought from the relevant Local Government Authority or the Department of Environment and Science.

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Map 2 - MSES - Wetlands and Waterways





Protected Plants Flora Survey Trigger Map

Legend

- Coordinates
- High risk area
- Cadastral line
Property boundaries shown are provided as a locational aid only
- Freeways / motorways / highways
- Secondary roads / streets



0 480 960 1,440 1,920 2,400 m

This product is projected into:
GDA 1994 Queensland Albers

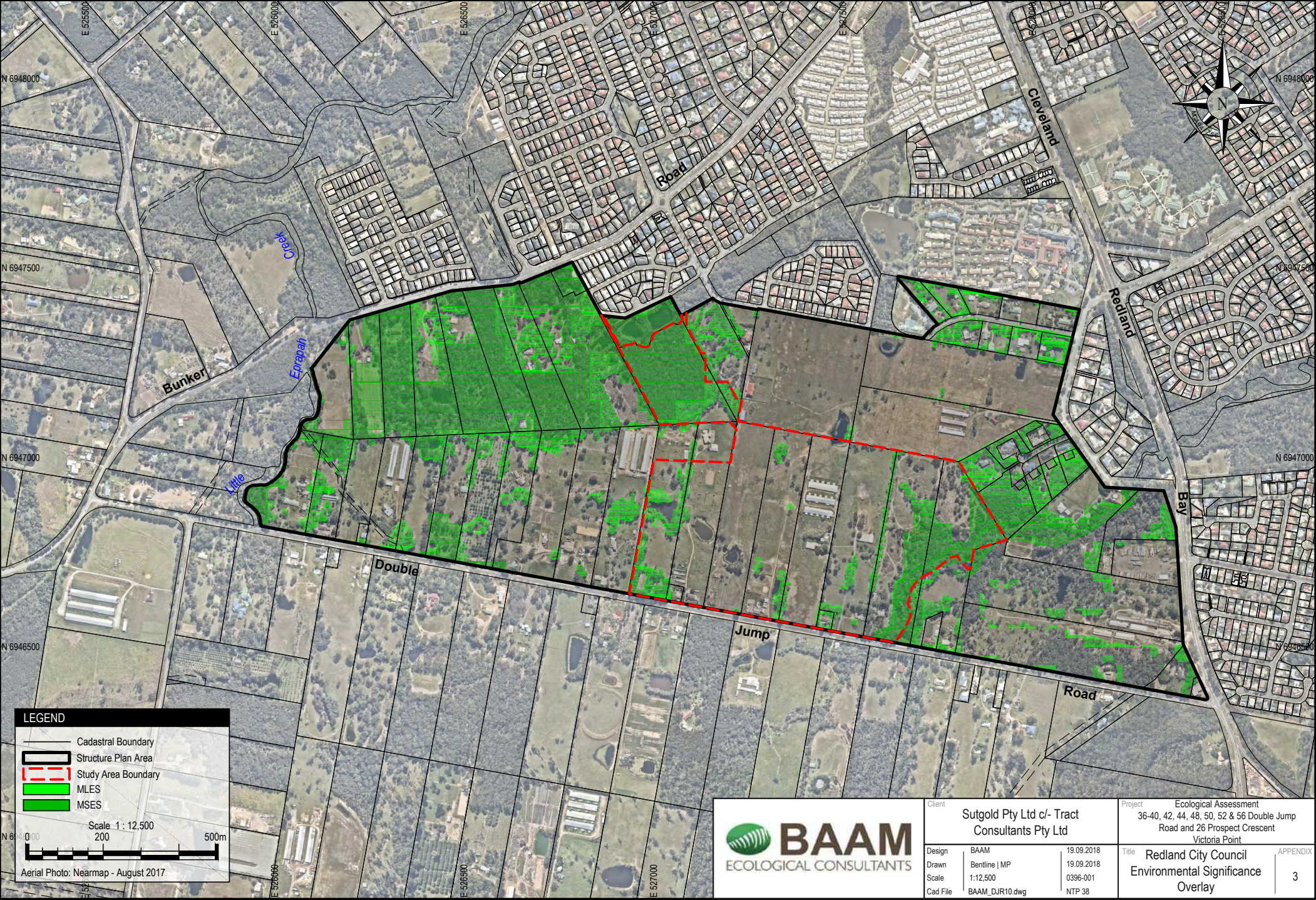
This map shows areas where particular provisions of the Nature Conservation Act 1992 apply to the clearing of protected plants.

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 and Science at palm@ehp.qld.gov.au

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APPENDIX 3
**RCC Environmental Significance and Waterway
Corridors and Wetlands Overlays**



LEGEND

- Cadastral Boundary
- Structure Plan Area
- Study Area Boundary
- MLES
- MSES

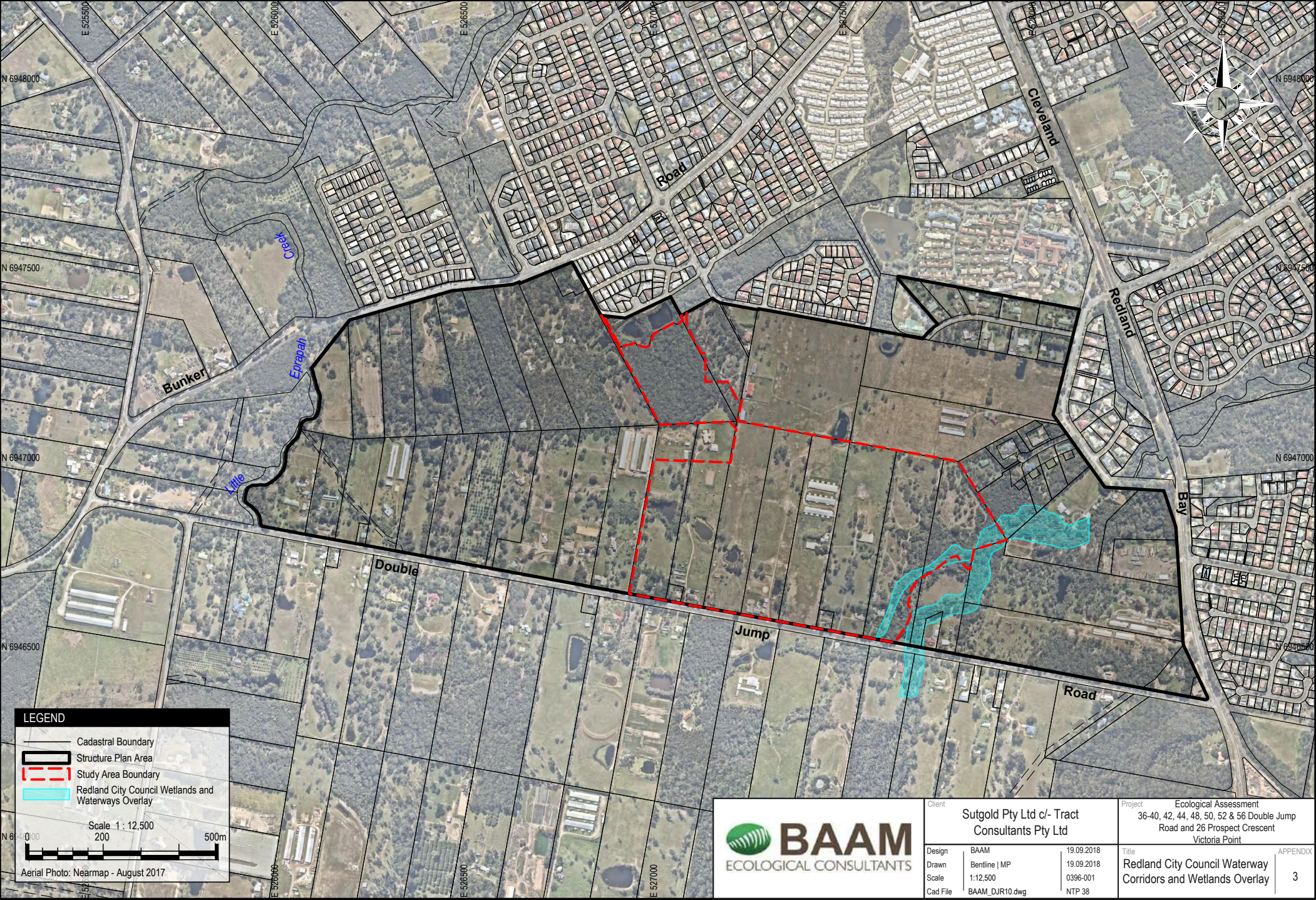
Scale 1 : 12,500
200 500m

Aerial Photo: Nearmap - August 2017

BAAM
ECOLOGICAL CONSULTANTS

Client Sutgold Pty Ltd c/- Tract Consultants Pty Ltd			Project Ecological Assessment 36-40, 42, 44, 48, 50, 52 & 56 Double Jump Road and 26 Prospect Crescent Victoria Point	
Design Drawn Scale Cad File	BAAM Bentline MP 1:12,500 BAAM_DJR10.dwg	19.09.2018 19.09.2018 0396-001 NTP 38	Title Redland City Council Environmental Significance Overlay	APPENDIX 3

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APPENDIX 4
Likelihood of Occurrence for Threatened Flora
and Fauna Species

Conservation significant terrestrial flora and vertebrate fauna species recorded or predicted to occur within a 5 km radius of the subject site and their likelihood of occurrence (known, likely, potential, unlikely) within or immediately adjoining the subject site.

Abbreviations: EPBC = status under the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth); NCA = status under the *Nature Conservation Act 1992* (Queensland); PM = EPBC Protected Matters Search Tool database search within a 10 km radius of the study area; WN = Queensland Department of Environment and Heritage Protection WildNet database search within a 25 km radius of the study area; E = Endangered; V = Vulnerable; NT = Near Threatened; M = Migratory; S = Special Least Concern (Migratory or culturally significant); LC = Least Concern; X = species occurrence predicted (PM).

Likelihood of occurrence categories: **Known** - from other surveys (BAAM, other consultancies, databases), species recorded onsite; **Likely to occur** – species not known to occur onsite but the site is within the known range of the species, potentially suitable habitat is present and there are either database records for the local region or knowledge of the species occurrence suggests it may occur as a resident or visitor; means 'high potential' or good habitat is present but no species were observed onsite; **Potential to occur** – the site is within the known range of the species and potentially suitable habitat is present but there are no database records for the local region and/or it is a rare, erratic or poorly known species; means 'low potential' or habitat for species is not definitive; **Unlikely to occur** – no suitable habitat present and/or the site is outside of the known range of the species.

Species	Common name	EPBC	NCA	PM	WN	BAAM	Preferred habitat characteristics	Likelihood of occurrence
Birds								
<i>Anthochaera phrygia</i>	Regent Honeyeater	E,M	E	X			Box-ironbark eucalypt forests and woodlands on the inland slopes of the Great Dividing Range, preferring the wettest, most fertile sites (Garnett <i>et al.</i> 2011).	Unlikely. The species is not known from the local region and only low value habitats for the species.
<i>Botaurus poiciloptilus</i>	Australasian Bittern	E	C	X			Shallow, vegetated freshwater or brackish swamps, favouring those dominated by sedges, rushes and/or reeds (Garnett <i>et al.</i> 2011).	Unlikely. Very little suitable habitat present. The wetland and pondage areas on the subject site have little to no habitat of relevance to this species.
<i>Erythrotriorchis radiatus</i>	Red Goshawk	V	E	X			Woodlands and forests, ideally with a mosaic of vegetation types and permanent water, particularly riverine forests. The species avoids both very dense and very open habitats (Marchant and Higgins, 1993).	Unlikely. No observation records for the region and the species was not observed during the field survey.
<i>Dasyornis brachypterus</i>	Eastern Bristlebird	E		X			Occurs in a variety of habitats but has only been recorded from three disjunct populations in Queensland/New South Wales (DoEE 2017a).	Unlikely. No suitable habitat and the species is not known from the local region.

Species	Common name	EPBC	NCA	PM	WN	BAAM	Preferred habitat characteristics	Likelihood of occurrence
<i>Geophaps scripta</i>	Squatter Pigeon	V		X			Dry grassy eucalypt woodlands and open forests, also <i>Callitris</i> and <i>Acacia</i> woodlands. Most birds live in sandy sites near permanent water (Frith 1982; Blakers <i>et al.</i> 1984; Crome and Shields 1992).	Unlikely. Not known in local landscape.
<i>Poephila cincta</i>	Southern Black-throated Finch	E		X			Dry open grassy woodlands and forests with seeding native grasses and free-standing water (Higgins <i>et al.</i> 2006b).	Unlikely. Not known in local landscape.
<i>Turnix melanogaster</i>	Black-breasted Button-quail	V	V	X			Semi-evergreen vine thicket and low microphyll vine forest; also dry rainforest (softwood scrubs) of Brigalow Belt, mature Hoop Pine plantations, and <i>Acacia</i> and <i>Austromyrtus</i> scrubs on sandy coastal soils (Garnett <i>et al.</i> 2011).	Unlikely. The site is dry open woodland or pasture and provides no suitable habitat present.
<i>Lathamus discolor</i>	Swift Parrot	E	E	X			Mainly dry open eucalypt forest and woodland, including those with Grey Box or River Red Gum (Higgins 1999).	Unlikely. A rare visitor to flowering eucalypts, but no local records. The extant habitats hold low potential for the species to occur. The proposed restoration will increase habitat values. .
<i>Rostratula australis</i>	Australian Painted Snipe	E	V	X			Terrestrial shallow wetlands, ephemeral and permanent, usually freshwater but occasionally brackish. They also use inundated grasslands, saltmarsh, dams, rice crops, sewage farms and bore drains (Marchant and Higgins 1993).	Unlikely. The existing farm dams do not support preferred habitats.
<i>Calyptorhynchus lathamii</i>	Glossy-Black Cockatoo		V		X		Lives in coastal woodlands and drier forest areas, open inland woodlands or timbered watercourses where its main food trees are common	Potential. Vegetated portions of the study area are dominated by <i>Allocasuarina littoralis</i> , a favoured food source. No birds or feeding evidences (orts) were observed during the surveys.
Frogs								
<i>Adelotus brevis</i>	Tusked Frog		V		X		Found within wet eucalypt forest, rainforest and occasionally dry eucalypt forest in close proximity to slow-moving creeks. Also recorded in disturbed areas.	Potential. Little Eprapah Creek holds some habitat values for this species. If present, it is likely to only occur within the study area during extended rainfall periods.

Species	Common name	EPBC	NCA	PM	WN	BAAM	Preferred habitat characteristics	Likelihood of occurrence
Mammals								
<i>Phascolarctos cinereus</i> (SEQ Bioregion)	Koala (SEQ Bioregion)	V	V	X	X		Eucalypt forest and woodland, feeding mostly on eucalypts.	Known. The current and prior site surveys have recorded the evidence (scats) of this species presence. The species is known to occur across the locality. There is some loss of habitat envisaged by the development footprint; however the proposed restoration and mitigation actions will increase habitat and safe movement options.
<i>Dasyurus maculatus</i>	Spotted-tail Quoll	E	V	X			This species shelter in rock caves, boulder piles and hollow logs or trees, with basking sites usually nearby (Menkhorst and Knight 2004).	Unlikely. No local records and no suitable habitat for this species.
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	C	X	X		Open eucalypt forests, woodlands, melaleuca swamps and banksia woodlands, particularly on more fertile alluvial soils. The establishment of a camp is only likely within riparian vegetation (Churchill 2008).	Likely regular visitor to flowering eucalypts and Melaleuca sp. on the subject site. No flying-fox camp currently occurs on the subject lands. The proposed restoration will increase the overall feeding habitat for this species.
<i>Xeromys myoides</i>	Water Mouse, False Water Rat, Yirrkoo	V	V	X			The species occurs in mangroves, saltmarsh, sedged lakes near foredunes and coastal freshwater swamps. They require relatively large areas of intertidal flats over which to forage, together with suitable adjacent areas for nest sites	Unlikely. The species will not occur within the subject site, as there are no suitable habitats present.
<i>Chalinolobus dwyeri</i>	Large Pied Bat	V	V	X			Little known, but may depend heavily on sandstone outcrops. It has been found roosting in disused mine shafts, caves, overhangs and disused Fairy Martin <i>Petrochelidon ariel</i> nests (Hoye and Schulz 2008). It also possibly roosts in the hollows of trees (Duncan <i>et al.</i> 1999).	Unlikely. No suitable habitat present and not known from the local region.

Species	Common name	EPBC	NCA	PM	WN	BAAM	Preferred habitat characteristics	Likelihood of occurrence
<i>Potorous tridactylus tridactylus</i> (SE Mainland)	Long-nosed Potoroo	V					There is no consistent pattern to the habitat of the Long-nosed Potoroo (SE Mainland); it can be found in wet eucalypt forests (Seebeck 1995) to coastal heaths and scrubs (Mason 1997). The main factors would appear to be access to some form of dense vegetation for shelter (Bennett 1987).	Unlikely. Due to past and ongoing landuses, that have resulted in a highly disturbed environment, there is no suitable dense vegetation present for this species.
<i>Petauroides volans</i>	Greater Glider	V		X			Restricted to eucalypt forests and woodlands that support old trees with large hollows. They have relatively low persistence in small forest fragments, and disperse poorly across vegetation that is not native forest (DoEE 2017b).	Unlikely. Although the subject site supports numerous old hollow-bearing trees, this species is unlikely to move through the highly fragmented environment.
Reptiles								
<i>Coeranoscincus reticulatus</i>	Three-toed Snake-toothed Skink	V		X			Inhabits subtropical rainforest and nearby wet sclerophyll forests. Most records are from montane rainforest on dark soils, but it also occurs on Fraser Island and nearby Cooloola coast in rainforests on pale sands.	Unlikely. No suitable habitat present and not known from the local region.
<i>Delma torquata</i>	Collared Delma	V	V	X			Shelters in soil cracks, leaf litter and under loose surface rocks in open eucalypt forest with a shrub and tussock grass understorey.	Unlikely. No suitable habitat present and not known from the local region.
Migratory Terrestrial Species								
<i>Cuculus optatus</i>	Oriental Cuckoo	M					This species is a relatively sparse migrant to south-east Queensland in areas of suitable, open habitat.	Potential. May be an occasional visitor to the subject site.
<i>Hirundapus caudacutus</i>	White-throated Needletail	M		X			This is an aerial species, typically occurring over forested habitats, but also over coastal areas, including cities (Higgins 1999; Pizzey and Knight 2003). They forage aerially in small to huge flocks for insects and spiders, often associated with low pressure weather systems in combination with other aerial species.	Likely. Well known in local area. This species may occur over the site, primarily in summer preceding rainfall and storm events. This species has little to no relevance to the proposed actions.

Species	Common name	EPBC	NCA	PM	WN	BAAM	Preferred habitat characteristics	Likelihood of occurrence
<i>Monarcha melanopsis</i>	Black-faced Monarch	S,M		X			Mainly rainforests, also wet sclerophyll forest and open forest near rainforest (Higgins <i>et al.</i> 2006a).	Potential. Summer visitor to forested habitats on the subject site, particularly denser vegetated portions along Little Eprapah Creek.
<i>Monarcha trivirgatus</i>	Spectacled Monarch	M		X			Spectacled Monarchs are mostly found singly or in pairs in low dense vegetation, mainly in rainforests, but also in wet sclerophyll forests and other dense vegetation such as mangroves, drier sclerophyll forests, woodlands, parks and gardens.	Potential. Low potential to occur in the forested habitats on the subject site, particularly denser vegetated portions associated with Little Eprapah Creek.
<i>Myiagra cyanoleuca</i>	Satin Flycatcher	M		X			Satin Flycatchers are mostly found in eucalypt forest, favouring wet forests, moist gullies and watercourses. They are largely absent from regrowth forests and feed on arthropods (mainly insects) and, occasionally, seeds. Generally, the Satin Flycatcher forages singly or in pairs high in the canopy and sub-canopy.	Potential. Potential to occur in the forested habitats on the subject site, particularly denser vegetated portions associated with Little Eprapah Creek.
<i>Rhipidura rufifrons</i>	Rufous Fantail	S,M		X			Moist habitats, including closed forests, coastal scrubs, mangroves and along watercourses and gullies, and urban/rural areas during mid-year migration (Pizzey and Knight, 2003; Higgins <i>et al.</i> 2006a).	Potential. Potential summer visitor to forested associated with Little Eprapah Creek.
Migratory Wetlands Species								
<i>Ardea alba</i>	Great Egret	M		X			This species is found in most shallow, coastal and inland wetland habitats, both estuarine and freshwater, including man-made dams and ponds and moist grasslands (Marchant and Higgins 1990; Pizzey and Knight 2003).	Likely. There are suitable habitats for this common wide ranging species within and adjoining the subject site.
<i>Ardea ibis</i>	Cattle Egret	M		X			The Cattle Egret inhabits grasslands, wetlands and wooded lands, often foraging away from water in grassland, pasture and crops. The species is strongly associated with grazing animals in Australia, but also forages at garbage tips, follows machinery, and feeds independently.	Known. This species is common in the local landscape. The proposed actions will reduce potential habitat values. However this will not have any notable impact on the species or its long term presence in the area.

Species	Common name	EPBC	NCA	PM	WN	BAAM	Preferred habitat characteristics	Likelihood of occurrence
Plants								
<i>Mardenia longiloba</i>	Clear Milkvine	V	V		X		Clear Milkvine grows in open eucalypt forest, or margins of subtropical and warm temperate rainforest, and in areas of rocky outcrops.	Unlikely. This species was not detected and there is no suitable habitat, due to past and ongoing agricultural activities and weed invasions.
<i>Marsdenia coronata</i>	Slender Milkvine		V		X		Most commonly found in open eucalypt forest and woodland communities on hillslopes and ridge tops at altitudes of 40–780 m above sea level.	Unlikely. This species was not detected and there is no suitable habitat, due to past and ongoing agricultural activities and weed invasions.
<i>Arthraxon hispidus</i>	Hairy-joint Grass	V	V	X			The species occupy a diverse range of ecosystem types including edges of rainforest, wet eucalyptus forest, near creeks or swamps, woodland, freshwater springs, coastal dunes, gullies and sandy alluvium in open forests (DoEE 2017c).	Unlikely. This species was not detected. Whilst some suitable habitat is on site, the ground stratum is highly disturbed and there are no historical records within and surrounding the study area.
<i>Baloghia marmorata</i>	Marbled Baloghia	V	V	X			Marbled Baloghia is found in subtropical rainforest/notophyll vine forest and wet sclerophyll forest (brush box woodland) with rainforest understorey between 150 and 550 m above sea level, with associated soil type being rich black or dark brown clay and loam derived from basalt (DoEE 2017d).	Unlikely. This species was not detected. The subject site contains low-lying coastal vegetation community with patches of loamy soil derived from basalt (typical of this region) and no suitable habitat for this species.
<i>Corchorus cunninghamii</i>	Native Jute	E	E	X			This species has been recorded in ecotonal habitats between wet sclerophyll and rainforest, occupying a variety of habitat types from the gully to ridge lines (DoEE 2017e).	Unlikely. This species was not detected. Whilst a population of this endangered species occurs in a rainforest edge habitat on Mt Cotton, the species is unlikely to compete with weed species that are currently dominating the ground layer in addition to inappropriate fire regime for the species.
<i>Cryptocarya foetida</i>	Stinking Cryptocarya	V	V	X			The species typically occurs in littoral rainforest, usually on sandy and basaltic soils (DoEE 2017f).	Unlikely. This species was not detected. Whilst some suitable habitat is on site, there are no historical records within and surrounding the area.

Species	Common name	EPBC	NCA	PM	WN	BAAM	Preferred habitat characteristics	Likelihood of occurrence
<i>Cryptostylis hunteriana</i>	Leafless Tongue-orchid	V		X			The species predominantly occurs along coastal heathlands, margins of coastal swamps and sedge lands, coastal forest, dry woodland, often associated with understorey of forested vegetation communities. The species is only known to occur from a single plant near the village of Tinnanbar and four additional coastal populations north of the Glass Mountains to Tin Can Bay on sandy or rocky heathland, Mt Mee in montane heathy woodland and Mt Coolum in rocky coastal heath (DoEE 2017g).	Unlikely. This species was not detected. The study area does not support suitable habitats and is outside of the known range for this species.
<i>Endiandra floydii</i>	Floyd's Walnut	E		X			Warm temperate, subtropical rainforest or wet sclerophyll forest with Brush Box overstorey, and in and Camphor Laurel forest.	Unlikely. No suitable habitats present
<i>Macadamia integrifolia</i> and <i>Macadamia tetraphylla</i>	Macadamia Nut	V	NT	X	X	X	These species often occupy ecotonal habitat, particularly between rainforest and sclerophyll forests, preferring well-drained fertile soil (DoEE 2017h).	Known. Macadamia trees were detected within one property of the study area. However, the individuals that were detected were clearly planted in rows. Given the context, these individual plants are not protected under <i>Nature Conservation Act 1992</i> and or the <i>EPBC Act 1999</i> .
<i>Phaius australis</i>	Lesser Swamp-orchid	E	E	X			The species is typically restricted to heath/sedge land, wetlands, swampy grassland or swampy forest in association with Broad-leaved Paperbark or Swamp Mahogany and or Swamp Box, swampy rainforest or fringing open forest.	Unlikely. The study area does not support preferred habitats for this species.
<i>Samadera bidwillii</i>	Quassia	V		X			Commonly occurs in lowland rainforest or rainforest margins generally associated with watercourses. It is only known from populations north of Gympie (DoEE 2017i)	Unlikely: The study area is outside of the known range for this species.
<i>Thesium australe</i>	Toadflax	V	V	X			Semi-parasitic on roots of a range of grass species notably Kangaroo Grass (<i>Themeda triandra</i>) occurs in shrubland, grassland or woodland, often on damp sites (DoEE 2017j).	Unlikely. This species was not detected and there is no suitable habitat, due to past and ongoing agricultural activities and weed invasions.

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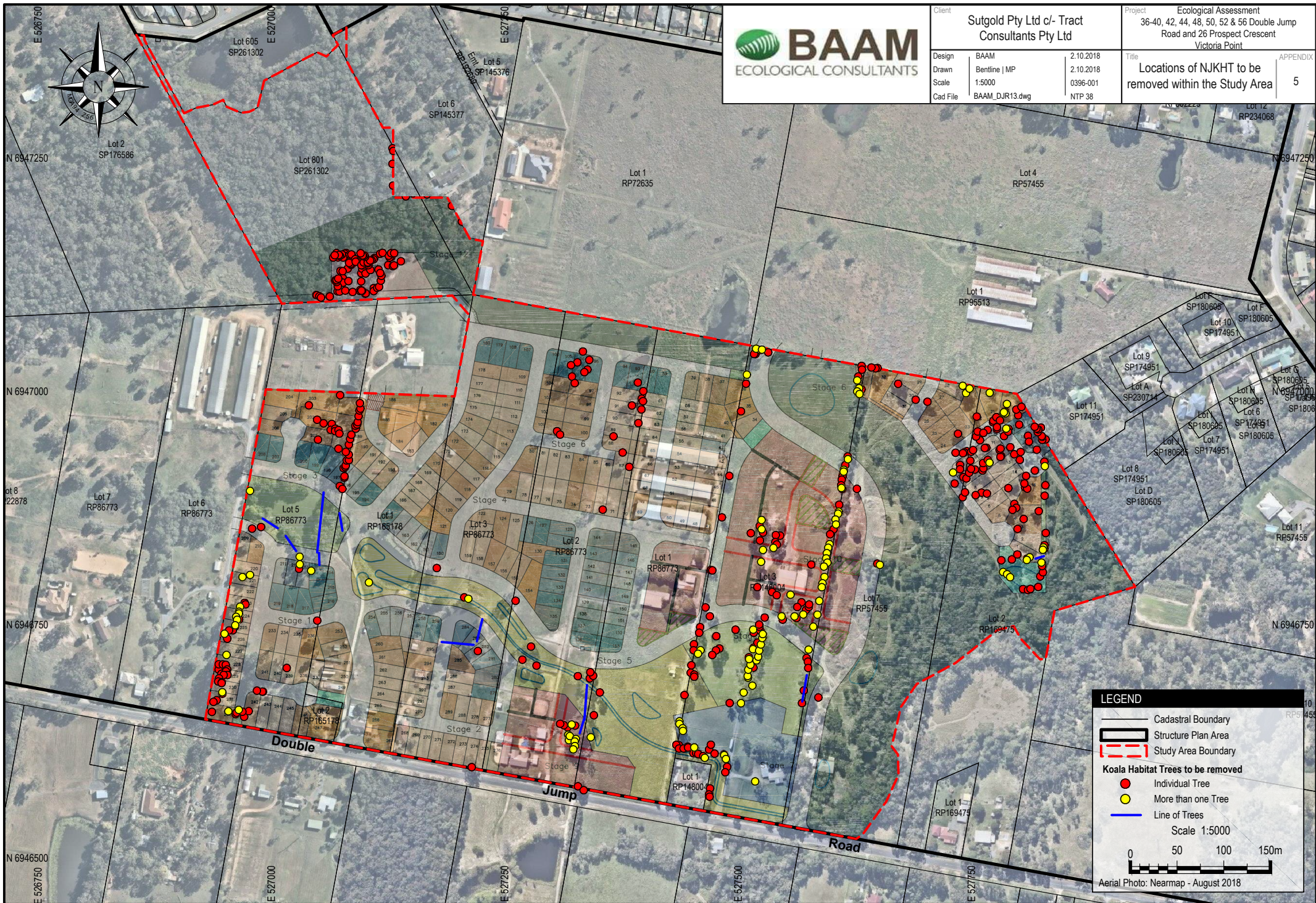
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APPENDIX 5

Locations of NJKHT within the study Area



APPENDIX 6
Fauna survey results and assessment of
likelihood of occurrence of unrecorded species
within the VPSPA

Victoria Point Structure Plan Area

Status under the *Nature Conservation Act 1992* (Queensland); V = Vulnerable; SL = Special Least Concern; LC = Least Concern; I = Introduced

Likelihood of occurrence categories: **Known** - from site surveys (BAAM, other consultancies, and public databases), species recorded onsite; **Expected** – species not known to occur onsite but the site is within the known range of the species, potentially suitable habitat is present and there are either database records for the local region or knowledge of the species occurrence suggests it may occur as a resident or visitor; means ‘high potential’ or good habitat is present but no species were observed onsite; **Potential**– the site is within the known range of the species and potentially suitable habitat is present but there are no database records for the local region and/or it is a rare, erratic or poorly known species; means ‘low potential’ or habitat for species is not definitive; **Unlikely**– no suitable habitat present and/or the site is outside of the known range of the species.

Scientific Name	Common Name	Status	Occurrence	Comments
Amphibians				
<i>Limnodynastes tasmaniensis</i>	spotted grassfrog	LC	Unlikely	Not recorded onsite. This species is uncommon in the Redlands and is unlikely to occur on the site.
<i>Limnodynastes terraereginae</i>	scarlet sided pobblebonk	LC	Known	Was recorded onsite across several lots. Primarily associated with vegetated areas and dams/ pondage habitats.
<i>Platyplectrum ornatum</i>	ornate burrowing frog	LC	Known	Species was not found breeding onsite. Several individuals were removed from pitfall traps within the western portions of the study area. Suitable habitats present and the species is known from surrounding landscape
<i>Limnodynastes peronii</i>	striped marshfrog	LC	Known	Common across the site primarily in association with waterways and wetland habitats
<i>Adelotus brevis</i>	tusked frog	V	Potential	Was not recorded despite targeted surveys in ideal conditions. Likely to be associated with the main creek lines and potentially farm dams where more permanent water is present
<i>Pseudophryne raveni</i>	copper backed broodfrog	LC	Potential	Known in local landscape and suitable habitat within the site. Was not recorded during targeted surveys.
<i>Crinia parinsignifera</i>	beeping froglet	LC	Known	A common local species which is known from the site and is expected to be present in several locations.
<i>Mixophyes fasciolatus</i>	great barred frog	LC	Potential	The study area has very limited habitats. The species may occur within the larger creek lines and waterways. The proposed land uses will not remove this species habitats.
<i>Pseudophryne coriacea</i>	red backed broodfrog	LC	Potential	Some local records and potential to occur within waterways and drainage lines. It should be noted these records are most likely <i>Pseudophryne raveni</i> which was once the same species.
<i>Crinia signifera</i>	clicking froglet	LC	Known	A common local species which has been recorded onsite in the central and eastern portions of the lands. It is expected to be present in several locations around the site.
<i>Uperoleia fusca</i>	dusky gungan	LC	Unlikely	Low likelihood of the species being present in the local landscape
<i>Crinia tinnula</i>	wallum froglet	V	Unlikely	No suitable habitat within or around the study area. This species does not occur within the study area.
<i>Pseudophryne major</i>	great brown broodfrog	LC	Unlikely	Low likelihood of this species in the local landscape. If present it will be associated with the riparian waterways and associated gully lines.

Scientific Name	Common Name	Status	Occurrence	Comments
<i>Litoria nasuta</i>	striped rocketfrog	LC	Potential	May occur within the waterways and drainage lines on and adjoining the site. Not recorded despite targeted frog surveys.
<i>Litoria dentata</i>	bleating treefrog	LC	Expected	Suitable habitat is present, pondage areas and waterways most likely areas of value.
<i>Litoria rubella</i>	ruddy treefrog	LC	Known	Occurs across the site and was recorded from dams, drainage lines and calling from structures.
<i>Litoria caerulea</i>	common green treefrog	LC	Known	Known. Expected to occur across the site and local landscape particularly in association with dwellings and wetland habitats.
<i>Litoria gracilentia</i>	graceful treefrog	LC	Known	Common across the site and particularly those areas where vegetated portions and suitable breeding locations coincide.
<i>Litoria latopalmata</i>	broad palmed rocketfrog	LC	Known	Recorded calling in flooded habitats and pondage areas within Little Eprapah Creek corridor and within the structure plan area. . Expected to occur across the study site in suitable habitats.
<i>Litoria fallax</i>	eastern sedgefrog	LC	Known	Common across the site and found calling from dams and adjacent waterways and drainage lines.
<i>Litoria peronii</i>	emerald spotted treefrog	LC	Potential	This species was recorded calling nearby in Springacre Road. Not found onsite despite ideal survey conditions. Could occur within the wetter portions of the site particularly where melaleuca habitats coincide with the major waterways.
<i>Rhinella marina</i>	cane toad	I	Known	Occurs across and throughout the site.
Reptiles				
<i>Diporiphora australis</i>	tommy roundhead	LC	Potential	Low potential to occur. If present it would be restricted to the more wooded areas.
<i>Intellagama lesueurii</i>	eastern water dragon	LC	Known	Recorded. Species is present within the water storages and waterways.
<i>Morelia spilota</i>	carpet python	LC	Expected	May occur within any habitats particularly the wooded areas.
<i>Dendrelaphis punctulatus</i>	green tree snake	LC	Known	Recorded in the core habitats in the western portions of the lands. This species is expected to occur across the site.
<i>Tropidonophis mairii</i>	freshwater snake	LC	Expected	In association with adjoining creeks
<i>Boiga irregularis</i>	brown tree snake	LC	Potential	In wooded areas across the site
<i>Nebulifera robusta</i>	robust velvet gecko	LC	Potential	In wooded areas across the site
<i>Vermicella annulata</i>	bandy-bandy	LC	Potential	In wooded areas across the site
<i>Pseudechis porphyriacus</i>	red-bellied black snake	LC	Potential	In association with adjacent riparian habitats
<i>Cryptophis nigrescens</i>	eastern small-eyed snake	LC	Potential	In wooded areas across the site
<i>Cacophis krefftii</i>	dwarf crowned snake	LC	Unlikely	In wooded areas across the site
<i>Hemiaspis signata</i>	black-bellied swamp snake	LC	Potential	In association with adjacent riparian habitats
<i>Cacophis harriettae</i>	white-crowned snake	LC	Expected	In wooded areas across the site
<i>Demansia psammophis</i>	yellow-faced whipsnake	LC	Known	Known. This species is present onsite and is expected to move across the entire study area.
<i>Heteronotia binoei</i>	Bynoe's gecko	LC	Known	Known. This species is primarily associated with the woodland habitats.
<i>Hemidactylus frenatus</i>	house gecko	I	Known	Recorded. This introduced species is known to occur on several lots across the study area in association with the dwellings.

Scientific Name	Common Name	Status	Occurrence	Comments
<i>Lialis burtonis</i>	Burton's legless lizard	LC	Potential	In wooded areas across the site
<i>Ctenotus taeniolatus</i>	copper-tailed skink	LC	Known	Known. A wide ranging species typically associated with the more vegetated portions of the site.
<i>Lampropholis delicata</i>	dark-flecked garden sunskink	LC	Known	This species is common across the site
<i>Calypotis scutirostrum</i>	scute-snouted calypotis	LC	Known	Recorded within the bushland portions of the study area.
<i>Cyclodomorphus gerrardii</i>	pink-tongued lizard	LC	Potential	In wooded areas across the site
<i>Cryptoblepharus pulcher pulcher</i>	elegant snake-eyed skink	LC	Known	In wooded areas and where large timber is present across the site.
<i>Lygisaurus foliorum</i>	tree-base litter-skink	LC	Known	Recorded. Associated with the more vegetated areas where suitable leaf litter is retained.
<i>Tiliqua scincoides</i>	eastern blue-tongue lizard	LC	Known	This species can occur across the local landscape.
<i>Pogona barbata</i>	bearded dragon	LC	Known	This species can occur across the local landscape.
<i>Carlia vivax</i>	tussock rainbow-skink	LC	Known	This species may occur across the local landscape where stands of vegetation are retained.
<i>Concinnia martini</i>	dark bar-sided skink	LC	Potential	In wooded areas across the site.
<i>Eulamprus quoyii</i>	eastern water skink	LC	Potential	In waterways and wetter vegetated areas. Site.
<i>Concinnia tenuis</i>	bar-sided skink	LC	Potential	In wooded areas across the site.
<i>Varanus varius</i>	lace monitor	LC	Expected	Known to occur within the structure plan area primarily in association with the vegetated areas. Expected to occasion the wooded areas and larger trees across the site
Birds				
<i>Acanthiza reguloides</i>	buff-rumped thornbill	LC	Potential	Could occur within the more forested portions of the site and adjoining waterways.
<i>Gerygone olivacea</i>	white-throated gerygone	LC	Known	Associated with the bushland habitats and recorded within Little Epraph Creek corridor and the nearby vegetated habitats
<i>Sericornis frontalis</i>	white-browed scrubwren	LC	Known	Present within the denser vegetated portions of Little Epraph Creek and Moogurrapum Creek. Expected to have more coverage upon establishment of proposed corridors.
<i>Acanthiza pusilla</i>	brown thornbill	LC	Expected	Expected to occasionally frequent the more vegetated portions of the site.
<i>Acanthiza chrysorrhoa</i>	yellow-rumped thornbill	LC	Potential	Associated with the bushland habitats
<i>Smicronis brevirostris</i>	weebill	LC	Potential	Could occur where suitable forested vegetation and midstorey habitats are retained
<i>Acanthiza lineata</i>	striated thornbill	LC	Potential	Could occur where suitable woodland habitats are retained
<i>Accipiter novaehollandiae</i>	grey goshawk	LC	Potential	Could occasion the site in search of prey, unlikely to be a regular resident.
<i>Accipiter cirrocephalus</i>	collared sparrowhawk	LC	Potential	Could occasion the site in search of prey, unlikely to be a regular resident.
<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle	LC	Unlikely	May occur over the site but is unlikely to use the extant habitats for foraging or nesting purposes.
<i>Haliastur spheurnus</i>	whistling kite	LC	Known	Occurs over and around the site. A wide ranging species.
<i>Aviceda subcristata</i>	Pacific baza	LC	Known	Recorded within the bushland habitats and vegetated portions of the study area. Primarily associated with the woodland habitats.

Scientific Name	Common Name	Status	Occurrence	Comments
<i>Accipiter fasciatus</i>	brown goshawk	LC	Expected	Could occur where suitable woodland habitats are retained. Species was observed nearby within the bushland habitats at rear of Brookland Drive
<i>Lophoictinia isura</i>	square-tailed kite	LC	Unlikely	May visit the larger bushland habitats in the local landscape and along waterways. Unlikely within the stage 1 habitats.
<i>Circus approximans</i>	swamp harrier	LC	Known	Recorded in the central portions of the structure plan area. This species may venture across the pastoral areas and drainage lines.
<i>Pandion cristatus</i>	eastern osprey	SL	Unlikely	No suitable habitats onsite
<i>Elanus axillaris</i>	black-shouldered kite	LC	Known	Recorded utilising the open pastoral areas. The open portions of the local landscape are suitable for hunting. This species could nest within vegetated areas.
<i>Circus assimilis</i>	spotted harrier	LC	Unlikely	Little to no suitable habitat
<i>Haliastur indus</i>	brahminy kite	LC	Potential	Expected to occur flying over the site – though only low potential to utilise the extant habitats
<i>Aquila audax</i>	wedge-tailed eagle	LC	Potential	Expected to occur flying over the site – though only low potential to utilise the extant habitats other than as occasional hunting options are identified.
<i>Acrocephalus australis</i>	Australian reed-warbler	LC	Potential	Low potential to occur. Primarily if land is left unmanaged to allow suitable cover to establish. Little to no suitable habitat onsite
<i>Aegotheles cristatus</i>	Australian owl-nightjar	LC	Potential	There are suitable hollow bearing trees and wooded portions onsite. Was not recorded during spotlighting surveys.
<i>Ceyx azureus</i>	azure kingfisher	LC	Potential	Only within the main waterway habitats.
<i>Dendrocygna arcuata</i>	wandering whistling-duck	LC	Known	Observed feeding in pastoral areas nearby existing dams. Expected to occasion the larger dams and associated habitats.
<i>Anas castanea</i>	chestnut teal	LC	Potential	May occur within the Dams and associated habitats
<i>Anas gracilis</i>	grey teal	LC	Potential	May occur within the Dams and associated habitats
<i>Aythya australis</i>	hardhead	LC	Likely	May occur within the Dams and associated habitats
<i>Anas superciliosa</i>	Pacific black duck	LC	Known	A regularly recorded species within the suitable dams and associated habitats
<i>Chenonetta jubata</i>	Australian wood duck	LC	Known	Common across the open areas and local landscape. The site provides suitable habitats for feeding and potential to breed within the hollow bearing trees. Species is common across the local landscape.
<i>Anhinga novaehollandiae</i>	Australasian darter	LC	Potential	This species is known from the wider structure plan area but not recorded within stage 1. May associate with the waterways and dams for foraging purposes.
<i>Anseranas semipalmata</i>	magpie goose	LC	Potential	Waterways, open grasslands and dams for foraging purposes. Unlikely to breed onsite. Has been observed flying over the wider structure plan area.
<i>Hirundapus caudacutus</i>	white-throated needletail	SL	Expected	This aerial species will occur over the site.
<i>Apus pacificus</i>	fork-tailed swift	SL	Potential	This primarily aerial species may occur over the site.
<i>Egretta novaehollandiae</i>	white-faced heron	LC	Known	Known. This species is regularly present onsite and visitation is for foraging purposes. Unlikely to breed onsite.
<i>Bubulcus ibis</i>	cattle egret	LC	Known	Occurs in association with domestic stock within the open pastoral areas across the site if/where domestic stock are present. .
<i>Ardea intermedia</i>	intermediate egret	LC	Potential	Potential to occur within waterways, wetland

Scientific Name	Common Name	Status	Occurrence	Comments
				habitats and dams.
<i>Egretta garzetta</i>	little egret	LC	Known	Occurs within waterways, and dams.
<i>Botaurus poiciloptilus</i>	Australasian bittern	LC	Unlikely	Little to no suitable habitats present within the VPSP area.
<i>Nycticorax caledonicus</i>	nankeen night-heron	LC	Potential	Potential to occur within waterways, and dams. Not roosting onsite.
<i>Cracticus tibicen</i>	Australian magpie	LC	Known	Common across the site and local landscape.
<i>Cracticus torquatus</i>	grey butcherbird	LC	Known	Common across the site where the more vegetated portions are present.
<i>Cracticus nigrogularis</i>	pied butcherbird	LC	Known	Common across the site
<i>Strepera graculina</i>	pied currawong	LC	Potential	May occur within the study area though not recorded onsite.
<i>Burhinus grallarius</i>	bush stone-curlew	LC	Potential	Suitable habitats are present and the species is known from the local landscape.
<i>Cacatua galerita</i>	sulphur-crested cockatoo	LC	Known	Recorded. Known across the study area and observed regularly feeding on pastoral weeds. Expected to occasion habitats across the site and may breed onsite.
<i>Calyptorhynchus banksii</i>	red-tailed black-cockatoo	LC	Unlikely	Not known in local area.
<i>Cacatua tenuirostris</i>	long-billed corella	LC	Expected	Suitable habitats are present and the species occurs in the local landscape.
<i>Eolophus roseicapilla</i>	galah	LC	Known	Recorded breeding onsite within Lot 22. Species has been observed across stage 1.
<i>Cacatua sanguinea</i>	little corella	LC	Expected	Suitable habitats are present
<i>Calyptorhynchus funereus</i>	glossy black-cockatoo	LC	Potential	Potential to occur as suitable feeding resources are present. No evidence of their feeding has been recorded onsite despite targeted searches.
<i>Lalage leucomela</i>	varied triller	LC	Potential	Not recorded within Stage 1 but known from wider structure plan area. This species is associated with the more vegetated portions of the local landscape.
<i>Coracina lineata</i>	barred cuckoo-shrike	LC	Unlikely	Not known in local landscape.
<i>Lalage tricolor</i>	white-winged triller	LC	Unlikely	Not known in local landscape.
<i>Coracina novaehollandiae</i>	black-faced cuckoo-shrike	LC	Known	Common across the local landscape.
<i>Coracina tenuirostris</i>	cicadabird	LC	Known	Known. This species is restricted to the more vegetated portions and primary corridors. A seasonal visitor during summer months.
<i>Vanellus miles</i>	masked lapwing	LC	Known	Common in the open grassland portions.
<i>Ephippiorhynchus asiaticus</i>	black-necked stork	LC	Unlikely	Wetland and dams have low value for this species.
<i>Cisticola exilis</i>	golden-headed cisticola	LC	Expected	Where grassland habitats are not mown or reduced by presence of stock.
<i>Climacteris affinis</i>	white-browed treecreeper	LC	Potential	Known from the tributary of Moogurrapum Creek in the eastern portions of the Structure Plan area. This species will be restricted to the larger vegetated areas.
<i>Phaps chalcoptera</i>	common bronzewing	LC	Potential	May occur onsite within a variety of woodland habitats.
<i>Chalcophaps indica</i>	emerald dove	LC	Potential	Potential as a migrant during movement through the landscape. Little to no direct habitat values onsite.
<i>Geopelia humeralis</i>	bar-shouldered dove	LC	Known	Associated with the wooded portions of the site.
<i>Macropygia amboinensis</i>	brown cuckoo-dove	LC	Potential	Most likely along the larger waterways and wooded portions.
<i>Streptopelia</i>	spotted dove	I	Known	Across the site.

Scientific Name	Common Name	Status	Occurrence	Comments
<i>chinensis</i>				
<i>Columba livia</i>	rock dove	I	Known	Occurs in the more open areas.
<i>Geopelia striata</i>	peaceful dove	LC	Potential	Known from the more vegetated areas and adjoining open habitats in the eastern portions of the Structure Plan area.
<i>Ocyphaps lophotes</i>	crested pigeon	LC	Known	Across the site
<i>Eurystomus orientalis</i>	dollarbird	LC	Known	Recorded utilising the central portions of the study area and within the adjoining Little Eprapah Creek corridor. Expected to occur across the site, and potential breeding in the larger hollow bearing trees.
<i>Corvus orru</i>	Torresian crow	LC	Known	Common across the site
<i>Cacomantis flabelliformis</i>	fan-tailed cuckoo	LC	Known	Within the wooded portions of the study area and adjoining creek corridors.
<i>Centropus phasianinus</i>	pheasant coucal	LC	Known	Common across the local landscape. More likely within the vegetated portions and waterways.
<i>Cacomantis variolosus</i>	brush cuckoo	LC	Potential	Potential to occur within the more vegetated portions and Little Eprapah Creek.
<i>Eudynamys orientalis</i>	eastern koel	LC	Expected	Summer visitor within the more vegetated portions and waterways.
<i>Chalcites minutillus barnardi</i>	little bronze-cuckoo	LC	Potential	Most likely along the larger waterways and wooded portions.
<i>Chalcites lucidus</i>	shining bronze-cuckoo	LC	Potential	Most likely along the larger waterways and wooded portions.
<i>Chalcites basalus</i>	Horsfield's bronze-cuckoo	LC	Potential	Most likely along the larger waterways and wooded portions.
<i>Scythrops novaehollandiae</i>	channel-billed cuckoo	LC	Known	A summer vagrant, that is a wide ranging species that can utilise the entire study area.
<i>Cacomantis pallidus</i>	pallid cuckoo	LC	Potential	A summer vagrant, which may irregularly occur on or nearby the site.
<i>Dicrurus bracteatus</i>	spangled drongo	LC	Known	Present within and across all vegetated areas.
<i>Neochmia temporalis</i>	red-browed finch	LC	Known	Associated with the waterways and wetter portions of the study area. The creek corridors are the core habitats.
<i>Neochmia modesta</i>	plum-headed finch	LC	Unlikely	Not known in local landscape
<i>Taeniopygia bichenovii</i>	double-barred finch	LC	Known	This species can occur across the local landscape particularly where grassland and ground vegetation is dense and grasses hold seeds.
<i>Eurostopodus mystacalis</i>	white-throated nightjar	LC	Potential	Not known from the site. May occur within the wooded area and associated habitats
<i>Falco peregrinus</i>	peregrine falcon	LC	Potential	May occasion the site in search of prey.
<i>Falco berigora</i>	brown falcon	LC	Expected	May occasion the site in search of prey.
<i>Falco longipennis</i>	Australian hobby	LC	Known	Suitable habitats across the site
<i>Falco cenchroides</i>	nankeen kestrel	LC	Potential	Suitable habitats across the site
<i>Todiramphus sanctus</i>	sacred kingfisher	LC	Known	Woodland and waterways
<i>Dacelo novaeguineae</i>	laughing kookaburra	LC	Known	Occurs across the site and local landscape.
<i>Todiramphus macleayi</i>	forest kingfisher	LC	Potential	Within the larger vegetated portions
<i>Petrochelidon nigricans</i>	tree martin	LC	Potential	Across the site
<i>Cheramoeca leucosterna</i>	white-backed swallow	LC	Potential	Low potential to be present in the local landscape. Would utilise the open habitats and drainage lines across the site.

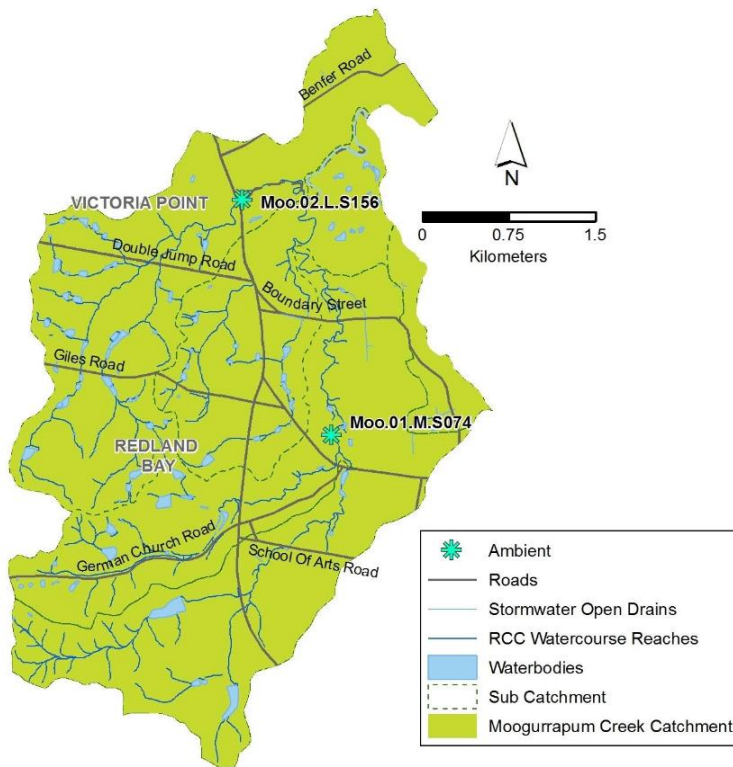
Scientific Name	Common Name	Status	Occurrence	Comments
<i>Hirundo neoxena</i>	welcome swallow	LC	Known	Common across the site particularly the open pastoral areas.
<i>Petrochelidon ariel</i>	fairy martin	LC	Known	Relatively common within the site and surrounds.
<i>Irediparra gallinacea</i>	comb-crested jacana	LC	Potential	The dams are primarily too small and lack sufficient waterlilies for this species to occur
<i>Malurus cyaneus</i>	superb fairy-wren	LC	Expected	Likely within the waterways and vegetated portions
<i>Malurus lamberti</i>	variegated fairy-wren	LC	Known	Known. This species is has been observed in several locations within and immediately adjoining the study area.
<i>Malurus melanocephalus</i>	red-backed fairy-wren	LC	Known	Relatively common within the vegetated areas where denser mid-storey is present.
<i>Megalurus timoriensis</i>	tawny grassbird	LC	Potential	Low potential due to existing land use and stoic limiting the height and cover of grassland habitats
<i>Alectura lathamii</i>	Australian brush-turkey	LC	Known	Known. This common species is expected to use a variety of habitats onsite.
<i>Lichmera indistincta</i>	brown honeyeater	LC	Known	Present across the site where suitable vegetation exists.
<i>Melithreptus lunatus</i>	white-naped honeyeater	LC	Potential	Some local records and limited suitable habitats present.
<i>Philemon corniculatus</i>	noisy friarbird	LC	Known	Regular visitor in the local area. Known from across the VPSP area.
<i>Manorina melanocephala</i>	noisy miner	LC	Known	Present across the VPSP area.
<i>Myzomela sanguinolenta</i>	scarlet honeyeater	LC	Known	Winter visitor to the more intact woodland areas and melaleuca portions.
<i>Philemon citreogularis</i>	little friarbird	LC	Expected	The wooded portions have potential for this species to occur
<i>Anthochaera chrysoptera</i>	little wattlebird	LC	Potential	Some local records and suitable habitats present
<i>Entomyzon cyanotis</i>	blue-faced honeyeater	LC	Known	Common across the site and local landscape
<i>Caligavis chrysops</i>	yellow-faced honeyeater	LC	Known	Known. A seasonal/intermittent visitor Expected to be commonly present onsite and across the local landscape.
<i>Meliphaga lewinii</i>	Lewin's honeyeater	LC	Known	Known. Associated with the more vegetated portions and particularly the Creek Corridors.
<i>Acanthorhynchus tenuirostris</i>	eastern spinebill	LC	Expected	Seasonal visitor in response to localised flowering events.
<i>Plectorhyncha lanceolata</i>	striped honeyeater	LC	Known	Irregular visitor onsite and surrounds. Heard calling along Little Eprapah Creek.
<i>Merops ornatus</i>	rainbow bee-eater	LC	Known	Regularly present in the local landscape.
<i>Grallina cyanoleuca</i>	magpie-lark	LC	Known	Common across the site
<i>Monarcha melanopsis</i>	black-faced monarch	SL	Expected	Primarily within the riparian areas along Little Eprapah Creek and associated denser vegetation.
<i>Myiagra inquieta</i>	restless flycatcher	LC	Potential	Vegetated portions particularly Little Eprapah Creek.
<i>Symposiachrus trivirgatus</i>	spectacled monarch	SL	Unlikely	The site and surrounds lack the denser wetter rainforest elements preferred by this species.
<i>Myiagra rubecula</i>	leaden flycatcher	LC	Expected	Known in local area and suitable habitats present.
<i>Anthus novaeseelandiae</i>	Australasian pipit	LC	Known	Known. Suitable open habitats, pastoral areas, present within and across the local landscape.
<i>Dicaeum hirundinaceum</i>	mistletoebird	LC	Known	Regularly recorded in local landscape. Wooded portions of higher value.
<i>Daphoenositta chrysoptera</i>	varied sittella	LC	Potential	Would only utilise the larger wooded portions of the study area.
<i>Oriolus sagittatus</i>	olive-backed oriole	LC	Expected	Common in local area and suitable habitats exists

Scientific Name	Common Name	Status	Occurrence	Comments
<i>Sphecotheres vieilloti</i>	Australasian figbird	LC	Known	Across the site within the vegetated portions.
<i>Pachycephala pectoralis</i>	golden whistler	LC	Known	This species is known from the Moogurrapum riparian habitats.
<i>Colluricincla megarhyncha</i>	little shrike-thrush	LC	Potential	Woodland habitats and riparian areas.
<i>Pachycephala rufiventris</i>	rufous whistler	LC	Known	A locally common species within woodland and riparian habitats.
<i>Colluricincla harmonica</i>	grey shrike-thrush	LC	Known	Expected within the higher value woodland habitats and riparian areas.
<i>Pardalotus punctatus</i>	spotted pardalote	LC	Expected	Primarily within the denser vegetation and adjoining riparian habitats.
<i>Pardalotus striatus</i>	striated pardalote	LC	Known	Recorded calling in several locations where suitable wooded habitats are retained. .
<i>Passer domesticus</i>	house sparrow	I	known	Present within the VPSP area.
<i>Microeca fascians</i>	jacky winter	LC	Potential	Very few local records and species not known in the area.
<i>Eopsaltria australis</i>	eastern yellow robin	LC	Known	Larger vegetated portions are of value. Recoded along Little Epraph Creek and Moogurrapum Creeks.
<i>Phalacrocorax sulcirostris</i>	little black cormorant	LC	Known	Known. Likely within any of the waterways and dams
<i>Microcarbo melanoleucos</i>	little pied cormorant	LC	Potential	Waterways and Dams
<i>Phalacrocorax carbo</i>	great cormorant	LC	Unlikely	Low value habitats onsite
<i>Phalacrocorax varius</i>	pied cormorant	LC	Known	May occur within the larger dams
<i>Coturnix ypsilophora</i>	brown quail	LC	Known	Grassland and open woodland habitats.
<i>Podargus strigoides</i>	tawny frogmouth	LC	Known	This species may be present in most of the areas where vegetation is retained.
<i>Poliocephalus poliocephalus</i>	hoary-headed grebe	LC	Unlikely	Very low potential to occur due to small size of water bodies.
<i>Podiceps cristatus</i>	great crested grebe	LC	Unlikely	Very low potential to occur due to small size of water bodies.
<i>Tachybaptus novaehollandiae</i>	Australasian grebe	LC	Potential	May occur within the larger dams
<i>Pomatostomus temporalis</i>	grey-crowned babbler	LC	Unlikely	No recent records inn local area.
<i>Platycercus eximius</i>	eastern rosella	LC	Potential	Wide ranging species which could occur seasonally onsite.
<i>Alisterus scapularis</i>	Australian king-parrot	LC	Potential	Wide ranging species which could occur seasonally onsite.
<i>Platycercus adscitus</i>	pale-headed rosella	LC	Known	Regular visitor across the site This wide ranging species utilises a variety of habitats. .
<i>Trichoglossus chlorolepidotus</i>	scaly-breasted lorikeet	LC	Known	Wide ranging species which occurs regularly across the site.
<i>Trichoglossus haematodus moluccanus</i>	rainbow lorikeet	LC	Known	Wide ranging species which occurs regularly across the site.
<i>Parvipsitta pusilla</i>	little lorikeet	LC	Potential	Wide ranging species which would occur intermittently onsite.
<i>Psophodes olivaceus</i>	eastern whipbird	LC	Known	Primarily associated with the riparian and woodland areas of Little Epraph Creek.
<i>Sericulus chrysocephalus</i>	regent bowerbird	LC	Unlikely	No suitable habitat
<i>Porphyrio melanotus</i>	purple swamphen	LC	Known	Regularly observed onsite. Primarily associated with dams and riparian areas.
<i>Gallinula tenebrosa</i>	dusky moorhen	LC	Known	Associated with dams and riparian areas.
<i>Lewinia pectoralis</i>	Lewin's rail	LC	Unlikely	May occur within riparian habitats and waterways. No suitable habitats within the Stage 1 area.

Scientific Name	Common Name	Status	Occurrence	Comments
<i>Gallirallus philippensis</i>	buff-banded rail	LC	Potential	May occur in the more densely vegetated and rank grassland areas particular along waterways.
<i>Himantopus himantopus</i>	black-winged stilt	LC	Potential	Could utilise dam's onsite – though low value as habitat.
<i>Rhipidura leucophrys</i>	willie wagtail	LC	Known	Present across the site
<i>Rhipidura rufifrons</i>	rufous fantail	SL	Expected	Seasonal visitor within the vegetated portions of the site and adjoining riparian habitats.
<i>Rhipidura albiscapa</i>	grey fantail	LC	Known	Present within the vegetated portions of Lot 22 and Little Eprapah Creek.
<i>Ninox connivens</i>	barking owl	LC	Unlikely	Not known in local landscape
<i>Ninox strenua</i>	powerful owl	V	Potential	May occasion the site in search of prey. No suitable roosting or breeding habitat present.
<i>Ninox boobook</i>	southern boobook	LC	Known	This nocturnal species is relatively common in local landscape.
<i>Sturnus vulgaris</i>	common starling	I	Potential	Not observed onsite but known in local landscape
<i>Acridotheres tristis</i>	common myna	I	Known	Common within the open areas and utilising hollow bearing trees for breeding.
<i>Platalea regia</i>	royal spoonbill	LC	Expected	Known in local landscape and suitable habitats present.
<i>Platalea flavipes</i>	yellow-billed spoonbill	LC	Potential	Could utilise dam's onsite – though low value as habitat.
<i>Plegadis falcinellus</i>	glossy ibis	SL	Potential	May visit the wetland portions onsite
<i>Threskiornis molucca</i>	Australian white ibis	LC	Known	Utilising the pastoral habitats across the site.
<i>Threskiornis spinicollis</i>	straw-necked ibis	LC	Known	This species will utilise the pastoral habitats.
<i>Zosterops lateralis</i>	silveryeye	LC	Known	Recorded along Little Eprapah Creek and wooded habitats.
<i>Turnix varius</i>	painted button-quail	LC	Unlikely	No suitable habitat
<i>Turnix maculosus</i>	red-backed button-quail	LC	Unlikely	No suitable habitat
<i>Tyto delicatula</i>	eastern barn owl	LC	Potential	Could occur within the local landscape and may utilise the open habitats for hunting.
<i>Tyto tenebricosa tenebricosa</i>	sooty owl	LC	Unlikely	Not known in local landscape and no suitable habitat.
Mammals				
<i>Acrobates pygmaeus</i>	feathertail glider	LC	Unlikely	Little to no suitable habitat
<i>Vulpes vulpes</i>	red fox	I	Known	Evidence of visitation recorded. This species could occur anywhere onsite
<i>Planigale maculata</i>	common planigale	LC	Unlikely	Low value woodland habitats lacking size and structure. Likely excluded due to presence of predators.
<i>Phascogale tapoatafa tapoatafa</i>	brush-tailed phascogale	LC	Unlikely	A species which is present in larger bushland areas. Could occur onsite or within the adjoining riparian habitats.
<i>Antechinus flavipes</i>	yellow-footed antechinus	LC	Potential	Not trapped during targeted survey. Expected to occur in the wider landscape in larger more intact woodland and forest habitats.
<i>Sminthopsis murina</i>	common dunnart	LC	Unlikely	A species which is present in larger bushland areas and generally associated with intact bushland. Little to no suitable habitats within stage 1. .
<i>Lepus europaeus</i>	European brown hare	I	Known	Across the pastoral portions of the site.
<i>Macropus giganteus</i>	eastern grey kangaroo	LC	Unlikely	This common species is not known in local area and no evidence of visitation was recorded.
<i>Wallabia bicolor</i>	swamp wallaby	LC	Potential	Adjoining riparian habitats and vegetated

Scientific Name	Common Name	Status	Occurrence	Comments
				linkages. Not recorded onsite.
<i>Macropus parryi</i>	whiptail wallaby	LC	Unlikely	Not known in local area and no suitable habitats. Not recorded during site visits.
<i>Macropus rufogriseus</i>	red-necked wallaby	LC	Known	Can and does occur across the site.
<i>Miniopterus australis</i>	little bent-wing bat	LC	Potential	May forage across wooded areas
<i>Miniopterus schreibersii oceanensis</i>	eastern bent-wing bat	LC	Potential	May forage across wooded areas and nearby open areas.
<i>Mormopterus norfolkensis</i>	east coast freetail bat	LC	Potential	May forage across wooded areas and roost in hollows
<i>Mormopterus lumsdenae</i>	northern free-tailed bat	LC	Potential	Across the site
<i>Tadarida australis</i>	white-striped freetail bat	LC	Known	Present over the site during survey period. This species can forage across wooded areas, open pasture and urban environments.
<i>Mormopterus ridei</i>	eastern free-tailed bat	LC	Potential	May forage across wooded areas and roost in hollows
<i>Mus musculus</i>	house mouse	I	Known	Recorded. Would be present across the site.
<i>Rattus rattus</i>	black rat	I	Known	Recorded. Would be present across the site.
<i>Rattus fuscipes</i>	bush rat	LC	Potential	Low potential within the heavily wooded areas particularly riparian habitats along Little Eprapah Creek.
<i>Rattus lutreolus</i>	swamp rat	LC	Potential	Adjoining riparian habitats and swampy areas.
<i>Hydromys chrysogaster</i>	water rat	LC	Potential	Associated with creek systems. Would be restricted to Little Eprapah and Moogurrapum Creeks. .
<i>Rattus norvegicus</i>	brown rat	I	Potential	In heavily wooded areas
<i>Ornithorhynchus anatinus</i>	platypus	SL	Unlikely	In adjoining creek systems.
<i>Perameles nasuta</i>	long-nosed bandicoot	LC	Unlikely	Not known in local landscape.
<i>Isodon macrourus</i>	northern brown bandicoot	LC	Known	Relatively common species across the local landscape and urban areas where suitable cover is retained. .
<i>Petaurus breviceps</i>	sugar glider	LC	Potential	In wooded habitats and tree hollows
<i>Petaurus norfolcensis</i>	squirrel glider	LC	Expected	In wooded habitats and tree hollows. Observed within roadside vegetation on Bunker road.
<i>Trichosurus vulpecula</i>	common brushtail possum	LC	Known	Mostly within the wooded areas but this species occurs across the site
<i>Trichosurus caninus</i>	short-eared possum	LC	Unlikely	Little to no suitable habitats.
<i>Phascolarctos cinereus</i>	koala	V	Known	In wooded areas supporting preferred feed trees
<i>Pseudocheirus peregrinus</i>	common ringtail possum	LC	Known	Across the site within vegetated areas.
<i>Petauroides volans volans</i>	southern greater glider	V	Unlikely	No suitable habitat. The site lacks suitable vegetation and habitats for this species to persist.
<i>Pteropus scapulatus</i>	little red flying-fox	LC	Expected	Seasonal visitor in response to flowering
<i>Pteropus alecto</i>	black flying-fox	LC	Known	Regular visitor in response to flowering
<i>Pteropus poliocephalus</i>	grey-headed flying-fox	LC	Expected	Seasonal visitation in response to flowering
<i>Sus scrofa</i>	pig	I	Potential	Although no evidence observed
<i>Tachyglossus aculeatus</i>	short-beaked echidna	SL	Potential	In wooded areas across the site

Scientific Name	Common Name	Status	Occurrence	Comments
<i>Scoteanax rueppellii</i>	greater broad-nosed bat	LC	Potential	In association with adjoining creek vegetation.
<i>Chalinolobus nigrogriseus</i>	hoary wattled bat	LC	Potential	May forage across wooded areas and roost in large dead trees
<i>Myotis macropus</i>	large-footed myotis	LC	Potential	May forage over adjacent creeks and hunt over existing dams.
<i>Chalinolobus morio</i>	chocolate wattled bat	LC	Potential	May forage across wooded areas and roost in hollows
<i>Nyctophilus gouldi</i>	Gould's long-eared bat	LC	Potential	May forage across wooded areas and roost in hollows
<i>Scotorepens greyii</i>	little broad-nosed bat	LC	Potential	May forage across wooded areas and roost in hollows
<i>Chalinolobus gouldii</i>	Gould's wattled bat	LC	Potential	May forage across wooded areas and roost in hollows



Inset 1: Moogurrapum Creek Catchment

(https://www.redland.qld.gov.au/info/20261/waterways_coasts_and_catchments/657/catchment_areas_of_the_redlands#:~:text=Moogurrapum%20Creek-,Catchment%20description,the%20Cleveland%20Redland%20Bay%20Road accessed 15/5/2024).

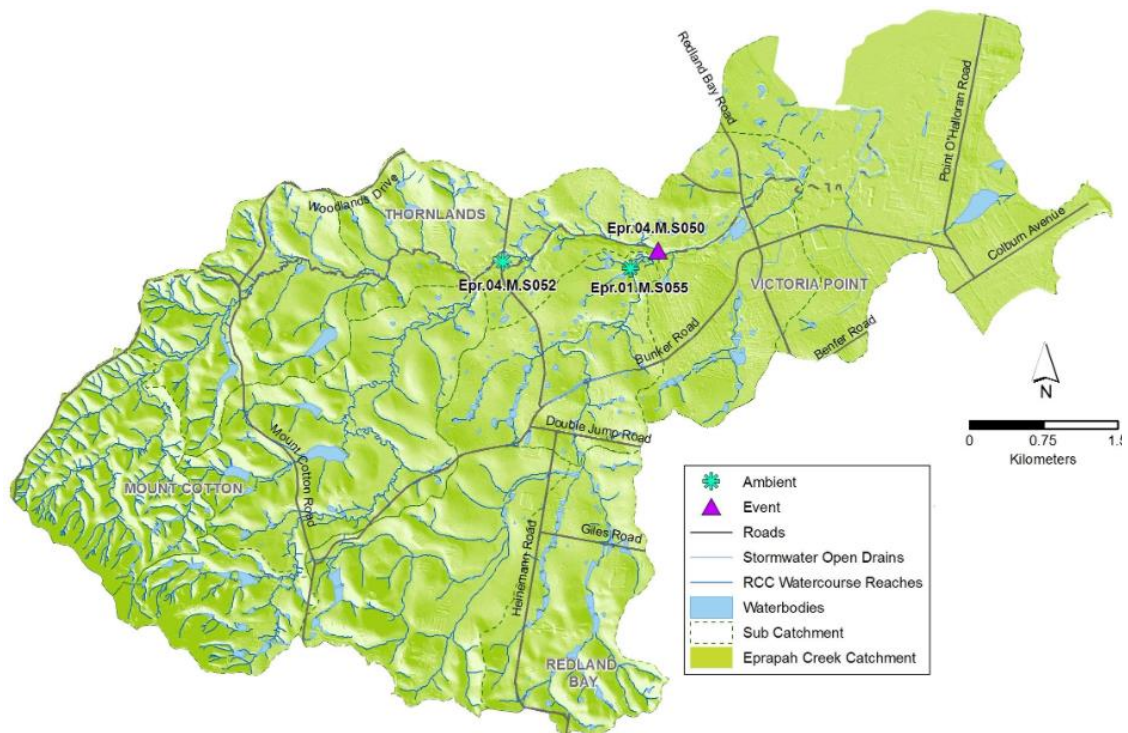


Plate 2: Erapah Creek Catchment

(https://www.redland.qld.gov.au/info/20261/waterways_coasts_and_catchments/657/catchment_areas_of_the_redlands#:~:text=Moogurrapum%20Creek-,Catchment%20description,the%20Cleveland%20Redland%20Bay%20Road accessed 15/05/2024)