PLANS AND DOCUMENTS
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DEVELOPMENT APPROVAL

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Queensland Government

Green Tape Solutions

Quality, Integrity, Experience

Ecological Assessment Report

169-187 Teviot Rd, Greenbank

Prepared for Australasian Solutions Pty Ltd

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Document Records - Quality

TITLE	Ecological Assessment Report for 169-187 Teviot Rd, Greenbank
FILED AS	PR17269_EA_VerA

Revision	Date	Prepared by (name/title)	Reviewed by (name/ title)	Approved by (name/title)
Version A	9/01/2018	Jasmine Vink, Ecologist Carla Perkins, Senior Ecologist	Kelly Matthews, Director and Principal Ecologist	Client
Version B	31/7/2019	Jasmine Vink, Ecologist	Kelly Matthews, Director and Principal Ecologist	Client

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Executive Summary

Green Tape Solutions was commissioned by Australasian Solutions Pty Ltd to undertake an ecological assessment of the property located at 169-187 Teviot Road, Greenbank (18RP184970), hereinafter referred to as the 'site'. This report identifies the ecological values associated with the site, in particular the potential presence of threatened species listed under Local, State and Commonwealth legislation; fauna and flora habitat and ecological corridor values. This report also assesses potential impacts associated within the proposed development and where required, provides mitigation measures to ensure that the proposal complies with the relevant environmental legislation.

Existing infrastructure on site includes a house, associated outbuildings and a small dam within the south-western corner of the site. The applicant seeks development approval for the reconfiguration of lot – 1 into 40 lots. The proposed configuration will require the clearing of all vegetation on site and dewatering of the dam.

The proposed development is located within the Greater Flagstone Priority Development Area (PDA). An assessment has been undertaken against the relevant ecological criteria of the Greater Flagstone Urban Development Scheme. The relevant assessment manager is Economic Development Queensland (EDQ), however an assessment against the relevant provisions of the Logan Planning Scheme 2015 (Biodiversity areas overlay code) has also been provided.

No threatened fauna or flora species listed under the Queensland *Nature Conservation Act 1992* (NC Act) or the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) were observed to be present within the site. The vegetation on site is mapped by the Department of Natural Resources, Mines and Energy (DNRME) on the Regulated vegetation management (RVM) map as Category C (High-value regrowth), comprising a heterogeneous polygon of regional ecosystems 12.9-10.2 (listed as Least Concern under the *Vegetation Management Act 1999*), 12.9-10.12 (Endangered) and 12.9-10.7 (Of concern). This mapped vegetation is also identified as essential habitat for Koala (*Phascolarctos cinereus*), tusked frog (*Adelotus brevis),* and spotted-tailed quoll (*Dasyurus maculatus maculatus*). The ground-truthed vegetation assessment determined that the vegetation on site does not meet remnant status as defined by the VM Act, and conforms to the DNRME mapping. The assessment also determined that site supports Koala habitat.

In accordance with the *PDA Guideline 17 – Remnant vegetation and Koala habitat obligations in Greater Flagstone and Yarrabilba PDAs*, an offset is required for areas defined as Koala habitat. Since the vegetation is mapped as rehabilitation habitat area under DES Koala habitat values regulatory mapping, an offset of $13,100 to the state is required to offset the clearing of 1.42 ha of Koala habitat.

Table 1 outlines the reports, databases, maps and relevant legislation that have been reviewed for this ecological assessment. It also provides a summary of the results of the desktop assessment, field assessment and legislative relevance.

The proposed development complies with the relevant Commonwealth, State and Local legislation. It minimises impacts on the biodiversity within the site. The proposed development is supported from an ecological perspective.

Table 1: Summary of Desktop, Field Assessment and Relevant Legislation

Legislation	Database Searches	Desktop Assessment	Field and compliance assessment
Commonwealth Legislation			
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	EPBC Protected Matters Tool Report	Under the EPBC Act, the following matters are identified as potentially occurring within, or may relate to, the site (2 km buffer): • 1 Wetland of International Importance; • 2 Threatened Ecological Communities; • 32 listed threatened species; and • 16 listed migratory species.	No threatened flora or fauna species listed under the EPBC Act were found to be present within the site during the field survey.
State Legislation			
Nature Conservation Act 1992 (NC Act)	Wildlife Online database	Three (3) fauna species listed as threatened under the NC Act are recorded within the site locale (2 km buffer).	No threatened species listed under the NC Act were found to be present within the site during the field survey.
Vegetation Management Act 1999 (VM Act)	Regulated vegetation management (v2.09) and Regional ecosystem (v10.1) maps	Site vegetation within the western portion of the site (0.82 ha) is mapped as Category C – High-value regrowth, consisting of a heterogeneous polygon (50/30/20%) of regional ecosystems 12.9-10.2 (Least concern), 12.9-10.12 (Endangered) and 12.9-10.7 (Of concern). The remainder of the site (1.18 ha) is mapped as Category X – Non-remnant vegetation.	The ground-truthed vegetation survey determined that the vegetation on site is consistent with the DNRME mapping.
	VMA Essential Habitat mapping (Version 3.1)	The site is mapped as essential habitat for Koala, Tusked Frog and Spotted-tailed Quoll.	The ground-truthed vegetation survey determined that the site contains habitat suitable for Koala but not for Spotted-tailed Quoll or Tusked Frog.
Planning Act 2016 and State Planning Policy 2017(SPP)	Koala assessable development areas and habitat values mapping (DES)	The site is not located within a Koala assessable development area. The site is mapped as High value rehabilitation under Koala habitat values mapping.	The site supports suitable Koala habitat, however no Koalas or evidence of Koalas were recorded during the site assessment.
Local Legislation			
Logan Planning Scheme	Biodiversity areas overlay code	The site is mapped within the following overlays: • OM-02.00 Biodiversity area trigger; • OM-02.01 Secondary vegetation management area; • OM–02.02 Biodiversity corridor; and • OM-02.04 Matters of local environmental significance area.	An assessment against the relevant provisions of the Biodiversity areas overlay code is provided in Section 5.

1.0 Introduction

1.1 Background

Green Tape Solutions was commissioned by Australasian Solutions Ltd to undertake an ecological assessment of the property located at 169-187 Teviot Rd, Greenbank (18RP184970).

This report identifies the ecological values associated with the site, in particular the potential presence of threatened species listed under Local, State and Commonwealth legislation, fauna and flora habitat and ecological corridor values. This report also assesses potential impacts associated within the proposed development and provides mitigation measures, where required, to ensure that the proposal complies with the relevant environmental legislation.

1.2 Site Description

The site is located on a single lot comprising a total area of approximately 20, 040 m^2 within the Logan City Council Local Government Area (**Figure 1**). The site is bounded by Teviot Rd to the east, parkland and community facilities to the north (James Smith Recreation Area) and low-density residential lots to the west and south.

Figure 1: Aerial Image of the Properties (Source: ArcGIS)

The site supports regrowth Eucalypt open forest across most of the property. A description of the vegetation communities of the site is provided in **Section 3.0**.

1.3 Proposed Development

The proposal is for a Reconfiguration of a Lot (ROL) - one into 40 lots. All vegetation on site will require removal to facilitate the development. The proposed layout for the development is provided in **Figure 2**.

1.4 Scope of Works

The specific scope of works for this report includes:

- A review of relevant background, database and mapping information;
- A review of the extent and structural integrity of vegetation communities and fauna habitat, including the presence of weed species;
- Confirmation of the likelihood of occurrence of flora and fauna species and vegetation communities protected under Local, State and Commonwealth legislation;
- An assessment of ecologically significant areas and the site's conservation values in respect to its position in the local and broader landscape, including corridor linkages and riparian areas;
- Evaluation of ecological constraints on the site and impacts;
- Identification of potential ecological impacts and provision of management measures to mitigate such impacts; and,
- Identification of statutory considerations relevant to ecological aspects of the proposed development.

SITE ACCORDING TO GUIDELINE 7'S PROVISIONS

2.0 Methodology

2.1 Desktop Assessment

The desktop assessment involved reviewing relevant environmental documents, databases, scientific journals, technical reports, maps and legislation (Commonwealth, State and Local) to identify ecological values with the potential to occur within and surrounding the site. Aerial photography of recent and historical imagery was also reviewed to assist with the verification of remnant vegetation. Results of the desktop assessment were used to inform the field survey design.

The desktop assessment was based on the site with a standard 2 km buffer. The following resources were reviewed:

- *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) Protected Matters Search Tool with a 2 km buffer, Federal Department of Environment and Energy (DoEE), accessed 17th December 2018 (DotE 2016) (**Appendix 1**);
- Department of Environment and Sciences (DES) Wildlife Online records with a 2 km buffer, accessed 17th December 2018 (DES 2018) (**Appendix 2**);
- *Vegetation Management Act 1999* (VM Act) Regulated Vegetation Management Map (Version 8), Department of Natural Resources and Mines (DNRM) accessed 17th December 2018 (DNRM 2016) (**Appendix 3**);
- VM Act Essential Habitat Map (Version 4), accessed 17th December 2018 (DNRM 2016) (**Appendix 3**);
- Atlas of Living Australia (ALA) species search, accessed 17th December 2018 (ALA 2014);
- Eremaea Birds species search, accessed 17th December 2018 (Eremea Birds 2014);
- Bird Data Bird Atlas Lists, accessed 17th December 2018 (ALA 2014);
- Koala assessable development area and habitat values mapping, accessed 17th December 2018 (DES May 2010) (**Appendix 4**);
- Map of Referable Wetlands, accessed 17th December 2018 (DES 2016) ;
- Protected Plants Flora Survey Trigger Map, accessed 17th December 2018 (DES 2016) (**Appendix 3**);
- Logan City Council Planning Scheme Overlay Maps (LCC 2015) (**Appendix 5**); and
- Aerial imagery (Google Earth Professional 2012).

2.2 Field Survey

A site assessment was conducted on the 18th December 2018. The assessment involved the following:

- Validation of desktop findings;
- Verifying the floristic structure and composition of vegetation communities present;
- Describing the fauna habitat present and recording any incidental fauna sightings;
- Searching for potentially occurring significant species (and associated habitat) as listed under the

EPBC Act and/or *Nature Conservation Act 1992* (NC Act);

- Identifying weed species and documenting vegetation disturbance; and
- Identifying the ecological values associated with the mapped environmental values on the site.

2.2.1 Flora Species Survey

General baseline botanical surveys were undertaken to describe the vegetation communities, dominant flora species and their extent. Fauna habitat values and opportunistic sightings of fauna were also recorded. The survey was undertaken in accordance with quaternary survey methods described in Neldner *et al*. (2012) by compiling a species inventory and assigning relative dominance of each flora species within the dominant structural layer.

Threatened species searches were undertaken using the random meander technique described by Cropper (1993), which involved traversing areas of suitable habitat in a non-standardised manner. Where identified, samples from each threatened flora species were sent to the Queensland Herbarium to confirm identification.

2.2.2 Fauna Species and Habitat Survey

Fauna and habitat values were assessed at the same time as conducting the vegetation survey. The following characteristics were observed to determine fauna likely to be present on-site based on the type and quality of habitat present:

- Confirmation of habitat units and habitat structure including an analysis of habitat quality;
- Presence of Koala food and habitat trees;
- Targeted searches for Koalas and evidence of Koala presence (scats and scratches);
- Presence of hollow-bearing trees, their form and size;
- Presence of scratches on tree trunks and scats of wildlife;
- Presence of hollow logs/debris and areas of dense leaf litter cover;
- Level of disturbance (e.g. weed, litter); and,
- Habitat connectivity within the network.

No fauna trapping was undertaken for the site.

2.2.3 Survey Limitations

The ability to detect plants and accurately identify them to species level can vary greatly with season, prevailing climatic conditions and the presence of reproductive material (e.g. flowers, fruit and seed capsules). The survey undertaken as part of this assessment only represents a ‘snapshot’ in time and therefore may not provide a true indication of plant presence at the site. For example, some cryptic flora species may only be detected during particular flowering periods that were not present during the current survey. Hence, this survey should not be regarded as conclusive evidence that certain protected plants do not occur at the site. However, every effort has been made to detect these species in their preferred habitat areas.

3.0 Flora and Fauna Species Assessment

3.1 Ground-truthed Vegetation Communities

3.1.1 Vegetation Community 1: Landscape vegetation

Vegetation surrounding the residential dwelling and associated infrastructure on site consists of sparsely scattered planted non-native vegetation with areas of maintained lawn (**Plate 1**). This area conforms to the DNRME mapping, which shows this area as Category X vegetation (non-remnant).

Plate 1: Landscape vegetation adjacent to existing dwelling.

3.1.2 Vegetation Community 2: Open Eucalypt Vegetation Community

Vegetation within the remainder of the site predominantly consists of regrowth Eucalypt open forest with a canopy layer consisting of a mix of Eucalypt species. This vegetation community has a sparse to moderately dense mid-storey dominated by regrowth and recruiting Eucalypt species, red ash (*Alphitonia excelsa*), wattle species (*Acacia leiocalyx* and *A. disparrima* var. *disparrima*) and a sparse to moderately dense ground layer. Canopy species recorded included swamp mahogany (*Lophostemon suaveolens*), spotted gum (*Corymbia citriodora* subsp. *variegata*), narrow-leaved red gum (*Eucalyptus seeana*), narrow-leaved iron bark (*Eucalyptus crebra*), rusty gum (*Angophora leiocarpa*) and pink bloodwood (*Corymbia intermedia*). The canopy ranges in height from 5 to 26 metres, with an average height of 12 m and an average estimated canopy cover of approximately 25% (**Plate 2**).

This community conforms to the DNRME mapping which shows the site as supporting Category C (High-value regrowth), consisting of a heterogeneous polygon (50/30/20%) of regional ecosystems 12.9-10.2 (Least concern), 12.9-10.12 (Endangered) and 12.9-10.7 (Of concern).

A full list of species recorded on the site is provided in **Appendix 7**.

Plate 2: Regrowth Eucalypt open forest community.

3.2 Weed Species

A number of weed species are present on site. These species include restricted invasive plants listed under the *Biosecurity Act 2014* (Qld) and as Weeds of National Significance (WoNS):

- Velvety tree-pear (*Opuntia tomentosa*) - Category 3 restricted matter, WoNS;
- Climbing asparagus fern (*Asparagus africanus*) – Category 3 restricted matter, WoNS;
- Lantana (*Lantana camera*) – Category 3 restricted matter, WoNS;
- Mother-of-millions (*Bryophyllum delagoense*) – Category 3 restricted matter; and
- Hybrid mother-of-millions (Brypophyllym x houghtonii) - Category 3 restricted matter.

A full list of weed species present on site is provided in **Appendix 7**.

3.3 Fauna Species Assessment

Common birds such as Galah (*Eolophus roseicapillus*), Grey Butcherbird (*Cracticus torquatus*), Rainbow Lorikeet (*Trichoglossus moluccanus*), Noisy Miner (*Manorina melanocephala*) and Australian magpie (*Cracticus tibicen*) were observed on site.

Common reptiles found on site include Elegant Snake-Eyed Skink (*Cryptoblepharus pulcher*) and Delicate Skink (*Lampropholis delicata).* Scratches were found on some Eucalypt and Corymbia species suggesting use by Brush-tailed Possums (*Trichosurus vulpecula*), Ring-tailed Possums (*Pseudocheirus peregrinus*), Squirrel Gliders (*Petaurus norfolcensis*) or Lace Monitors (*Varanus varius*).

No Koala, or evidence of the presence of Koala, was sighted on site. The site contains moderate habitat for Koala with some large preferred food trees present. No threatened species were observed on site during the site investigation.

3.4 Habitat Assessment

Fauna habitat features of the site consist of resources (e.g. foraging, breeding, refuge and shelter resources) of varying quality and condition, including:

- Foraging resources associated with native flowering plants (in particular, *Eucalyptus*, *Corymbia*, *Angophora* and *Acacia* spp.) - nectar, pollen and insect prey items;
- Dam with standing water;
- Few dead and live trees with hollows. Overall, site vegetation contains limited hollows, due to the immature status of most of the vegetation;
- Arboreal termitaria with entrances. The site contains numerous arboreal termitaria with entrances. Two active Sacred Kingfisher (*Todiramphus sanctus*) nests were observed in arboreal termitaria. Chicks were heard and parents were seen entering and exiting the nest entrance;
- Coarse and fine woody debris;
- Dry grass and leaf litter; and
- Anthropogenic refuse in the form of tin, general rubbish and insulation sheets.

No other active bird nests were observed on site. The site is unlikely to support any of threatened species.

3.5 Corridors and Linkages

The site forms part of a corridor that connects vegetated properties on all sides. Although Teviot and Brisbane Rd intercept the vegetated areas, this corridor still seems to be of a good quality. The development of the site will reduce the width of this corridor, particularly from the east to west. However, the two vegetated properties south of the site will still provide a corridor with a width of just over 90 m.

3.6 Federal Government Values

3.6.1 Threatened Ecological Communities

The EPBC Act Protected Matters Search Tool results (**Appendix 1**) listed three (3) Threatened Ecological Communities (TECs) as potentially occurring within a 2 km radius of the site. These TECs are described below.

The Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland ecological community is usually found below 20 m above sea level (ASL) within 30 km of the coast. It can be found in association with other vegetation communities including mangroves, coastal salt marshes and freshwater wetlands. The vegetation community varies from forest to woodland but coastal swamp oak (Casuarina glauca) is a characteristic species (DoEE 2018).

The Lowland Rainforest of Subtropical Rainforest TEC consists of moderately tall (>20 m) to tall (>30 m) closed forest and is characterised by having a high diversity of tree and vine species. There is generally a low abundance of species from the *Eucalyptus, Melaleuca* and *Casuarina* genera. This TEC generally occurs on basalt and alluvial soils, typically more than 2 km from the coast and in areas >300 m above sea level (DSEWPaC, 2016).

The white box-yellow box Blakely's grassy woodlands TEC can be found in two forms, one as a woodland or as a derived grassy woodland where the trees have been removed. The species white box (Eucalyptus albens),

yellow box (Eucalyptus mellidora) or Blakely's red gum (Eucalyptus blakelyi) dominate the canopy layer with a ground layer of native grasses and herbs (DEH 2006).

Relevance on site

While the site contains flora species that occur in the above TECs, the floristic composition, vegetation structure and vegetation cover on site do not match the ecological requirement for being a TEC. Therefore, no TEC was observed during field investigations.

3.6.2 Significant Flora and Fauna Species

The EPBC Act Protected Matters Search Tool results (**Appendix 1**) identified 32 threatened fauna and flora species that have the potential to occur within a 2 km radius of the site. Some of these species are marine species and are unlikely to occur on site.

Relevance on site

An assessment of likelihood of threatened species occurrence was conducted for each of the threatened species identified in the desktop assessment. This assessment was based on the presence of suitable habitat within the site and database records for each threatened species. The assessment is provided in **Appendix 6**.

No significant flora or fauna species listed under the EPBC Act were identified as occurring on the site.

3.7 State Government Values

3.7.1 Remnant Vegetation

The DNRME Regulated Vegetation Management (RVM) map identifies the site as supporting Category C – high value regrowth as a heterogeneous polygon consisting of the regional ecosystems 12.9-10.2 (Least concern), 12.9-10.12 (Endangered) and 12.9-10.7 (Of concern) (**Appendix 3**).

Relevance on site

The ground-truthed vegetation survey determined that the vegetation on site is consistent with the DNRM mapping, which has the site mapped as Category C. This vegetation community is described in **Section 3.1**.

3.7.2 Wetlands

The site is not mapped as having any wetland protection areas or wetlands of high (HES) or general ecological significance (GES) under the DES Referable Wetlands mapping.

Relevance on site

Although a minor dam is present on the site, this feature does not support vegetation or the water quality to be considered a wetland.

3.7.3 Essential Habitat

The site is mapped as supporting essential habitat for the Tusked Frog (*Adelotus brevis*), Spotted-tailed Quoll (*Dasyurus maculatus*) and Koala (*Phascolarctos cinereus*). Tusked frog and Koala are listed as Vulnerable while the Spotted-tailed Quoll is listed as Endangered under the *Nature Conservation Act 1999*.

Relevance on site

Suitable Koala habitat is present on site, including a total of 339 Koala non-juvenile habitat trees. **Figure 3** shows the location of non-juvenile Koala habitat trees (i.e. specimens within the Eucalyptus, Corymbia or Angophora genera with a height of more than 4 metres or a trunk with a diameter at breast height (DBH) of ≥ 100 mm), as well as the ground-truthed extent of Koala habitat.

No suitable habitat was found to be present for Tusked Frog (*Adelotus brevis*) and Spotted-tailed Quoll. The dam is degraded and does not support any of the aquatic vegetation required to support Tusked Frog. The site does not contain any denning features suitable for Spotted-tailed Quoll.

Further detailed assessment for all threatened species is provided in **Appendix 6**.

3.7.4 State Significant Flora and Fauna Species

The Wildlife Online database records identified three (3) State listed threatened species within a 2 km radius of the site (**Appendix 2**) – Tusked Frog (*Adelotus brevis*), Koala (*Phascolarctos cinereus*) and Southern Greater Glider (*Petauroides volans volans*). All of these species are listed as Vulnerable under the NC Act.

Relevance on site

An assessment of likelihood of occurrence is provided in **Appendix 6**. This assessment was conducted for each of the threatened species identified in the desktop assessment. This assessment was based on the presence of suitable habitat within the site and database records for each threatened species.

No species listed under the NC Act were confirmed to be present on site.

3.8 Local Government Values

The site is mapped under a number of overlays under the Logan Planning Scheme (**Appendix 5**):

- OM - 02.01 – Secondary vegetation management areas;
- OM - 02.00 - Biodiversity area trigger;
- OM – 2.02 – Biodiversity corridor; and
- OM - 02.04 - Matters of local environmental significance area.

The development requires the clearing of most of the vegetation on site mapped within the environmental overlays. A detailed assessment of the development against the relevant provisions of the Biodiversity areas overlay code is provided in Section 5.3.

FIGURE 3:
NON-JUVENILE KOALA HABITAT TREES AND
KOALA HABITAT AREA

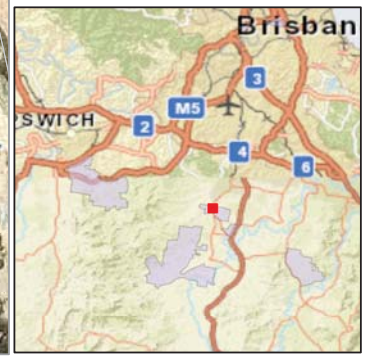
Project: 169-187 Teviot Road, Greenbank

Legend

- Non-juvenile Koala habitat trees
- Koala habitat
- Site Boundary
- Cadastral boundaries

0 25 50 Meters

N



4.0 Proposed Development

4.1 Potential Impacts

The ecological values on site are considered to be moderate. The assessment of vegetation on site determined that the site supports a high-value regrowth vegetation community. No threatened species were found during the site assessment but suitable habitat is present for Koala.

Potential impacts on the environmental matters are direct and indirect in nature including:

- The loss of food source for common wildlife;
- The loss of potential habitat for hollow-dependant species;
- Injury or mortality of fauna species through the vegetation clearing; and,
- Sediment run off into retained areas during earthworks.

4.2 Mitigation Measures

4.2.1 General Mitigations Measures

The following mitigation measures are recommended to reduce the potential ecological impacts:

- Where fences require replacement, the use of barbed wire will be avoided;
- All retained vegetation/trees outside the site will be protected and fenced during the construction phase in accordance with the AS 4970-2009 Protection of tree on Development of Sites.
- No domestic animals will be allowed onto the construction site.
- Injury or mortality of fauna species will be minimised by managing habitat clearing and by having a qualified fauna spotter supervising all clearing activities. This includes a dewatering program for the dam and the supervision of the demolition of the current house on site.
- Habitat degradation will be minimised by maintaining hydrology, undertaking weed management during construction, managing waste and water quality.
- A sediment fence will be required to be constructed to protected adjacent properties and the minor waterway present on site. Monitoring will also take place to ensure the effectiveness of the fencing;
- Offsets will be provided to the state government for the removal of native vegetation within a mapped Koala habitat area as detailed in **Section 4.1.4**.

4.2.2 Offset Calculation

As the site is mapped as a Priority Development Area, offsets are handled by State Government rather than Local Government. PDA Guideline 17 – Remnant vegetation and habitat obligations in Greater Flagstone and Yarrabilba PDAs is applicable to the proposed development. This guideline states that the removal of vegetation mapped as a Koala habitat area under the Koala Conservation in South East Queensland (SPP) Koala Habitat Values requires an offset.

Where a final settlement is proposed, an offset of $15,000 per hectare is required for land mapped as bushland habitat for Koalas, while land mapped as having rehabilitation potential requires an offset of $5,000 per hectare or $920 per non-juvenile Koala habitat tree. Additionally, a $150 payment must be made for each new dwelling to support Koala habitat management in the region.

The site is mapped as supporting medium value rehabilitation. **Figure 3** illustrates the location of non-juvenile Koala habitat trees (i.e. specimens within the Eucalyptus, Corymbia or Angophora genera with a height of more than 4 metres or a trunk with a diameter at breast height (DBH) of ≥ 100 mm), as well as the ground-truthed extent of Koala habitat. To offset the clearing of 1.42 ha of vegetation the offset cost will be $7,100. An additional cost of $150 per dwelling for the 40 lots equals $6,000. The total cost payable to the state equates to $13,100.

5.0 Environmental Regulatory Framework

Table 2 outlines the environmental regulatory framework that applies to the proposed development at the Commonwealth, State and Local Government level. Details are provided to demonstrate how the proposal complies with relevant legislation and policy.

Table 3 provides an assessment of the proposed development against the relevant criteria in Sections 3.3.6 – Community greenspace network and 3.3.8 – Natural cultural values of the Greater Flagstone Urban Development Area Development Scheme.

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Table 2: Federal, state and local regulatory framework

Legislation Framework	Description	Triggers	Database Searches	Desktop / Field Assessment Results	Compliance / Impact Assessment
Commonwealth Legislation					
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	The *EPBC Act* protects the environment in relation to Matters of National Environmental Significance (MNES). Under the EPBC Act, if a development proposal involves an action that will or is likely to result in a significant impact on a MNES, the proposal must be referred to the DoEE (an EPBC Referral).	Action resulting in significant impacts upon a MNES.	EPBC Protected Matters Search Tool (PMST_ Report	Under the EPBC Act, the following may potentially occur within, or relate to, the site (2km buffer): • 3 threatened ecological communities • 32 listed threatened species • 16 migratory species	**Not applicable** No threatened ecological communities, threatened flora or fauna species listed under the EPBC Act were found to be present on site during the field survey. The development will not have any significant impacts upon MNES. No EPBC referral required for this development.
State Legislation					
Coastal Protection and Management Act 1995	The *State Coastal Management Plan 2002* (Coastal Plan) describes how the coastal zone is to be managed and guides relevant decisions by the State and local governments for effective protection and management of the coastal zone. The State Coastal Plan applies to the coastal zone defined in section 11 of the *Coastal Protection and Management Act 1995*. The determination of the coastal zone depends on the existence of a clear link with the coast or coastal resources.	Action resulting in interference with the coastal zone.	Coastal Management District and the coastal hazard maps	The site is not mapped within the Coastal Management District and the Coastal Zone.	**Not Applicable** The site is not mapped within the Coastal Management District and the Coastal Zone.

Legislation Framework	Description	Triggers	Database Searches	Desktop / Field Assessment Results	Compliance / Impact Assessment
Biosecurity Act 2014	The main purpose of the *Biosecurity Act 2014* is to provide for the risk-based management of biosecurity matters, including prohibited and restricted invasive animals and plants.	Presence of prohibited and/ or restricted invasive animals or plants on site.	Review of Schedule 2 of the Act and Weeds of National Significance (WoNS) database	The site investigation confirmed the presence of a number of Class 3 restricted weed species within the site.	**Applicable** Any on-ground activities associated with the proposed development must ensure that all Category 3 restricted invasive plant species on site are not distributed and that all material be disposed of in accordance with legislative requirements. Weed may be disposed of by: a) burying the matter in the ground at a depth that ensures any seeds or vegetative material being disposed of cannot grow; or b) transporting the matter directly to a waste facility if the matter is i. in a sealed container or a covered vehicle; or ii. covered in a way that prevents the restricted matter from being lost or released during transport; or iii. sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.
Fisheries Act 1994	The *Fisheries Act 1994* (Fisheries Act) provides for the use, conservation and enhancement of Queensland's fisheries resources and fish habitats. The purpose of the Fisheries Act is achieved through the provision of management and protection measures for fish habitats as well as the prevention, control and eradication of disease in fish. In addition to the protection of fish	Action resulting of interference with fish passage in a Watercourse or marine plants/ mangroves.	Mapped Watercourse on the Regulated Vegetation Management Map	The site does not fall within a Fish Habitat Area. This was confirmed during the site investigation.	**Not Applicable** The site does not contain fish habitat.

Legislation Framework	Description	Triggers	Database Searches	Desktop / Field Assessment Results	Compliance / Impact Assessment
	and fish habitats, the *Fisheries Act 1994* also manages commercial, recreational, ingenious fishing and aquiculture in Queensland.				
Nature Conservation Act 1992 (NC Act)	The primary purpose of the *Nature Conservation Act 1992* (NC Act) is to conserve biodiversity by creating and managing protected areas, managing and protecting native wildlife, and managing the spread of non-native wildlife. Unless authorised, it is an offence under the NC Act to take, keep, use, or move protected flora and fauna for commercial, recreational or other purposes. Where a proposed development will result in such impacts to flora and/or fauna protected under the NC Act, authorisation from DES will be required.	Actions resulting in a significant impact upon NC Act listed Matters and special least concern fauna and/or impacts to animal breeding places	Wildlife Online database	Four fauna species listed under the NC Act were recorded on site or within the site locale (2 km buffer). (**Appendix 2**)	**Applicable** No threatened species listed under the NC Act were found present on site during the field investigation. There was no threatened flora or fauna species present on site and therefore, there are no DES requirements for referrals, permits, or offsets. A licensed fauna spotter will be present on site at all time during the vegetation clearing to minimise injury or mortality of common wildlife as required under the NC Act.
		Action occurring within high risk area and will directly or indirectly impact (occurring 100 m of) threatened flora species listed under NC Act.	Protected Flora Survey Trigger Map	The site is not mapped within the flora trigger map. No threatened flora species were found on site (**Appendix 3**).	**Applicable** The site is mapped within a high risk area on the Protected Plants Flora Survey Trigger Map (**Appendix 3**). Therefore, a threatened plant species survey is not required to be undertaken before any clearing works. No threatened species listed under the NC Act were found present on site during the field investigation.
Vegetation Management Act 1999 Vegetation Management and Other Legislation	The clearing of native vegetation in Queensland is regulated by the VM Act, which protects the clearing of remnant vegetation as shown by the DNRME mapping. The VM Act works in conjunction	Clearing of regulated vegetation communities, unless exempt under the	Regulated Vegetation Management Map	The site is mapped as containing Category C (High-value regrowth) and Category X (non-remant) vegetation (**Appendix 3**)	**Not applicable** The ground-truthed vegetation assessment determined that the site supports Category C vegetation within the western portion of the property.

Legislation Framework	Description	Triggers	Database Searches	Desktop / Field Assessment Results	Compliance / Impact Assessment
Amendment Bill 2018 (VM Act)	with the *Planning Act 2016* and Planning Regulation 2017 to ensure that where vegetation clearing is for a relevant purpose and constitutes assessable development.	*Planning Act 2016* and/or Vegetation Management Regulation.			As the development is under 5ha in size, it is classed as exempt development under the Planning Regulation and does not require assessment against the VM Act.
		Clearing of habitat that is mapped has essential habitat.	Regulated Vegetation Management Map	The site is mapped as containing essential habitat for Koalas, Tusked Frog and Spotted-tailed Quolls (**Appendix 3**)	**Applicable** Suitable habitat was found on site for Koalas including non-juvenile Koala habitat trees and preferred food tree species. No suitable habitat was found for Spotted-tailed Quolls or Tusked Frog.
Water Act	The Act provides for the sustainable management of water and other resources and establishes a framework for the operation of water authorities. The Water Act aims to provide and manage water resources through the principles of water sharing, cost sharing and pricing principles, planning and water source quality.	Action resulting in Interference with overland flow, earthworks, significant disturbance.	Mapped Watercourse on the Regulated Vegetation Management Map	The site does not contain a watercourse (**Appendix 3**)	**Not applicable** The site does not contain a watercourse.
Economic Development Act 2012	The purpose of this act is to facilitate economic growth and development in Queensland.	Action within a Priority Development Area.	SPP Interactive Mapping System	The site is mapped under the Greater Flagstone Priority Development Area.	**Applicable** This scheme is applicable to all development occurring within the boundaries of the urban development area and includes an infrastructure plan and implementation strategy. **Table 3** below addresses the ecological criteria outlined in Section 3.3.6 - Community greenspace network and Section 3.3.8 - Natural and cultural values.

Legislation Framework	Description	Triggers	Database Searches	Desktop / Field Assessment Results	Compliance / Impact Assessment
Planning Act 2016 and *Planning Regulation 2017*	The Koala assessable development areas mapping identifies Koala habitat within assessable development areas under the *Planning Act 2016*. The Planning Act regulates assessable development, which is development that planning schemes or planning legislation has identified as requiring assessment, where that development meets certain triggers.	Action resulting of impact on mapped Koala assessable development areas.	DNRME Koala Assessable Development Area and Habitat Values map.	The site is not mapped within the Koala Assessable Development Area. Field investigation confirmed that the site supports suitable Koala habitat.	**Not applicable** The site is not mapped within the Koala Assessable Development Area.
	State code 8: Coastal development and tidal works	Refer to *Coastal Protection and Management Act 1995* section.			**Not applicable** The site is not mapped within the Coastal Management District and the Coastal Zone.
	State code 9: Great Barrier Reef Wetland Protection Areas	Action resulting in interference with referable wetlands	DRNME Referable Wetland Map	This site is not mapped as supporting referable wetlands. Field investigation confirmed the lack of referable wetland.	**Not Applicable** This site is not mapped as supporting referable wetlands.
	State code 10: Taking or interfering with water The purpose of this code is to provide for the sustainable management of water by ensuring that development for taking or interfering with water. SDAP Guideline 18 – Waterway barrier works	Action resulting in interference with mapped watercourses, lakes, spring, underground water and overland flow water.	Vegetation Management Supporting Map	The site is not mapped as supporting a waterway.	**Not applicable** The site does not contain a waterway.
	State code 11: Removal,	Refer to *Fisheries Act 1994* section			**Not applicable**

Legislation Framework	Description	Triggers	Database Searches	Desktop / Field Assessment Results	Compliance / Impact Assessment
	destruction or damage of marine plants and State code 12: Development in a declared fish habitat area				The site does not contain fish habitat.
	State code 16: Native vegetation clearing	Refer to *Vegetation Management Act 1999* section			**Not applicable** The project is exempt clearing under the Planning Regulation 2017.
Local Legislation					
Logan Planning Scheme 2015	The Logan Planning Scheme 2015 sets out Council's intention for the future development in the planning scheme area.	Development within the mapped overlays	Planning Scheme - Overlay Maps	The site is mapped as having a biodiversity corridor, matters of local environmental significance and a secondary vegetation management area (**Appendix 4**)	**No Applicable** All vegetation will be removed from the site to facilitate the development. While not required as the site is assessed under the Greater Flagstone Urban Development Area Development Scheme, an assessment against the relevant provisions of the planning scheme is provided in Table 3.

Table 3: Assessment against relevant ecological criteria of the Greater Flagstone Urban Development Area Development Scheme.

3.3.6 Community Greenspace Network	
Development contributes to the provision of an integrated, high quality, regional community greenspace network that caters for a range of environmental needs by:	
• Retaining where possible locally significant wetlands, remnant vegetation and habitat for fauna • Protecting important landscape and visual quality values including scenic amenity areas • Enhancing wetland communities as part of the rehabilitation of biodiversity corridors • Providing biodiversity corridors and linkages including to areas outside of the neighbourhood or community • Locating and designing fauna connectivity structures in road infrastructure that traverses an identified or potential fauna and flora corridor	**Complies with 3.3.6** The proposed development does not entail the clearing of any remnant vegetation. Vegetation within the site has been ground-truthed as regrowth, classified as Category C under the VM Act. All vegetation will be removed on site and an offset of $13,100 will be payable to the state for the removal of Koala habitat. Fauna-sensitive design will be implemented and include the avoidance of barbed wire and imposition of low speed limits on street/internal roads.
Development delivers parks that:	
Retain existing significant vegetation to the greatest extent possible	**Complies with 3.3.6** The site does not support significant vegetation. No park is proposed for this development. A recreational park is located directly north of the site.
3.3.8 Natural and cultural values	
Provide for multiple purposes and uses including:	
Development responds to the constraints of the land and delivers: • Protection of significant environmental and ecological values; • Protection of remnant endangered vegetation where proven by groundtruthing to be viable; • Minimal emissions to land, water and atmosphere;	**Complies with 3.3.8** The vegetation on site is Category C conforming to an Endangered, Of Concern and Least Concern mixture of regional ecosystems. Category C vegetation is high value regrowth, not remnant so it has been cleared in the past. All vegetation on site will be cleared to facilitate the development with an offset of

• Efficient use of land and resources	$13,100 paid to the state for the removal of Koala habitat. Strict contamination protocols will be followed during the construction stage with no long-term contamination risk due to the residential nature of the land use.
The design, siting and layout of development:	
• Preserves and enhances important environment values and respects local land forms; • Avoids, minimises and offsets development impacts on areas of biodiversity values and Koala habitat values; • Maintains or improves ecological connectivity in the local urban context; • Incorporated landscaping with endemic species that contribute to bushland character, flora and fauna habitat and fauna movement • Minimises adverse impacts on natural landforms and the visual amenity of the site; • Maintains or improves the ecological health and environmental values of surface and groundwater, including wetlands and waterways in and adjacent to the UDA; • Maintains and improves the functioning and characteristics of the hydrological network and generally maintains the natural flow regime; • Incorporates total water cycle management and water sensitive urban design principles to appropriately manage floodwater and stormwater; • Applies best industry practice erosion and sediment control techniques giving particular regard to the local dispersive soils; • Ensures that all land and groundwater will be fit for purpose in accordance with accepted standards and practices; • Manages air quality, noise and hazardous materials according to current standards • Promotes innovative and efficient use of energy and water.	**Complies with 3.3.8** The development will clear all vegetation on site and provide a $13,100 offset to compensate for this loss. No waterways are present on site but erosion and sediment control measures will be employed during construction and earthworks. Stormwater will be managed and water sensitive urban design used to construct the stormwater facilities on site.
Koala Conservation	

The design siting and layout of development: • Incorporates Koala conservation and habitat protection outcomes in a way that contributes to a net increase in Koala habitat and assists in the long-term viability of Koala populations in SEQ; • Avoids (to the greatest extent possible) the clearing of areas mapped as high value bushland on the Koala conservation SPP; • Caters for Koala movement between conservation areas of bushland habitat • Ensures impacts on Koala habitat are offset through the delivery of a net benefit to Koalas, including through the expansion of habitat on lands as suitable for rehabilitation • Incorporates Koala sensitive urban design	**Complies with 3.3.8** The site is mapped as medium value rehabilitation on the Koala habitat map. The clearing of areas mapped as high value bushland on the Koala conservation SPP has been avoided. The field investigation illustrated there was no Koala or evidence of use by Koala on site. The development will require the clearing of all vegetation on site. To offset the loss of 1.42 ha of Koala habitat, an offset of $13,100 will be provided to the state. This includes the offset for the loss of the habitat and the additional $150 per dwelling to go towards Koala conservation.

Table 4: Assessment against the Biodiversity Area Overlay Code

Performance Outcomes		Acceptable Outcomes		Compliance
Biodiversity Area Overlay Code				
Corridors				
PO1	Development in a Biodiversity corridor identified on Biodiversity areas overlay map–OM-02.02 is designed and located to: (a) provide for habitat links; (b) facilitate safe wildlife movement; (c) facilitate wildlife refuge; (d) enhance habitat values; (e) rehabilitate degraded areas with native vegetation. Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report prepared in accordance with Part 2 of planning scheme policy 3–Environmental management.	A01	Development is located outside a Biodiversity corridor identified on Biodiversity areas overlay map–OM-02.02.	**Complies with PO1** This ecological assessment report has been prepared in accordance with the Logan City Council planning scheme policy. All vegetation within the biodiversity corridor will be removed and an offset of $13,100 will be provided to the state to compensate. A fauna spotter catcher will be present on site at all times during vegetation removal to reduce the likelihood of direct injury and mortality to fauna during clearing. The fauna spotter will relocate and assist in the self-relocation of fauna to nearby habitat areas.
Primary vegetation management area				
PO2	Development in the Primary vegetation management area identified on	AO2	Development is located to avoid the need to clear any native vegetation in the Primary vegetation management area identified on Biodiversity areas overlay map–OM–02.01, unless:	**Not Applicable** The development is outside the Primary Vegetation Management Area.

Performance Outcomes		Acceptable Outcomes		Compliance
	Biodiversity areas overlay map–OM–02.01 is designed and located: (a) to: (i) protect the current extent of native vegetation; or (ii) achieve a net gain of native vegetation; (b) to rehabilitate degraded areas with native vegetation. Note—The Primary vegetation management area includes the locally significant vegetation identified on Biodiversity areas overlay map–OM–02.03. Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report [for section (a)(i)] and an environmental offset report [for section (a)(ii)] prepared in accordance with Part 2 of planning scheme policy 3–Environmental management.		(a) if identified as a matter of local environmental significance on Biodiversity areas overlay map–OM–02.04, an offset is provided in accordance with section 3.1–Environmental offset standards in Planning scheme policy 3–Environmental management; or (b) if identified as a matter of State environmental significance on Biodiversity areas overlay map–OM-02.04, an offset is provided in accordance with the Queensland Environmental Offset Policy and the *Environmental Offsets Act* 2014. Note—Compliance with AO2.1(a) is to be demonstrated by an environmental offset report prepared in accordance with Part 2 of planning scheme policy 3–Environmental management. Compliance with AO2.1(b) is achieved where an environmental offset is provided to the Queensland Government in accordance with conditions imposed by a referral agency under the State Development Assessment Provisions. Alternatively, compliance is also achieved where referral agency assessment was undertaken but no environmental offset condition imposed.	

Performance Outcomes		Acceptable Outcomes		Compliance
		AO2.2	Development rehabilitates degraded areas in accordance with the South East Queensland Ecological Restoration Framework.	
Secondary vegetation management area				
P03	Development in the Secondary vegetation management area identified on Biodiversity areas overlay map–OM-02.01 is designed and located to either: (a) protect the current extent of native trees and native habitat trees; or (b) achieve a net gain of native trees and native habitat trees. Compliance with this performance outcome is to be demonstrated by a basic ecological assessment report [for paragraph (a)] and environmental offset report [for section (b)] prepared in accordance with Part 2 of planning scheme policy 3–Environmental management.	AO3	Development is located to avoid the need to clear any native trees and native habitat trees in the Secondary vegetation management area identified on Biodiversity areas overlay map–OM–02.01, unless: (a) if identified as a matter of local environmental significance on Biodiversity areas overlay map–OM–02.04, an offset is provided in accordance with section 3.1–Environmental offset standards in Planning scheme policy 3–Environmental management; or (b) if identified as a matter of State environmental significance on Biodiversity areas overlay map–OM–02.04, an offset is provided in accordance with the Queensland Environmental Offset Policy and the *Environmental Offsets Act* 2014. Note—Compliance with AO3(a) is to be demonstrated by an environmental offset report prepared in accordance with Part 2 of planning scheme policy 3–Environmental management.	**Complies with PO3** The development will require the clearing of all vegetation on site. Financial offsets of $13,100 will be provided to the state for the removal of vegetation in a Koala habitat area. No further offsets for the removal of vegetation within a secondary vegetation management area are required.

Performance Outcomes		Acceptable Outcomes		Compliance
			Compliance with AO3(b) is achieved where an environmental offset is provided to the Queensland Government in accordance with conditions imposed by a referral agency under the State Development Assessment Provisions. Alternatively, compliance is also achieved where referral agency assessment was undertaken but no environmental offset condition imposed	
Koala Corridor				
PO4	Development in a Koala corridor identified on Biodiversity areas overlay map–OM–02.02 is designed and located to protect and enhance Koala habitat. Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report prepared in accordance with Part 2 of planning scheme policy 3–Environmental management.	A04	Development: (a) is located to avoid the need to clear any native vegetation in a Koala corridor identified on Biodiversity areas overlay map–OM–02.02; (b) in a Koala corridor identified on Biodiversity areas overlay map–OM–02.02 rehabilitates degraded Koala habitat values within the Koala corridor, in accordance with the South East Queensland Ecological Restoration Framework.	**Not Applicable** The development is located outside of a mapped Koala corridor.
Wildlife Movement				
PO5	Development in a Biodiversity corridor or Koala corridor identified on Biodiversity areas overlay map–OM–02.02 provides for the safe movement of native fauna by:	A05	Development in a Biodiversity corridor or Koala corridor identified on Biodiversity areas overlay map–OM–02.02 provides for the safe movement of native fauna through the implementation of:	**Complies with PO5** The road construction will have a low speed with minimal night time lighting around the retained vegetated areas in adjacent properties. Barbed wire will be avoided with fauna

Performance Outcomes		Acceptable Outcomes		Compliance
	(a) generating minimal additional night time traffic; (b) minimising the risk of injury or death to wildlife by vehicular traffic; (c) incorporating practices or measures to minimise disruption, injury or death during construction; (d) providing that a road or accessway has a low design speed; (e) providing fauna-friendly fencing. Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report prepared in accordance with Part 2 of planning scheme policy 3–Environmental management.		(a) the Queensland Government Fauna Sensitive Road Design Manual Volume 2: Preferred Practices; the Queensland Government Koala-sensitive Design Guideline.	friendly fencing employed. Qualified fauna spotter catchers will supervise all vegetation clearing during construction to minimise death and injury to native fauna.
Locally significant *Melaleuca irbyana* buffer area				
PO5	Development within the Locally significant Melaleuca irbyana buffer area identified on Biodiversity areas overlay map–OM–02.03 protects the Locally significant Melaleuca irbyana area identified on Biodiversity areas overlay map–OM–02.03 from: (a) edge effects;	A06	Development within the Locally significant Melaleuca irbyana buffer area identified on Biodiversity areas overlay map–OM–02.03 provides for a vegetated buffer within 50 metres of the Locally significant Melaleuca irbyana area identified on Biodiversity areas overlay map–OM–02.03.	**Not Applicable** The site is located outside of the *Melaleuca irbyana* buffer area.

Performance Outcomes		Acceptable Outcomes		Compliance
	(b) adverse changes to the local hydrology. Compliance with this performance outcome is to be demonstrated by a detailed ecological assessment report prepared in accordance with Part 2 of planning scheme policy 3–Environmental management.			
Landscape values				
PO7	Development is designed and located to protect and enhance the landscape values of: (a) a ridgeline; (b) native vegetation.	A07	No acceptable outcome provided.	**Complies with PO7** The site contains regrowth vegetation and limited landscape values. A landscape plan will be prepared to support the development which will include native vegetation.
Lighting				
PO8	Development in a Biodiversity corridor or Koala corridor identified on Biodiversity areas overlay map–OM–02.02 is designed to minimise adverse light impacts on native fauna.	AO8	Lighting associated with development in a Biodiversity corridor or Koala corridor identified on Biodiversity areas overlay map–OM–02.02: (a) complies with the dark surrounds lighting levels in AS4282-1997–Control of the obtrusive effects of outdoor lighting; is directed away from areas identified on Biodiversity areas overlay map–OM–02.00	**Complies with PO8** Outdoor lighting from the newly constructed dwellings will be minimised and directed away from retained vegetated areas in adjacent properties.

6.0 Conclusion

This ecological assessment report identifies ecological values associated with the vegetation on site including the mapped minor waterway. No threatened flora or fauna species were observed on site.

The proposed development has been designed to comply with the planning and environmental requirements of the Logan City Council City Plan 2015, State and Commonwealth environmental legislation. Areas mapped as Koala habitat will be offset in accordance with the Greater Flagstone Priority Development Area Scheme.

By implementing a number of key recommended actions designed to minimise impacts during the construction and operational phases, the proposed development will reduce its impact to the ecological value of the local area. The report also provides mitigations measures to ensure that the development complies with the relevant environmental legislation.

It is concluded, that the future development of the site satisfies Commonwealth, State and Local environmental legislation.

7.0 References

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Appendix 1 – EPBC Act Protected Matters Search

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.

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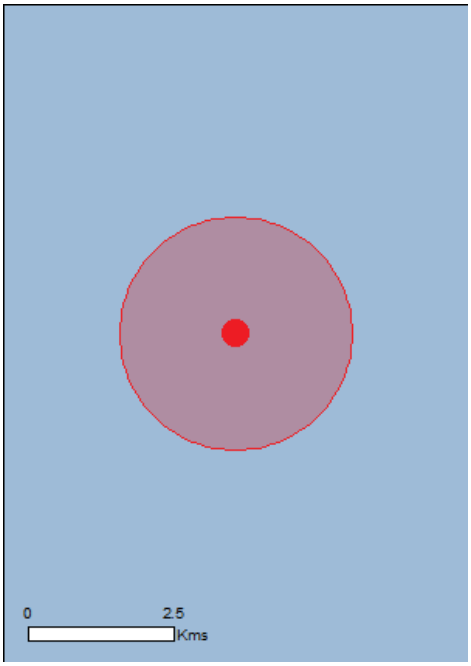

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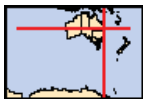

Summary

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:	2
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
Listed Threatened Species:	32
Listed Migratory Species:	16

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:	1
Commonwealth Heritage Places:	1
Listed Marine Species:	22
Whales and Other Cetaceans:	None
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:	37
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	20 - 30km upstream
Moreton bay	20 - 30km upstream

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 may occur within area
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occur within area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may 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 likely to occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Dasyornis brachypterus Eastern Bristlebird [533]	Endangered	Species or species habitat may occur within area
Erythrotriorchis radiatus Red Goshawk [942]	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
Grantiella picta Painted Honeyeater [470]	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
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species

Name	Status	Type of Presence
		habitat may occur within area
Poephila cincta cincta Southern Black-throated Finch [64447]	Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Turnix melanogaster Black-breasted Button-quail [923]	Vulnerable	Species or species habitat likely to occur within area
Insects		
Argynnis hyperbius inconstans Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area
Mammals		
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 known to occur within area
Petauroides volans Greater Glider [254]	Vulnerable	Species or species habitat likely to 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	Foraging, feeding or related behaviour known to occur within area
Plants		
Bosistoa transversa Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat likely to occur within area
Cycas ophiolitica [55797]	Endangered	Species or species habitat may occur within area
Dichanthium setosum bluegrass [14159]	Vulnerable	Species or species habitat may 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
Notelaea ipsviciensis Cooneana Olive [81858]	Critically Endangered	Species or species habitat may occur within area
Phaius australis Lesser Swamp-orchid [5872]	Endangered	Species or species habitat likely to occur within area

Name	Status	Type of Presence
Plectranthus habrophyllus [64589]	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		
Delma torquata Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area
Furina dunmalli Dunmall's Snake [59254]	Vulnerable	Species or species habitat may occur within area
Saiphos reticulatus Three-toed Snake-tooth Skink [88328]	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		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may 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
Motacilla flava Yellow Wagtail [644]		Species or species habitat may 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 may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land [Resource Information]

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

Name
Defence - GREENBANK TRAINING AREA

Commonwealth Heritage Places [Resource Information]

Name	State	Status
Natural		
Greenbank Military Training Area (part)	QLD	Listed place

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 may 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]		Species or species habitat likely to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within

Name	Threatened	Type of Presence
		area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
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
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
Motacilla flava Yellow Wagtail [644]		Species or species habitat may 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 may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may 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
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Extra Information

State and Territory Reserves [Resource Information]

Name	State
Koolena	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 Resouces 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
Equus caballus Horse [5]		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

Name	Status	Type of Presence
		habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species 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
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
Genista monspessulana Montpellier Broom, Cape Broom, Canary Broom, Common Broom, French Broom, Soft Broom [20126]		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
Parkinsonia aculeata Parkinsonia, Jerusalem Thorn, Jelly Bean Tree, Horse Bean [12301]		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

Name	Status	Type of Presence
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
Senecio madagascariensis Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]		Species or species habitat likely to occur within area
Solanum elaeagnifolium Silver Nightshade, Silver-leaved Nightshade, White Horse Nettle, Silver-leaf Nightshade, Tomato Weed, White Nightshade, Bull-nettle, Prairie-berry, Satansbos, Silver-leaf Bitter-apple, Silverleaf-nettle, Trompillo [12323]		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
Greenbank Army Training Area C	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

-27.73166 152.98322

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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Appendix 2 – Wildlife Online Database

Queensland Government

Wildlife Online Extract

Search Criteria: Species List for a Specified Point
Species: All
Type: All
Status: Rare and threatened species
Records: All
Date: All
Latitude: -27.7316
Longitude: 152.9832
Distance: 2
Email: jasmine.vink@greentapesolutions.com.au
Date submitted: Monday 17 Dec 2018 14:05:09
Date extracted: Monday 17 Dec 2018 14:10:39

The number of records retrieved = 3

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians	Limnodynastidae	*Adelotus brevis*	tusked frog		V		1
animals	mammals	Phascolarctidae	*Phascolarctos cinereus*	koala		V	V	33
animals	mammals	Pseudocheiridae	*Petauroides volans volans*	southern greater glider		V	V	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 3 – DNRM Vegetation Management Report

Department of Natural Resources, Mines and Energy

Vegetation management report

For Lot: 18 Plan: RP184970

Current as at 17/12/2018

Queensland Government

Recent changes

New vegetation clearing laws

New vegetation management laws were passed by the Queensland Parliament on 3 May 2018 and may affect the clearing you can undertake on your property.

For more information, read about the new vegetation management laws (https://www.dnrme.qld.gov.au/land-water/initiatives/vegetation-management-laws/) or call 135VEG (13 58 34) between 8.30am and 4.30pm Monday to Friday.

Updated mapping

The Regulated Vegetation Management Map and Supporting Map was updated in March 2018 to reflect the most up to date information available in relation to regional ecosystems, essential habitat and wetland mapping (Version 10).

Overview

Based on the lot on plan details you have supplied, this report provides the following detailed information:

- *Vegetation management framework* - an explanation of the application of the framework.
- *Property details* - information about the specified Lot on Plan, lot size, local government area, bioregion(s), subregion(s), catchment(s), coastal or non coastal status, and any applicable area management plans associated with your property.
- *Vegetation management details for the specified Lot on Plan* - specific information about your property including vegetation categories, regional ecosystems, watercourses, wetlands, essential habitat, and protected plants.
- *Contact information.*
- *Maps* - a series of colour maps to assist in identifying regulated vegetation on your property.
- *Other legislation contact information.*

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.

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 Queensland's Protected Plants framework or the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Section 6 of this guide provides contact details of other agencies you should confirm requirements with, before commencing vegetation clearing.

Table of Contents

1. Vegetation management framework

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 prescribed under Schedule 5 of the Vegetation Management Regulation 2012; and
- a mangrove.

1.1 Exempt clearing work

Exempt clearing work is an activity for which you do not need to notify DNRME or obtain an approval 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 5.1), 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 approval under the vegetation management framework. For all other land tenures, contact DNRME 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/vegetation/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. Contact DNRME prior to clearing in any of these areas.

1.2 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/vegetation/codes/

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

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

1.3 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.

As a result of the new laws, AMPs for fodder harvesting, managing thickened vegetation and managing encroachment will continue for 2 years. New notifications cannot be made for these AMPs.

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 2.2 of this report. Before clearing under one of these AMPs, you must first notify the DNRME and then follow the conditions and requirements listed in the AMP.
https://www.qld.gov.au/environment/land/vegetation/area-plans/

1.4 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/vegetation/applying/

2. Property details

2.1 Tenure

All of the lot, plan and tenure information associated with property Lot: 18 Plan: RP184970, including links to relevant Smart Maps, are listed in Table 1. The tenure of the property (whether it is freehold, leasehold, or other) may be viewed by clicking on the Smart Map link(s) provided.

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

Lot	Plan	Tenure	Link to property on SmartMap
18	RP184970	Freehold	https://apps.information.qld.gov.au/data/cadastre/GenerateSmartMap?q=18\RP184970

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.

2.2 Property location

Table 2 provides a summary of the locations for property Lot: 18 Plan: RP184970, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)
Logan City

Bioregion(s)	Subregion(s)
Southeast Queensland	Moreton Basin

Catchment(s)
Brisbane

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

*See also Map 5.4

Area Management Plan(s): Nil

3. Vegetation management details for Lot: 18 Plan: RP184970

3.1 Vegetation categories

Vegetation categories are shown on the regulated vegetation management map in section 5.1 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: 2.0ha

Vegetation category	Area (ha)
Category C	0.82
Category X	1.18

Table 4

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 DNRME 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 DNRME 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)

This report does not confirm if a Property Map of Assessable Vegetation (PMAV) exists on a lot. To confirm whether or not a PMAV exists on a lot, please check the PMAV layer on the Queensland Globe2, or contact DNRME on 135VEG (135 834).

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 5.2 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
12.9-10.12	Endangered	C	0.25	Eucalyptus seeana, Corymbia intermedia, Angophora leiocarpa woodland on sedimentary rocks	Sparse
12.9-10.2	Least concern	C	0.41	Corymbia citriodora subsp. variegata +/- Eucalyptus crebra open forest on sedimentary rocks	Mid-dense
12.9-10.7	Of concern	C	0.16	Eucalyptus crebra +/- E. tereticornis, Corymbia tessellaris, Angophora spp., E. melanophloia woodland on sedimentary rocks	Sparse
non-rem	None	X	1.18	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 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 5.2.

3.4 Wetlands

There are no vegetation management wetlands present on this property.

3.5 Essential habitat

Protected wildlife is native wildlife prescribed under the *Nature Conservation Act 1992* (NCA), and includes 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 5.2.

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 as assessable vegetation -

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
860	Phascolarctos cinereus	koala	V	SEQ: Open eucalypt forest and woodland that has: a) multiple strata layers containing Eucalyptus, Corymbia, Angophora, Lophostemon or Melaleuca trees that-at 1.3 metres above the ground-have a diameter both greater and less than 30 centimetres; and b) at least 1 of the following species: Eucalyptus tereticornis, E. fibrosa, E. propinqua; E. umbra, E. grandis, E. microcorys, E. tindaliae, E. resinifera, E. populnea, E. robusta, E. nigra, E. racemosa, E. crebra, E. exserta, E. seeana, Lophostemon confertus, L. suaveolens, Melaleuca quinquenervia. Outside SEQ: Open eucalypt forest and woodland that contains Eucalyptus &/or Corymbia spp. Tree species used for food varies across State and can include Eucalyptus tereticornis, E. camaldulensis, E. coolabah; E. drepanophylla, E. platyphylla, E. orgadophilla, E. thozetiana, E. melanophloia, E. populnea, E. melliodora, E. dealbata, E. microtheca, E. crebra, E. exserta, E. blakelyi, E. papuana, Corymbia tessellaris, C. citriodora, Melaleuca quinquenervia, M. leucadendra.	Sea level to 1000m.	None	Riparian areas, plains and hill/escarpment slopes.
706	Adelotus brevis	tusked frog	V	In cavities, under debris (logs, stones) in subtropical vine forest, tall open moist forest, heaths, Melaleuca swamp and pasturelands near puddles and streams.	Sea level to 1000m.	None	None
803	Dasyurus maculatus maculatus	spotted-tailed quoll (southern subsp.)	V	Rainforest, wet and dry structurally complex sclerophyll forest (e.g. Eucalyptus andrewsii, E. saligna, E. tereticornis & Corymbia intermedia) on productive soils (gullies & flats) and in rocky areas (ridges), also open woodland (E. alba, E. melliodora, Callitris glaucophylla), coastal heathland (adjacent to forest) and riparian forest. Dens in caves, rock crevices and hollow logs.	Sea level to 1000m.	None	None

Label	Regional Ecosystem (mandatory unless otherwise specified)
860	SEQ: 11.3.2, 11.3.4, 11.3.25, 11.3.26, 11.8.2, 11.8.4, 11.8.5, 11.8.8, 11.9.9, 12.2.5, 12.2.6, 12.2.7, 12.2.8, 12.2.10, 12.3.2, 12.3.3, 12.3.4, 12.3.5, 12.3.6, 12.3.7, 12.3.9, 12.3.10, 12.3.11, 12.3.14, 12.3.18, 12.3.19, 12.3.20, 12.5.1, 12.5.2, 12.5.3, 12.5.4, 12.5.6, 12.5.7, 12.5.10, 12.5.12, 12.8.1, 12.8.8, 12.8.9, 12.8.11, 12.8.12, 12.8.14, 12.8.16, 12.8.17, 12.8.20, 12.8.24, 12.8.25, 12.9-10.1, 12.9-10.2, 12.9-10.3, 12.9-10.4, 12.9-10.5, 12.9-10.7, 12.9-10.8, 12.9-10.11, 12.9-10.12, 12.9-10.14, 12.9-10.17, 12.9-10.18, 12.9-10.19, 12.9-10.21, 12.9-10.25, 12.9-10.26, 12.9-10.27, 12.9-10.28, 12.9-10.29, 12.11.2, 12.11.3, 12.11.5, 12.11.6, 12.11.7, 12.11.8, 12.11.9, 12.11.14, 12.11.16, 12.11.17, 12.11.18, 12.11.22, 12.11.23, 12.11.24, 12.11.25, 12.11.26, 12.11.27, 12.11.28, 12.12.2, 12.12.3, 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. Outside SEQ: 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, 4.4.1, 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, 9.4.3, 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, 9.11.20, 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, 10.3.5, 10.3.6, 10.3.9, 10.3.10, 10.3.11, 10.3.12, 10.3.13, 10.3.14, 10.3.15, 10.3.17, 10.3.20, 10.3.27, 10.3.28, 10.4.3, 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, 10.7.1, 10.7.2, 10.7.3, 10.7.4, 10.7.5, 10.7.9, 10.7.10, 10.7.11, 10.7.12, 10.9.2, 10.9.3, 10.9.5, 10.10.1, 10.10.3, 10.10.4, 10.10.5, 10.10.7, 11.2.1, 11.2.5, 11.3.1, 11.3.2, 11.3.3, 11.3.4, 11.3.5, 11.3.6, 11.3.7, 11.3.9, 11.3.10, 11.3.12, 11.3.13, 11.3.14, 11.3.15, 11.3.16, 11.3.17, 11.3.18, 11.3.19, 11.3.21, 11.3.23, 11.3.25, 11.3.26, 11.3.27, 11.3.28, 11.3.29, 11.3.30, 11.3.32, 11.3.33, 11.3.35, 11.3.36, 11.3.37, 11.3.38, 11.3.39, 11.4.2, 11.4.3, 11.4.7, 11.4.8, 11.4.9, 11.4.10, 11.4.12, 11.4.13, 11.5.1, 11.5.2, 11.5.3, 11.5.4, 11.5.5, 11.5.7, 11.5.8, 11.5.9, 11.5.12, 11.5.13, 11.5.14, 11.5.17, 11.5.18, 11.5.20, 11.5.21, 11.7.1, 11.7.2, 11.7.3, 11.7.4, 11.7.6, 11.7.7, 11.8.1, 11.8.2, 11.8.4, 11.8.5, 11.8.8, 11.8.11, 11.8.12, 11.8.14, 11.8.15, 11.9.1, 11.9.2, 11.9.3, 11.9.5, 11.9.6, 11.9.7, 11.9.9, 11.9.10, 11.9.11, 11.9.13, 11.9.14, 11.10.1, 11.10.2, 11.10.3, 11.10.4, 11.10.5, 11.10.6, 11.10.7, 11.10.9, 11.10.11, 11.10.12, 11.10.13, 11.11.1, 11.11.2, 11.11.3, 11.11.4, 11.11.6, 11.11.7, 11.11.8, 11.11.9, 11.11.10, 11.11.11, 11.11.12, 11.11.13, 11.11.14, 11.11.15, 11.11.16, 11.11.17, 11.11.19, 11.11.20, 11.12.1, 11.12.2, 11.12.3, 11.12.5, 11.12.6, 11.12.7, 11.12.8, 11.12.9, 11.12.10, 11.12.13, 11.12.14, 11.12.15, 11.12.16, 11.12.17, 11.12.19, 11.12.20, 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.
706	8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.5, 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, 8.3.9, 8.3.10, 8.3.11, 8.3.13, 8.5.1, 8.5.2, 8.5.3, 8.5.5, 8.5.6, 8.8.1, 8.9.1, 8.10.1, 8.11.1, 8.11.2, 8.11.3, 8.11.4, 8.11.5, 8.11.6, 8.11.8, 8.12.1, 8.12.2, 8.12.3, 8.12.4, 8.12.5, 8.12.6, 8.12.7, 8.12.8, 8.12.9, 8.12.10, 8.12.11, 8.12.12, 8.12.14, 8.12.16, 8.12.17, 8.12.18, 8.12.19, 8.12.20, 8.12.22, 8.12.23, 8.12.25, 8.12.26, 8.12.27, 8.12.28, 8.12.29, 8.12.30, 8.12.31, 8.12.32, 11.2.1, 11.2.2, 11.2.3, 11.2.5, 11.3.1, 11.3.2, 11.3.3, 11.3.4, 11.3.5, 11.3.6, 11.3.7, 11.3.8, 11.3.9, 11.3.10, 11.3.11, 11.3.12, 11.3.13, 11.3.14, 11.3.15, 11.3.16, 11.3.17, 11.3.18, 11.3.19, 11.3.20, 11.3.23, 11.3.25, 11.3.26, 11.3.27, 11.3.28, 11.3.29, 11.3.30, 11.3.32, 11.3.33, 11.3.34, 11.3.35, 11.3.36, 11.3.37, 11.3.38, 11.3.39, 11.3.40, 11.4.1, 11.4.2, 11.4.3, 11.4.5, 11.4.6, 11.4.7, 11.4.8, 11.4.9, 11.4.10, 11.4.12, 11.4.13, 11.5.1, 11.5.2, 11.5.3, 11.5.4, 11.5.5, 11.5.7, 11.5.8, 11.5.9, 11.5.12, 11.5.13, 11.5.14, 11.5.15, 11.5.16, 11.5.17, 11.5.20, 11.5.21, 11.7.1, 11.7.2, 11.7.3, 11.7.4, 11.7.6, 11.7.7, 11.8.1, 11.8.2, 11.8.3, 11.8.4, 11.8.5, 11.8.6, 11.8.8, 11.8.9, 11.8.11, 11.8.12, 11.8.13, 11.8.14, 11.8.15, 11.9.1, 11.9.2, 11.9.3, 11.9.4, 11.9.5, 11.9.6, 11.9.7, 11.9.8, 11.9.9, 11.9.10, 11.9.13, 11.9.14, 11.10.1, 11.10.2, 11.10.4, 11.10.5, 11.10.6, 11.10.7, 11.10.8, 11.10.9, 11.10.11, 11.10.12, 11.10.13, 11.11.1, 11.11.2, 11.11.3, 11.11.4, 11.11.5, 11.11.6, 11.11.7, 11.11.8, 11.11.9, 11.11.10, 11.11.11, 11.11.12, 11.11.13, 11.11.14, 11.11.15, 11.11.16, 11.11.17, 11.11.18, 11.11.19, 11.11.20, 11.11.21, 12.11.24, 12.11.25, 12.11.26, 12.11.27, 12.11.28, 11.12.1, 11.12.2, 11.12.3, 11.12.4, 11.12.5, 11.12.6, 11.12.7, 11.12.8, 11.12.9, 11.12.10, 11.12.11, 11.12.12, 11.12.13, 11.12.14, 11.12.16, 11.12.17, 11.12.18, 11.12.19, 11.12.20, 11.12.21, 12.2.1, 12.2.2, 12.2.3, 12.2.4, 12.2.5, 12.2.6, 12.2.7, 12.2.8, 12.2.9, 12.2.10, 12.2.11, 12.2.12, 12.2.13, 12.3.1, 12.3.2, 12.3.3, 12.3.4, 12.3.5, 12.3.6, 12.3.7, 12.3.9, 12.3.10, 12.3.11, 12.3.12, 12.3.13, 12.3.14, 12.3.15, 12.3.16, 12.3.17, 12.3.18, 12.3.19, 12.3.20, 12.3.21, 12.5.1, 12.5.2, 12.5.3, 12.5.4, 12.5.5, 12.5.6, 12.5.7, 12.5.8, 12.5.10, 12.5.11, 12.5.12, 12.5.13, 12.7.1, 12.7.2, 12.8.1, 12.8.2, 12.8.3, 12.8.4, 12.8.5, 12.8.6, 12.8.7, 12.8.8, 12.8.9, 12.8.10, 12.8.11, 12.8.12, 12.8.13, 12.8.14, 12.8.16, 12.8.17, 12.8.18, 12.8.19, 12.8.20, 12.8.21, 12.8.22, 12.8.23, 12.8.24, 12.8.25, 12.8.26, 12.9-10.1, 12.9-10.2, 12.9-10.3, 12.9-10.4, 12.9-10.5, 12.9-10.6, 12.9-10.7, 12.9-10.8, 12.9-10.9, 12.9-10.12, 12.9-10.13, 12.9-10.14, 12.9-10.16, 12.9-10.17, 12.9-10.18, 12.9-10.19, 12.9-10.20, 12.9-10.21, 12.9-10.23, 12.9-10.24, 12.9-10.25, 12.9-10.26, 12.9-10.28, 12.9-10.29, 12.11.1, 12.11.2, 12.11.3, 12.11.4, 12.11.5, 12.11.6, 12.11.7, 12.11.8, 12.11.9, 12.11.10, 12.11.11, 12.11.12, 12.11.13, 12.11.14, 12.11.15, 12.11.16, 12.11.17, 12.11.18, 12.11.19, 12.11.20, 12.11.21, 12.11.22, 12.11.23, 12.12.1, 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, 12.12.13, 12.12.14, 12.12.15, 12.12.16, 12.12.17, 12.12.18, 12.12.20, 12.12.21, 12.12.22, 12.12.23, 12.12.24, 12.12.25, 12.12.26, 12.12.27, 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, 13.11.7, 13.11.8, 13.12.1, 13.12.2, 13.12.3, 13.12.4, 13.12.5, 13.12.8, 13.12.9, 13.12.10, 13.12.11
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3.6 Protected plants (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), with clearing of protected plants in the wild regulated by the Nature Conservation (Wildlife Management) Regulation 2006. These requirements apply irrespective of the classification of the vegetation under the *Vegetation Management Act 1999*.

Prior to clearing, if the plants proposed to be cleared are in the wild (see Operational policy: When a protected plant in Queensland is considered to be 'in the wild') and the exemptions under the Nature Conservation (Wildlife Management) Regulation 2006 are not applicable to the proposed clearing, you must check the flora survey trigger map to determine if any part of the area to be cleared is within a high risk area. The trigger map for this property is provided in section 5.5. The exemptions relate to:

- imminent risk of death or serious injury (refer s261A)
- imminent risk of serious damage to a building or other structure on land, or to personal property (refer s261B)
- *Fire and Emergency Service Act 1990* (refer 261C)
- previously cleared areas (refer s261ZB)
- maintenance activities (refer s261ZC)
- firebreak or fire management line (refer s261ZD)
- accepted development vegetation clearing code (refer s261ZE)
- conservation purposes (refer s261ZG)
- authorised in particular circumstances (refer s385).

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

If the proposed area to be cleared is shown as blue (i.e. high risk) on the flora survey trigger map, a flora survey of the clearing impact area must be undertaken in accordance with the flora survey guidelines. The main objective of a flora survey is to locate any endangered, vulnerable or near threatened plants (EVNT plants) that may be present in the clearing impact area.

If a flora survey identifies that EVNT 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 and Science, with a copy of the flora survey report, at least one week prior to clearing. The clearing must be conducted within two years after the flora survey report was submitted.

If a flora survey identifies that EVNT 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 application form clearing permit.

In an area other than a high risk area, a clearing permit is only required where a person is, or becomes aware that EVNT 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.

Further information on protected plants is available at
http://www.ehp.qld.gov.au/licences-permits/plants-animals/protected-plants/

For assistance on the protected plants flora survey trigger map for this property, please contact the Department of Environment and Science at palm@des.qld.gov.au.

3.7 Emissions Reduction Fund (ERF)

The ERF is an Australian Government scheme which offers incentives for businesses and communities across the economy to reduce emissions.

Under the ERF, landholders can earn money from activities such as planting (and keeping) trees, managing regrowth vegetation and adopting more sustainable agricultural practices.

The purpose of a project is to remove greenhouse gases from the atmosphere. Each project will provide new economic opportunities for farmers, forest growers and land managers.

Further information on ERF is available at https://www.qld.gov.au/environment/land/state/use/carbon-rights/.

4. Contact information for DNRME

For further information on vegetation management:
Phone 135VEG (135 834)
Email vegetation@dnrme.qld.gov.au

Visit www.dnrme.qld.gov.au/our-department/contact-us/vegetation-contacts to submit an online enquiry.

For contact details for other State and Commonwealth agencies, please see Section 6.

5. Maps

The maps included in this report may also be requested individually at:

https://www.dnrme.qld.gov.au/qld/environment/land/vegetation/vegetation-map-request-form
and
http://www.ehp.qld.gov.au/licences-permits/plants-animals/protected-plants/map-request.php

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 the State Development Assessment Provisions (SDAP).

Protected plants map

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

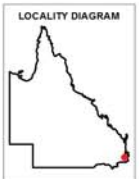
5.1 Regulated vegetation management map

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

LOCALITY DIAGRAM



N

0 60 120 180 240 300 m

This product is projected into:
GDA 1994 MGA Zone 56

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.

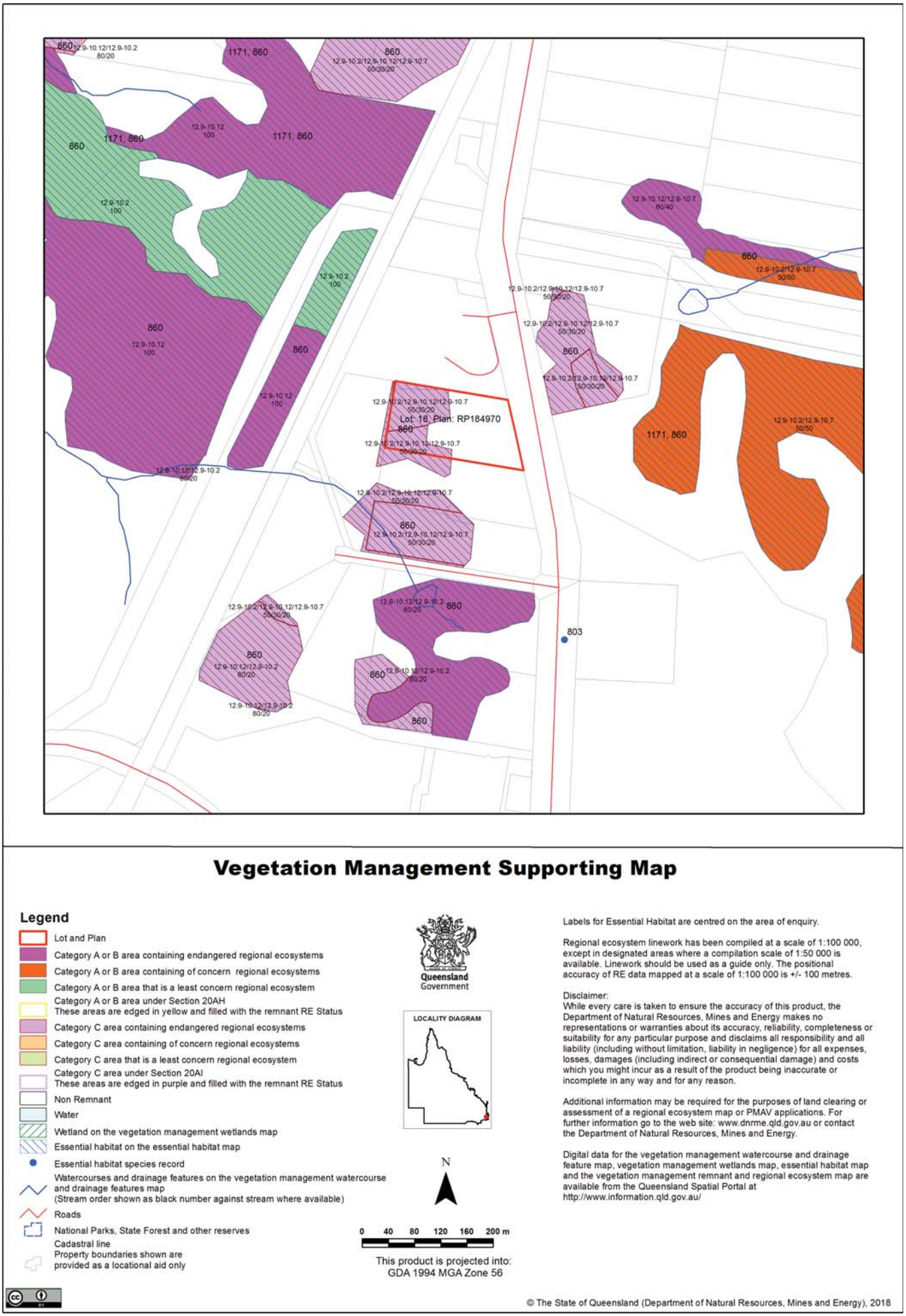
Additional information required for the assessment of vegetation values is provided in the accompanying "Vegetation Management Supporting map". For further information go to the web site: www.dnrme.qld.gov.au or contact the Department of Natural Resources, Mines and Energy.

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

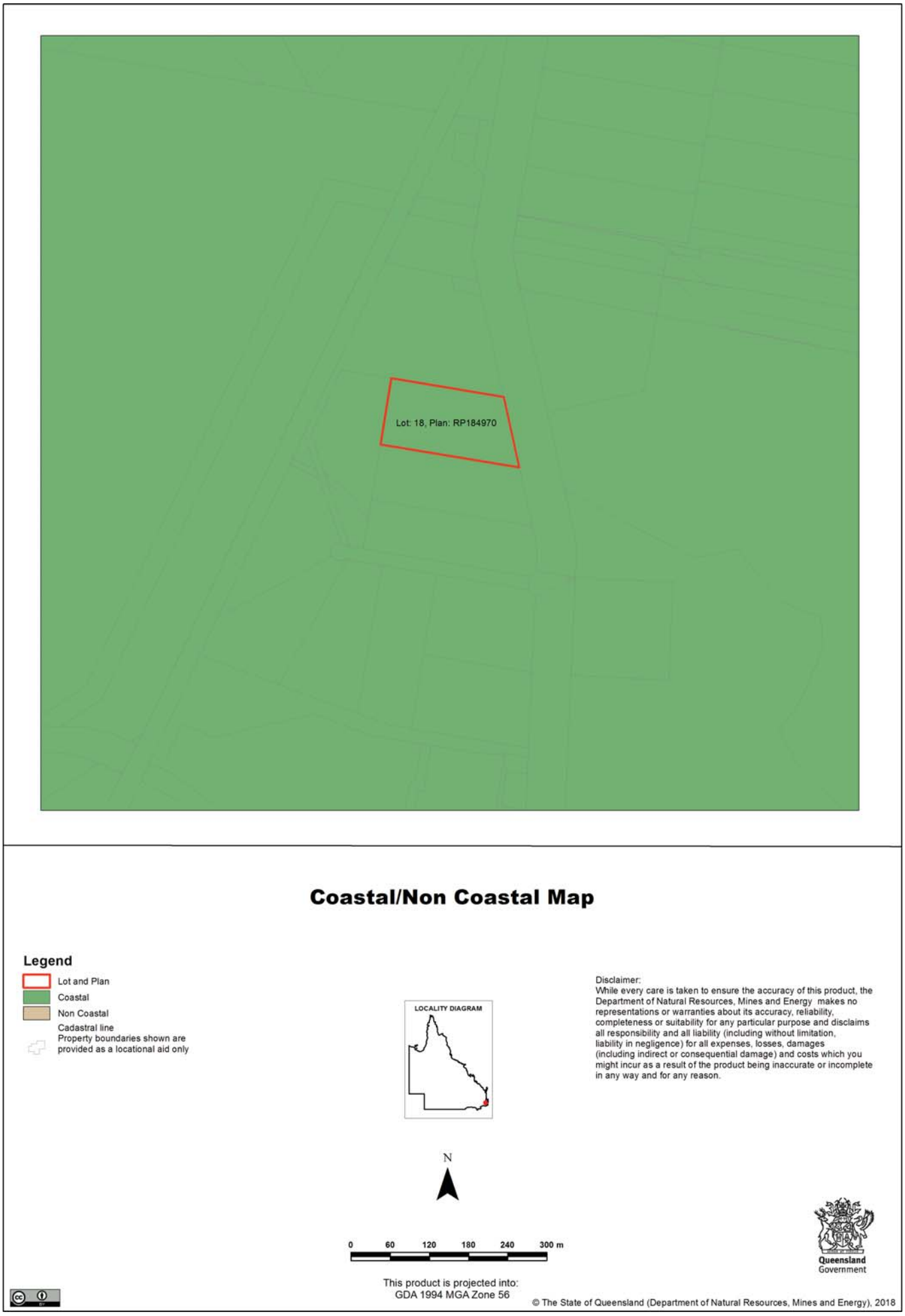
This map is updated on a monthly basis to ensure new PMAVs are included as they are approved.

Queensland Government

5.2 Vegetation management supporting map



5.3 Coastal/non coastal map



5.4 Protected plants map administered by DES

Protected Plants Flora Survey Trigger Map

Legend

- Lot and Plan
- High risk area
- Cadastral line
  Property boundaries shown are provided as a locational aid only
- Freeways / motorways / highways
- Secondary roads / streets

LOCALITY DIAGRAM

N

0 40 80 120 160 200 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.

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

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. Other relevant legislation contacts list

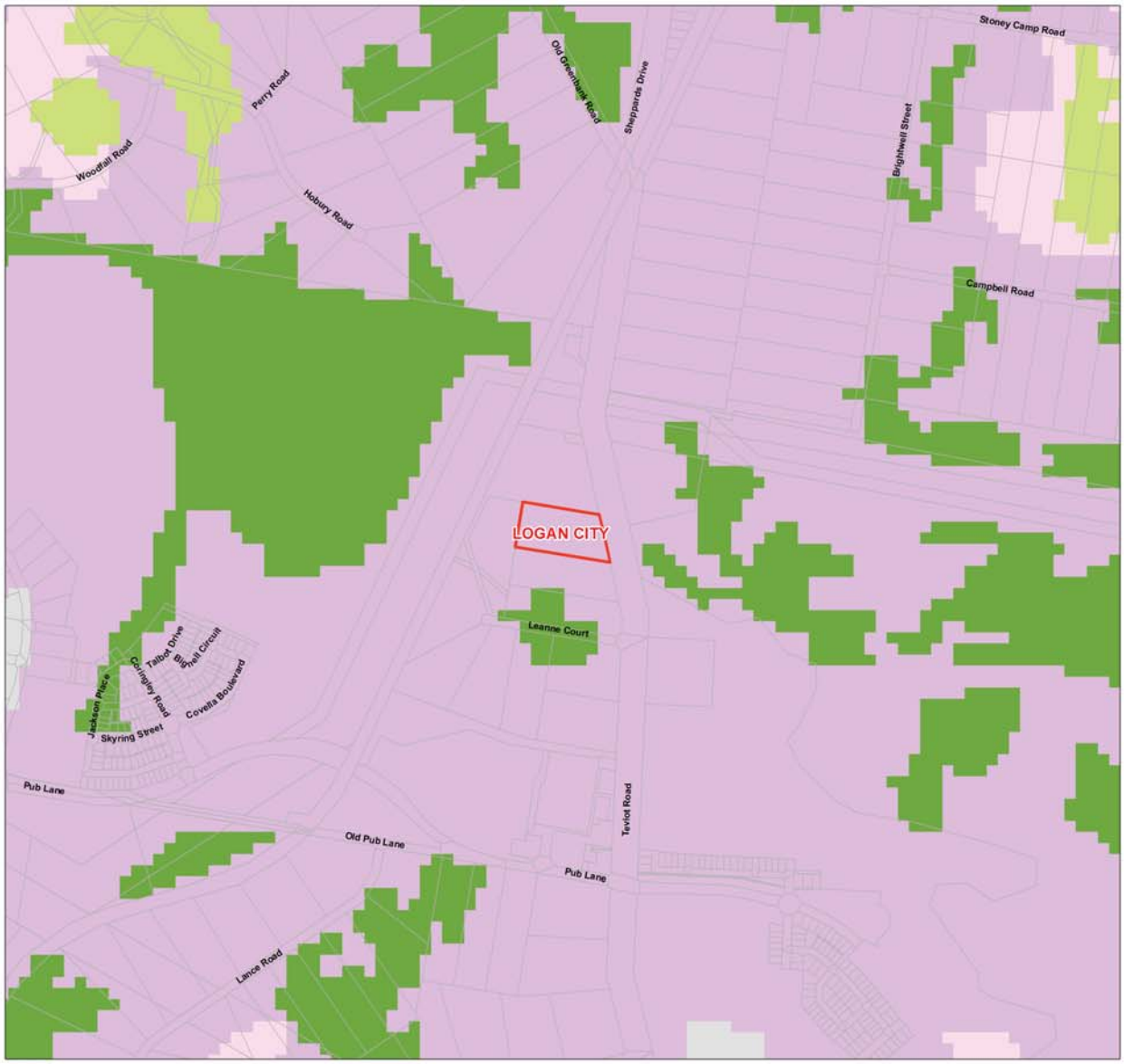
Activity	Legislation	Agency	Contact details
Interference with overland flow Earthworks, significant disturbance	*Water Act 2000* *Soil Conservation Act 1986*	Department of Natural Resources, Mines and Energy (Queensland Government)	Ph: 13 QGOV (13 74 68) www.dnrme.qld.gov.au
Indigenous Cultural Heritage	*Aboriginal Cultural Heritage Act 2003* *Torres Strait Islander Cultural Heritage Act 2003*	Department of Aboriginal and Torres Strait Islander Partnerships (Queensland Government)	Ph: 13 QGOV (13 74 68) www.datsip.qld.gov.au
Mining and environmentally relevant activities Infrastructure development (coastal) Heritage issues Protected plants and protected areas[1]	*Environmental Protection Act 1994* *Coastal Protection and Management Act 1995* *Queensland Heritage Act 1992* *Nature Conservation Act 1992*	Department of Environment and Science (Queensland Government)	Ph: 13 QGOV (13 74 68) www.des.qld.gov.au
Interference with fish passage in a watercourse, mangroves Forestry activities[2]	*Fisheries Act 1994* *Forestry Act 1959*	Department of Agriculture and Fisheries (Queensland Government)	Ph: 13 QGOV (13 74 68) www.daf.qld.gov.au
Matters of National Environmental Significance including listed threatened species and ecological communities	*Environment Protection and Biodiversity Conservation Act 1999*	Department of the Environment (Australian Government)	Ph: 1800 803 772 www.environment.gov.au
Development and planning processes	*Planning Act 2016* *State Development and Public Works Organisation Act 1971*	Department of State Development, Manufacturing, Infrastructure and Planning (Queensland Government)	Ph: 13 QGOV (13 74 68) www.dsdmip.qld.gov.au
Local government requirements	*Local Government Act 2009* *Planning Act 2016*	Department of Local Government, Racing and Multicultural Affairs (Queensland Government)	Ph: 13 QGOV (13 74 68) Your relevant local government office

1. In Queensland, all plants that are native to Australia are protected plants under the *Nature Conservation Act 1992*, which endeavours to ensure that protected plants (whether whole plants or protected plants parts) are not illegally removed from the wild, or illegally traded. Prior to clearing, you should check the flora survey trigger map to determine if the clearing is within a high-risk area by visiting www.des.qld.gov.au. For further information or assistance on the protected plants flora survey trigger map for your property, please contact the Department of Environment and Science on 13QGOV (13 74 68) or email palm@des.qld.gov.au.

2. Contact the Department of Agriculture and Fisheries before clearing:

- Any sandalwood on state-owned land (including leasehold land)
- On freehold land in a 'forest consent area'
- More than five hectares on state-owned land (including leasehold land) containing commercial timber species listed in parts 2 or 3 of Schedule 6 of the Vegetation Management Regulation 2012 and located within any of the following local government management areas-Banana, Bundaberg Regional, Fraser Coast Regional, Gladstone Regional, Isaac Regional, North Burnett Regional, Somerset Regional, South Burnett Regional, Southern Downs Regional, Tablelands Regional, Toowoomba Regional, Western Downs Regional.

Appendix 4 - Koala Assessable Development Area Mapping



Koala Habitat in South East Queensland

Lot and Plan

Koala SPP - 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

South East Queensland Koala Habitat Values western SEQ
- Bushland Habitat
- Suitable for rehabilitation
- Other areas of value
- Generally not suitable
- Water
- Cadastral Boundaries
- Local Government Boundaries

LOCALITY DIAGRAM

N

0 130 260 390 520 650 m

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.

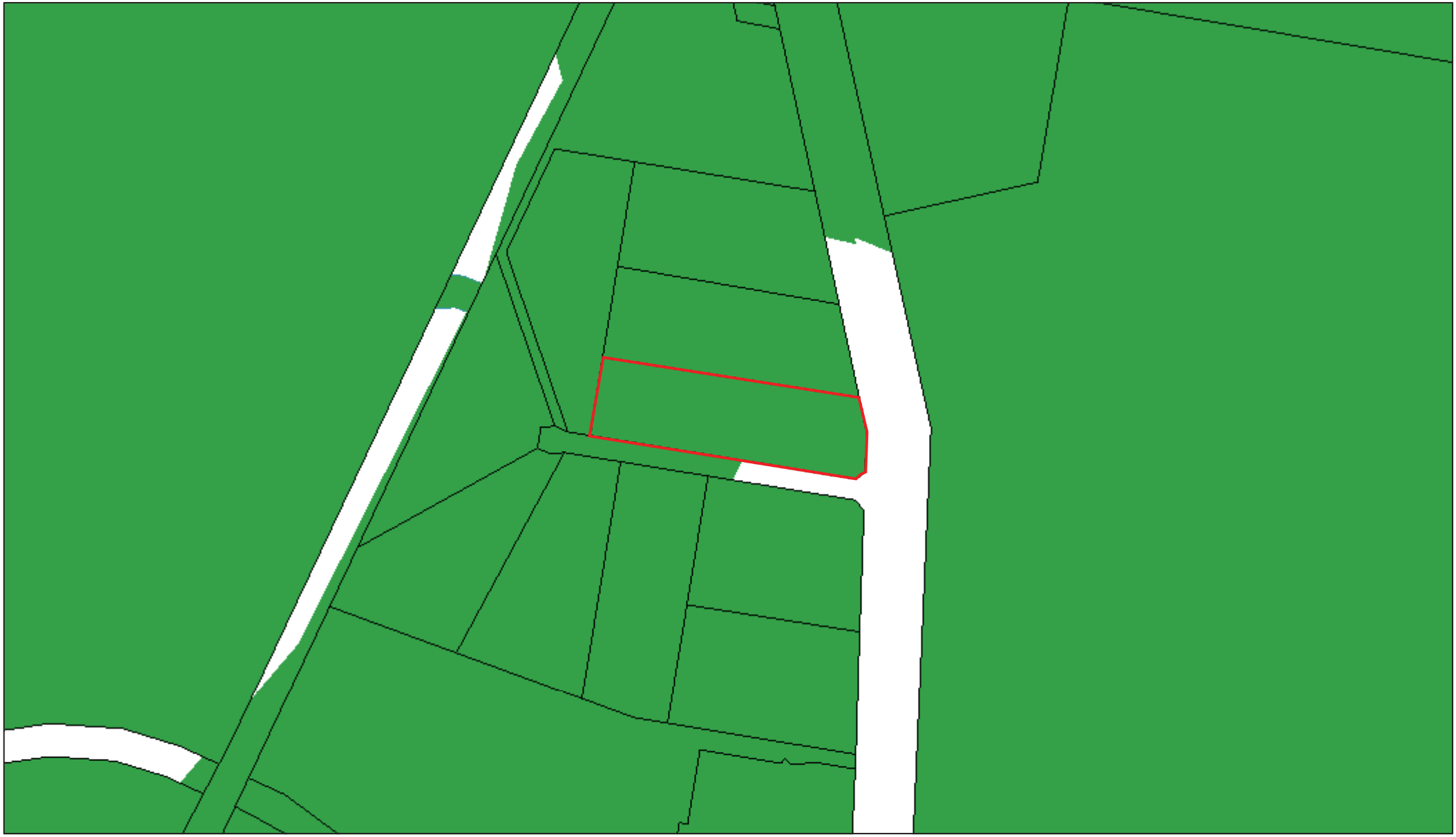
In consideration of the State permitting use of this data you acknowledge and agree that the State gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any 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.

Appendix 5 - Council Planning Scheme Overlay Maps

Logan City Council - Logan Planning Scheme 2015



December 21, 2017

1:5,000

0 0.0425 0.085 0.17 mi

0 0.05 0.1 0.2 km

Logan City Council

Logan City Council - Logan Planning Scheme 2015

December 21, 2017

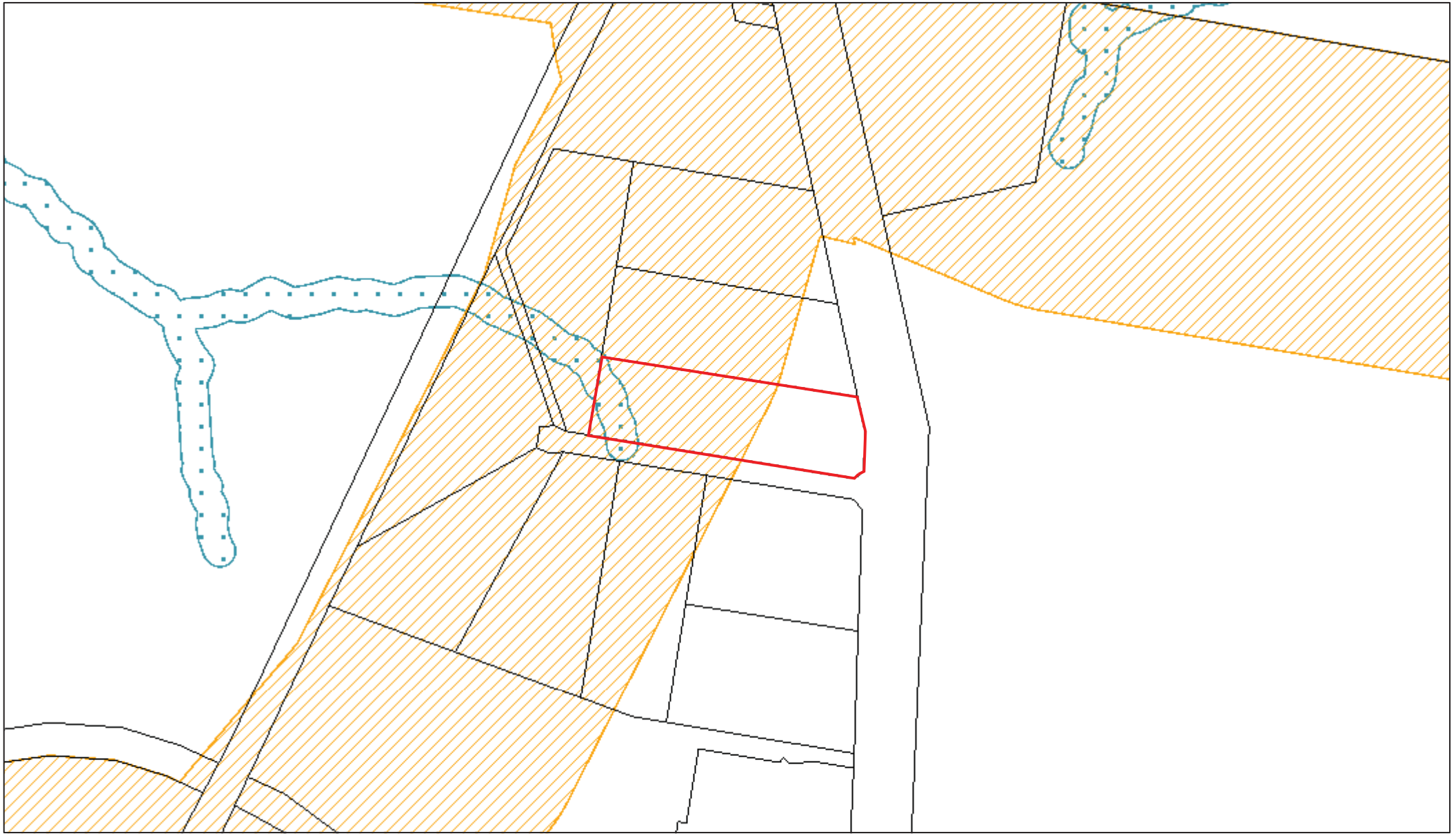
1:5,000

0 0.0425 0.085 0.17 mi

0 0.05 0.1 0.2 km

Logan City Council

Logan City Council - Logan Planning Scheme 2015



December 21, 2017

1:5,000

0 0.0425 0.085 0.17 mi

0 0.05 0.1 0.2 km

Logan City Council

Appendix 6 - Threatened Flora and Fauna Species Assessment of Likelihood

Species	Common Name	NC Act Status	EPBC Act Status	Habitat	Likelihood of Occurrence
Flora					
Bosistoa transversa	Three-leaved Bosistoa	-	V	Grows in wet sclerophyll forest, dry sclerophyll forest and rainforest up to 300m in altitude.	Unlikely – the preferred vegetation community for this species was confirmed to be not present within the proposed development area.
Cycas ophiolitica	Marlborough Blue	E	E	Found in rocky, sloping and open eucalypt-forest with little vegetative surround. Plants occur along hilly outcrops and in lower regions near creek systems. Current known distribution is from Marlborough to Rockhampton in central-eastern Queensland.	Unlikely – the preferred vegetation community for this species was confirmed to be not present within the proposed development area. The site is outside of the current known distribution.
Dichanthium setosum	Bluegrass	-	V	Found in moderately disturbed areas such as cleared woodland, grassy roadside remnants, grazed land and highly disturbed pasture on heavy basaltic black soils and stony red-brown hardsetting loam with clay subsoil.	Unlikely – the preferred vegetation community for this species was confirmed to be not present within the proposed development area.
Macadamia integrifolia	Macadamia Nut	V	V	Occurs within lowland warm complex notophyll vine forest and Araucarian notophyll vine forest on volcanic soils and alluvia in areas of higher rainfall.	Unlikely – the preferred vegetation community for this species was confirmed to be not present within the proposed development area.
Macadamia tetraphylla	Rough-shelled bush nut	V	V	Tall to very tall closed forest or rainforest on moderate to steep slopes with fertile soil, usually derived from basalt	Unlikely – the preferred vegetation community for this species was confirmed to be not present within the proposed development area.
Notelaea ipsviciensis	Cooneana Olive	E	CE	Understorey plant in open woodlands and is primarily associated with eucalypt-dominated dry sclerophyll communities situated on poor, sandstone-based soils (Lock et al., 2004; Beyleveld, 2006, 2007, cited in Threatened Species Scientific Committee, 2008). Occurs only in three closely clustered sub-populations in the Ipswich area of southern Queensland (Threatened Species Scientific Committee, 2008).	Unlikely – the preferred vegetation community for this species was confirmed to be not present within the proposed development area. The site is outside of the current known distribution.

Phaius australis	Lesser Swamp-orchid	E	E	Commonly associated with coastal wet heath/sedgeland wetlands, swampy grassland or swampy forest and often where Broad-leaved Paperbark or Swamp Mahogany are found.	Unlikely – the preferred vegetation community for this species was confirmed to be not present within the proposed development area.
Plectranthus habrophyllus	-	E	E	Occurs on rock outcrops of sandstone or chert in shaded situations in Eucalypt woodland often close to vine forest.	Unlikely – the preferred vegetation community for this species was confirmed to be not present within the proposed development area.
Samandera bidwilii	Quassia	V	V	Commonly occurs in lowland rainforest or on rainforest margins (Hewson 1985), but it can also be found in other forest types, such as open forest and woodland (QDNR 2001). Quassia is commonly found in areas adjacent to both temporary and permanent watercourses	Unlikely – the preferred vegetation community for this species was confirmed to be not present within the proposed development area.
Thesium australe	Austral Toadflax	V	V	It occurs in shrubland, grassland or woodland, often on damp sites	Unlikely – the preferred vegetation community for this species was confirmed to be not present within the proposed development area.
Birds					
Actitis hypoleucos	Common sandpiper	-	MW	Shallow, pebbly, muddy or sandy edges of rivers and streams, coastal to far inland; dams, lakes, sewage ponds. Margins of tidal rivers, waterways in mangroves or saltmarsh, mudflats, rocky or sandy beaches, causeways, riverside lawns, drains and street gutters (Pizzey and Knight, 2007).	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Anseranas semipalmata	Magpie Goose	-	M	Occurs in freshwater wetlands and nearby associated forests and grasslands. Rarely found in coastal wetlands (ALA 2017).	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Anthochaera phrygia	Regent Honeyeater	E	E	Regent Honeyeaters mostly occur in dry Box-Ironbark eucalypt woodland and dry sclerophyll forest along creek flats and river valleys and foothills.	Unlikely – the site investigation determined that this site does not support preferred habitat for this species. Furthermore, the site is not located within the usual distribution range for this species.
Apus pacificus	Fork-tailed Swift	-	MM, M	The Fork-tailed Swift is almost exclusively aerial. They mostly occur over dry or open habitats, including riparian woodland and tea-tree swamps,	Possible - may fly over the site.

				low scrub, heathland or saltmarsh. They are also found at treeless grassland and sandplains covered with spinifex, open farmland and inland and coastal sand dunes.	
Ardea alba	Great Egret, White Egret	-	MW, M	Occurs in a wide range of wetland habitats both inland and coastal including swamps, rivers and agricultural dams.	Possible – This species is found in a range of habitats including suburban backyards and degraded inundated areas.
Ardea ibis	Cattle Egret	-	MW, M	The Cattle Egret occurs in tropical and temperate grasslands, wooded lands and terrestrial wetlands. It predominantly uses shallow, open and fresh wetlands including meadows and swamps with low emergent vegetation and abundant aquatic flora. This species is often found in association with cattle.	Possible – This species is found in a range of habitats including suburban backyards and degraded inundated areas.
Botaurus poiciloptilus	Australasian Bittern	-	E	The Australasian Bittern requires shallow water, less than 30 cm deep with medium to low density reeds, grasses or shrubs for foraging and medium to high density for nesting.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Calidris acuminata	Sharp-tailed Sandpiper	-	MW, M	Tidal mudflats, saltmarshes, mangroves; shallow fresh, brackish or saline inland wetlands; floodwaters, irrigated pastures and crops; sewage ponds and saltfields (Pizzey and Knight, 2007).	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Calidris ferruginea	Curlew Sandpiper	E	CE, MW, M	Tidal mudflats, saltmarsh, saltfields; fresh, brackish or saline wetlands; sewage ponds (Pizzey and Knight, 2007).	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Calidris melanotos	Pectoral Sandpiper	-	MW, M	Shallow fresh waters, often with low grass and other herbage; swamp margins, flooded pastures, sewage ponds and occassionally tidal areas and saltmarshes (Pizzey and Knight, 2007).	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Cuculus optatus	Oriental Cuckoo	-	MT, M	Found in many wooded habitats (such as open and dry woodland and forest) with a range of understoreys from grasses to shrubs or heath. Sometimes found near clearings and in recently logged or burnt forests. Found in farmland with some	Possible – the site supports marginally suitable habitat and is located within the known seasonal distribution range (summer).

				trees, orchards, vineyards and urban parks and gardens.	
Cuculus saturatus	Oriental Cuckoo	-	M	Also known as Himalayan Cuckoo and treated as conspecific with C. optatus (Oriental Cuckoo). Inhabits monsoon forests and rainforest edges; leafy trees in paddocks; river flats, roadsides, mangroves and islands (Pizzey and Knight, 2007).	Possible – the site supports marginally suitable habitat and is located within the known seasonal distribution range (summer).
Dasyornis brachypterus	Eastern Bristlebird	E	E	This species inhabits low dense vegetation in a broad range of habitat types including sedgeland, heathland, swampland, shrubland, sclerophyll forest and woodland, and rainforest. Requires a dense understorey (65-90% coverage).	Unlikely – the site investigation determined that this site does not support preferred habitat for this species. Furthermore, the site is not located within the usual distribution range for this species.
Erythrotriorchis radiatus	Red Goshawk	V	E	It lives in coastal and subcoastal, tall, open forests and woodlands, tropical savannas traversed by wooded or forested rivers and along the edges of rainforest.	Unlikely – the site investigation determined that this site does not support preferred habitat for this species. Furthermore, the site is not located within the usual distribution range for this species.
Gallinago hardwickii	Japanese Snipe	-	M	Soft wet ground or shallow water with tussocks and other green or dead growth. Wet parts of paddocks, seepage below dams, irrigated areas, scrub or open woodland from sea level to alpine bogs over 2000 m above sea level, samphire on salt marshes and mangrove fringes	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Geophaps scripta scripta	Squatter Pigeon	V	V	Squatter Pigeon (southern) habitat is generally defined as open-forests to sparse, open-woodlands and scrub	Unlikely – the site investigation determined that this site does not support suitable habitat for this species. Furthermore, the site is not located within the usual distribution range for this species.
Grantiella picta	Painted Honeyeater	V	V	Habitat includes mistletoes in Eucalyptus forests, Box Ironbark/Yellow Gum woodlands, Paperbarks, Casuarinas, Mulgas/Acacias (Birds Australia, 2010; Pizzey and Knight, 2007). Rare migrant/nomad with range extending across eastern Australia (Pizzey and Knight, 2007).	Unlikely – the site investigation determined that this site does not support preferred habitat for this species. Unlikely – the site investigation determined that this site does not support preferred habitat for this species. Furthermore,

					the site is not located within the usual distribution range for this species.
Haliaeetus leucogaster	White-bellied sea eagle	-	M	Found on coasts, islands, estuaries, inlets, large rivers, inland lakes and reservoirs in coastal Australia and Tasmania. Sedentary (Pizzey and Knight, 2007).	Possible – may fly over the site, however this site does not support suitable habitat for this species.
Hirundapus caudacutus	White-throated Needletail	SL	MT, M	The White-throated Needletail is almost exclusively aerial, from heights of less than 1 m up to more than 1000m above the ground.	Possible – may fly over the site.
Lathamus discolor	Swift Parrot	E	E, M	The Swift Parrot inhabits dry sclerophyll eucalypt forests and woodlands and occasionally in wet sclerophyll forests.	Possible – may fly over the site however the site is not located within the usual distribution range for this species.
Merops ornatus	Rainbow Bee-eater	-	MT, M	The Rainbow Bee-eater occurs mainly in open forests and woodlands, shrublands, and in various cleared or semi-cleared habitats, including farmland and areas of human habitation.	Possible – may fly over the site.
Monarcha melanopsis	Black-faced Monarch	-	MT, M	The Black-faced Monarch mainly occurs in rainforest ecosystems. It is also sometimes found in nearby open eucalypt forests (mainly wet sclerophyll forests), especially in gullies with a dense, shrubby understorey as well as in dry sclerophyll forests and woodlands, often with a patchy understorey.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Monarcha trivirgatus	Spectacled Monarch	-	MT, M	Prefers thick understorey in rainforests, wet gullies and waterside vegetation, as well as mangroves.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Motacilla flava	Yellow Wagtail	-	MT	Regular summer migrant to coastal Australia, especially Darwin to Broome, but also north eastern Queensland from November to April. Found in short grass and bare ground, swamp margins, sewage ponds, saltmarshes, playing fields, airfields, ploughed land and town lands (Pizzey and Knight, 2007).	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.

Myiagra cyanoleuca	Satin Flycatcher	-	MT, M	The Satin Flycatcher is found in tall forests, preferring wetter habitats such as heavily forested gullies, but not rainforests.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Numenius madagascariensis	Eastern Curlew	E	CE, MW, M	Inhabits estuaries, tidal mudflats, sandspits, saltmarshes, mangroves; occasionally fresh or brackish lakes; bare grasslands near water (Pizzey and Knight, 2007). The Eastern Curlew breeds in north east Asia and is a common summer migrant to Australian coastlines, although about 25% of the population remains all year round (Finn et al. 2001 and 2007; Geering et al. 2007).	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Pandion cristatus	Osprey	SL	M, MW	Eastern Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands. They are mostly found in coastal areas but occasionally travel inland along major rivers.	Possible – may fly over the site, however this site does not support suitable habitat for this species.
Poephila cincta cincta	Southern Black-throated Finch	E	E	Found in the Townsville area, around Ingham and central eastern Queensland. Occurs mainly in grassy, open woodlands and forests, typically dominated by Eucalyptus, Corymbia and Melaleuca, and occasionally in tussock grasslands or freshwater wetlands, often along or near watercourses, or in the vicinity of water (SPRAT, 2010).	Unlikely - The site is located outside the known distribution range of this species.
Rhipidura rufifrons	Rufous Fantail	-	MT, M	In east and south-east Australia, the Rufous Fantail mainly inhabits wet sclerophyll forests, often in gullies dominated by eucalypts.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Rostratula australis	Australian Painted Snipe	V	E, MW, M	Inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Tringa nebularia	Common Greenshank	-	MW	In Queensland, the species is widespread in the Gulf country and eastern Gulf of Carpentaria (SPRAT, 2010). Found in mudflats, estuaries, saltmarshes, margins of lakes, wetlands, claypans, fresh and	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.

				salines, commercial saltfields and sewage ponds (Pizzey and Knight, 2007).	
Turnix melanogaster	Black-breasted Button-quail	V	V	Leaf-litter in drier rainforests, vine thickets, scrubby woodlands of eucalypts, she-oaks, bottle brushes, brush box, brigalow and *Acacia*, thickets of lantana on rainforest fringes, hoop pine plantations, grain stubbles.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Reptiles					
Delma torquata	Collared Delma	V	V	The Collared Delma normally inhabits eucalypt-dominated woodlands and open-forests on RE Land Zones 3, 9 and 10 with the presence of rocks, logs, bark and other coarse woody debris, and mats of leaf litter.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Furina dunmalli	Dunmall's Snake		V	Open forest and woodland, particularly brigalow (Acacia harpophylla) forest and woodland growing on floodplains of deep-cracking black clay and clay loam soils. Occurs in the south eastern interior of Queensland, especially the Darling Downs.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Saiphos reticulatus	Three-toed Snake-tooth Skink	NT	V	Inhabits rainforest and occasionally moist eucalypt forest, on loamy or sandy soils. It is found in leaf litter, often immediately adjacent to fallen tree trunks.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Mammals					
Chalinolobus dwyeri	Large-eared Pied Bat	V	V	This species inhabits sandstone gorges in tall open eucalypt forests, dry sclerophyll forests and woodlands, as well as the edge of rainforest, wet sclerophyll forest and *Callitris* dominated forest (Curtis et al. 2013).	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Dasyurus maculatus maculatus (SE	Spotted-tailed Quoll	V	E	Forest and woodland including rainforest, and wet and dry sclerophyll forest and woodland.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.

mainland population)					
Petauroides volans	Greater glider		V	Found in open old growth Eucalypt or Corymbia woodland. Highly reliant on a large number of large hollows in sizeable or highly connected habitat areas.	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Phascolarctos cinereus	Koala (combined populations of QLD, NSW and the ACT)	V	V	Inhabits a range of arid, temperate, sub-tropical and tropical forest and woodland communities dominated by species from the *Eucalyptus* genus.	Possible – while there are known food tree species present on site and this species has been recorded within 2 km of the site, the site investigation did not reveal the presence of Koalas or evidence of Koalas on site.
Potorous tridactylus tridactylus	Long-nosed Potoroo	V	V	Common in Tasmania, though rare and patchy on the mainland from coastal south west Victoria to south east Queensland. Inhabits sub-tropical and warm temperate rainforest, wet sclerophyll forest and coastal heathy woodland with dense understorey and light, sandy soils (Menkhorst and Knight, 2004).	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.
Pteropus poliocephalus	Grey-headed Flying-fox	-	V	Occurs in a range of habitats including subtropical and temperate rainforests, dry and wet sclerophyll forests, *Banksia* woodland, heaths and *Melaleuca* swamps	Possible – The site may be used for foraging but no colony were detected within or in the vicinity of the site.
Insects					
Argynnis hyperbius inconstans	Australian Fritillary	E	CE	Most specimens have been collected from river estuaries or swampy coastal areas at or near sea level. The Australian fritillary butterfly is restricted to open, swampy, coastal areas where the larval food plant, *Viola betonicifolia*, grows as a small, insignificant ground herb in association with the matrush (*Lomandra longifolia*) and grasses, especially the bladey Grass (*Imperata cylindrica*). The usual habitat is Melaleuca wetlands, although	Unlikely – the site investigation determined that this site does not support suitable habitat for this species.

				the larval food plant does not occur in all sub-types of this plant community.	
Amphibians					
Adelotus brevis	Tusked Frog	V		Near puddles, rocky streams and water bodies in rainforest, wet sclerophyll forest and open grazing country. Usually found under logs or stones or in cavities and crevices.	Unlikely – the site investigation determined that this site does not support preferred habitat for this species. The dam present on site lacks aquatic and riparian vegetation needed to support Tusked Frog.

***Sources:** DoE (2016), DES (2016b) and OEH (2012).

Status: E: Endangered, **V**: Vulnerable, **NT**: Near Threatened, **MM**: Migratory Marine, **MT**: Migratory Terrestrial, **MW**: Migratory Wetland, **M**: Marine.

Likelihood of Occurrence: **Unlikely** – no suitable habitat present, **Possible** – suitable species habitat present, **Likely** – suitable species habitat present and has previously been recorded within 5km, **Known** – species recorded during field survey

Appendix 7 - Flora and Fauna Species List

Scientific Name	Common Name
Flora Species	
Acacia disparrima M.W.McDonald & Maslin subsp. *disparrima*	hickory wattle
Acacia fimbriata A.Cunn. ex G.Don	fringed wattle
Acacia leiocalyx (Domin) Pedley subsp. *leiocalyx*	early black wattle
Aeschynomene falcata (Poir.) DC.*	jointvetch
Allocasuarina littoralis (Salisb.) L.A.S.Johnson	black she-oak
Alloteropsis semialata (R.Br.) Hitchc.	Cockatoo grass
Alphitonia excela (Fenzl) Benth.	red ash
Alternanthera brasiliana (L.) Kuntze*	purple joyweed
Angophora leiocarpa (L.A.S.Johnson ex G.J.Leach) K.R.Thiele & Ladiges	smooth-barked apple
Asparagus africanus Lam.*	climbing asparagus fern
Bidens pilosa L.	Cobbler's pegs
Breynia oblongifolia (Muell.Arg.) Muell.Arg.	coffee bush
Bryophyllum pinnatum (Lam.) Oken	mother-of-millions
Bryophyllum x *houghtonii* (D.B.Ward) P.I.Forst.*	hybrid mother-of-millions
Chrysocephalum apiculatum (Labill.) Steetz	yellow buttons
Corymbia citriodora subsp. *variegata* (F.Muell.) A.R.Bean & M.W.McDonald	spotted gum
Corymbia intermedia (R.T.Baker) K.D.Hill & L.A.S.Johnson	pink bloodwood
Corymbia tessellaris (F.Muell.) K.D.Hill & L.A.S.Johnson	Moreton Bay ash
Cyanthillium cinereum (L.) H.Rob.	vernonia
Davallia pyxidata Cav.	hare's foot fern
Entolasia stricta (R.Br.) Hughes	wiry panic
Eucalyptus crebra F.Muell.	narrow-leaved ironbark
Eucalyptus seeana Maiden	narrow-leaved red gum
Eucalyptus siderophloia Benth.	grey ironbark
Eucalyptus tereticornis Sm. subsp. *tereticornis*	Queensland blue gum
Eustrephus latifolius R.Br.	wombat berry
Eragrostis spartinoides Steud.	lovegrass
Gahnia aspera (R.Br.) Spreng.	rough saw-sedge
Geodorum densiflorum (Lam.) Schltr.	pink nodding orchid
Goodenia rotundifolia R.Br.	round-leaved goodenia

Ipomoea cairica (L.) Sweet*	mile-a-minute
Jacksonia scoparia R.Br.	dogwood
Lantana camara L.*	lantana
Laxmannia gracilis R.Br.	wire lily
Lobelia purpurascens R.Br.	white-root
Lomandra confertifolia (F.M.Bailey) Fahn	matrush
Lophostemon suaveolens (Sol. ex Gaertn.) Peter G.Wilson & J.T.Waterh.	swamp box
Macroptilium atropurpureum (DC.) Urb.*	siratro
Megathyrsus maximus (Jacq.) B.K.Simon & S.W.L.Jacobs var. *maximus**	Guinea grass
Nymphaea sp. *	a water lily
Ochna serrulata (Hochst.) Walp.*	ochna
Ozothamnus diosmifolius (Vent.) DC.	sago bush
Parsonsia straminea (R.Br.) F.Muell.	monkey vine
Paspalidium distans (Trin.) Hughes	spreading panic
Passiflora suberosa L.*	corky passion vine
Passiflora subpeltata Ortega*	white passionflower
Petalostigma pubescens Domin	quinine bush
Phyllanthus tenellus Roxb.*	phyllanthus
Phyllostachys aurea Riviere & C.Riviere*	golden bamboo
Pinus elliottii Engelm.*	slash pine
Pomax umbellata (Gaertn.) Sol. ex A.Rich.	pomax
Scleria sphacelata F.Muell.	razor sedge
Senna pendula var. *glabrata* (Vogel) H.S.Irwin & Barneby	Easter cassia
*Sphaeromorphaea australi*s (Less.) Kitam.	nut heads
Tecoma stans (L.) Juss. ex Kunth var. *stans**	yellow bells
Themeda triandra Forssk.	kangaroo grass
Tricoryne elatior R.Br.	yellow rush-lily
Urochloa decumbens (Stapf) R.D.Webster*	signal grass
Fauna Species	
Cacatua galerita	Sulphur crested cockatoo
Chenonetta jubata	Australian wood duck
Coracina novaehollandiae	Black-faced Cuckoo-shrike
Corvus orru	Torresian Crow
Cracticus nigrogularis	Pied butcherbird
Cracticus tibicen	Australian Magpie
Eolophus roseicapilla	Galah
Geopelia humeralis	Bar shouldered dove

Grallina cyanoleuca	Magpie Lark
Litoria fallax	Eastern sedge frog
Manorina melanocephala	Noisy Miner
Malurus melanocephalus	Red backed fairy wren
Melithreptus albogularis	White-throated honey eater
Pardalotus striatus	Striated Pardalote
Pseudocheirus peregrinus	Common ring tailed possum
*Rhinella marina**	Cane toad
Todiramphus sanctus	Sacred Kingfisher
Trichoglossus moluccanus	Rainbow Lorikeet
Zosterops lateralis	Silvereye

*Invasive species