APPENDIX I

Terrestrial Ecology Field Survey Report

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1 Executive Summary

An upgrade of Six Mile Creek dam is planned to improve performance requirements and comply with relevant regulations. A terrestrial ecological assessment was conducted to determine the existing ecological values associated with the Project Area (primary impact area) and broader Study Area (secondary impact area). This included assessment of the likelihood of terrestrial threatened species occurring and being impacted by the proposed project. This report documents the methodology and findings of the ecological assessment.

The terrestrial ecological assessment comprised a flora survey, fauna survey, habitat assessment, and verification of vegetation communities at nine sites within the Survey Area. The flora survey utilised a random meander technique, the fauna survey largely complied with the 'Terrestrial Vertebrate Fauna Survey Guidelines' and the regional ecosystem verification was conducted in accordance with the 'Methodology for survey and mapping of regional ecosystems and vegetation communities in Queensland, Version 4.0 May 2017'.

The assessment identified diverse habitats, including open water, shallow wetland habitats and forest communities (wet and dry Eucalypt forest, swamp forest) that were found to support a diversity of flora and fauna species. Mapped regional ecosystems within the Study Area were verified as present, though no Threatened Ecological Communities or threatened flora species were recorded in the Study Area. Most forest areas lacked important habitat features such as hollow-bearing trees and fallen logs, which limits the presence of species that require these mature forest elements.

A total of 17 conservation significant flora species and 21 conservation significant fauna species that were listed in the desktop search results have a moderate to high probability of occurring in the Study Area based on the presence of suitable habitat.

Two threatened frogs were recorded during the survey, the giant barred frog (*Mixophyes iteratus*) and the tusked frog (*Adelotus brevis*). The giant barred frog occurs along Six Mile Creek downstream of the dam. The tusked frog was recorded at one site in the upper Lake and also along Collwood Road, which would be used for construction access. One additional threatened species, Richmond birdwing butterfly (*Ornithoptera richmondia*), was recorded in forest vegetation east of Lake Macdonald. No other threatened fauna species were recorded.

Migratory aquatic and forest birds listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) were recorded in the Study Area. The aquatic species would use both the open waters and fringing vegetation of Lake Macdonald. The forest migrants utilise moist forest habitats, including habitat within the proposed construction area.

2 Introduction

Six Mile Creek Dam, commonly referred to as Lake Macdonald, is located on the Sunshine Coast in Noosa Shire and is one of two principal raw water sources that supply potable drinking water to the residents of Noosa Shire. Ownership of the dam was transferred from Noosa Council to Seqwater on 1 July, 2008. The Project site and its position within the shire are presented in Figure 2-1.

A terrestrial survey was carried out to inform and support the Impact Assessment Report (IAR) and subsequent approvals for the dam upgrade. The upgrade includes improving the spillway discharge capacity and earthquake stability while maintaining water supply security. Studies have considered a range of options including decommissioning of the dam, retrofit of strengthening works and new build options.

The proposed development area is located along Six Mile Creek and borders Tewantin National Park to the north. A referral was submitted to the Commonwealth Minster of the Environment under the Department of Environment and Energy (DoEE) for consideration in October 2017. The referral outlined the potential impacts to Matters of National Environmental Significance protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The project was deemed to be a controlled action on 6 December 2017, due to the potential impact on listed threatened species.

This report was prepared to document the findings of an ecological assessment of the proposed impact area and Lake Macdonald surrounds.

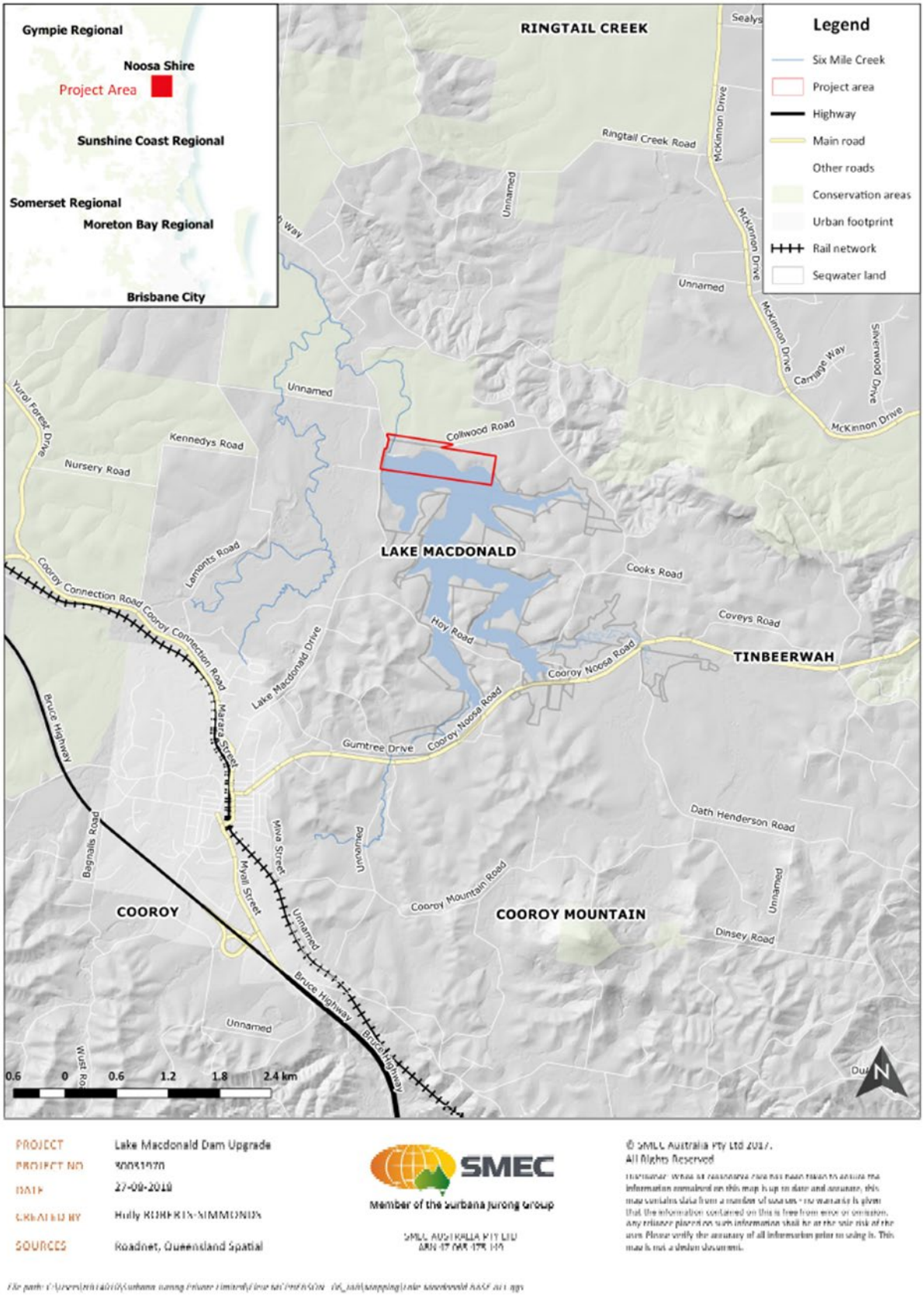


Figure 2-1 Locality Map

3 Methodology

The terrestrial ecological assessment methodology was undertaken as a two-step process. This entailed the following tasks:

1. A detailed desktop review of available online resources to determine key species and habitat values likely to occur and identify areas of direct and indirect ecological impacts
2. The field survey, targeting areas and species identified during the desktop review.

3.1 Desktop Analysis

A desktop assessment was conducted to understand mapped vegetation communities, potential habitat for threatened and migratory flora and fauna species, and confirmed records. Desktop searches were conducted in October 2017, before the field survey and were subsequently reviewed on 27 August 2018 to account for changes in species listings over this time. The initial desktop searches identified species to target in the survey and included a review of the following sources:

- DoEE's Protected Matters Search Tool (10 km), which provides lists of threatened flora and fauna, migratory/marine fauna listed and threatened ecological communities (TEC), collectively known as Matters of National Environmental Significance (MNES) under the EPBC Act based on predictive modelling
- Department of Environment and Science (DES) Wildlife Online Database (10 km), which provides record-based lists of Endangered, Vulnerable or Near Threatened (EVNT) flora and fauna species listed under the *Nature Conservation Act 1992* (NC Act)
- DES' Species Profile Search
- DES Protected Plants Flora Survey Trigger Map
- Atlas of Living Australia, including HERBRECs data, which provides records of flora and fauna species, including threatened species
- Department of Natural Resources, Mines and Energy's (DNRME) remnant vegetation mapping (Version 10.1), including essential habitat mapping
- Published literature and research papers
- Previous studies of the Lake Macdonald area including the Project's Initial Advice Statement.

An assessment of habitat requirements was undertaken for species identified during the desktop analysis to determine the likelihood of occurrence. The likelihood of occurrence for each flora and fauna species was assigned one of the following categories:

- **Nil** – species for which habitat is clearly not present
- **Low** – species with only a limited amount of suitable habitat available, restricted by the availability of key habitat features
- **Moderate** – species for which the broad habitat type is available (e.g. as determined by regional ecosystem (RE) mapping and ground-truthing), but are likely to be limited by the availability of one or more necessary habitat features (e.g. hollow-bearing trees, key food resources)
- **High** – species for which both the broad habitat type was available and key habitat features did not appear to be limiting.

3.2 Field Survey

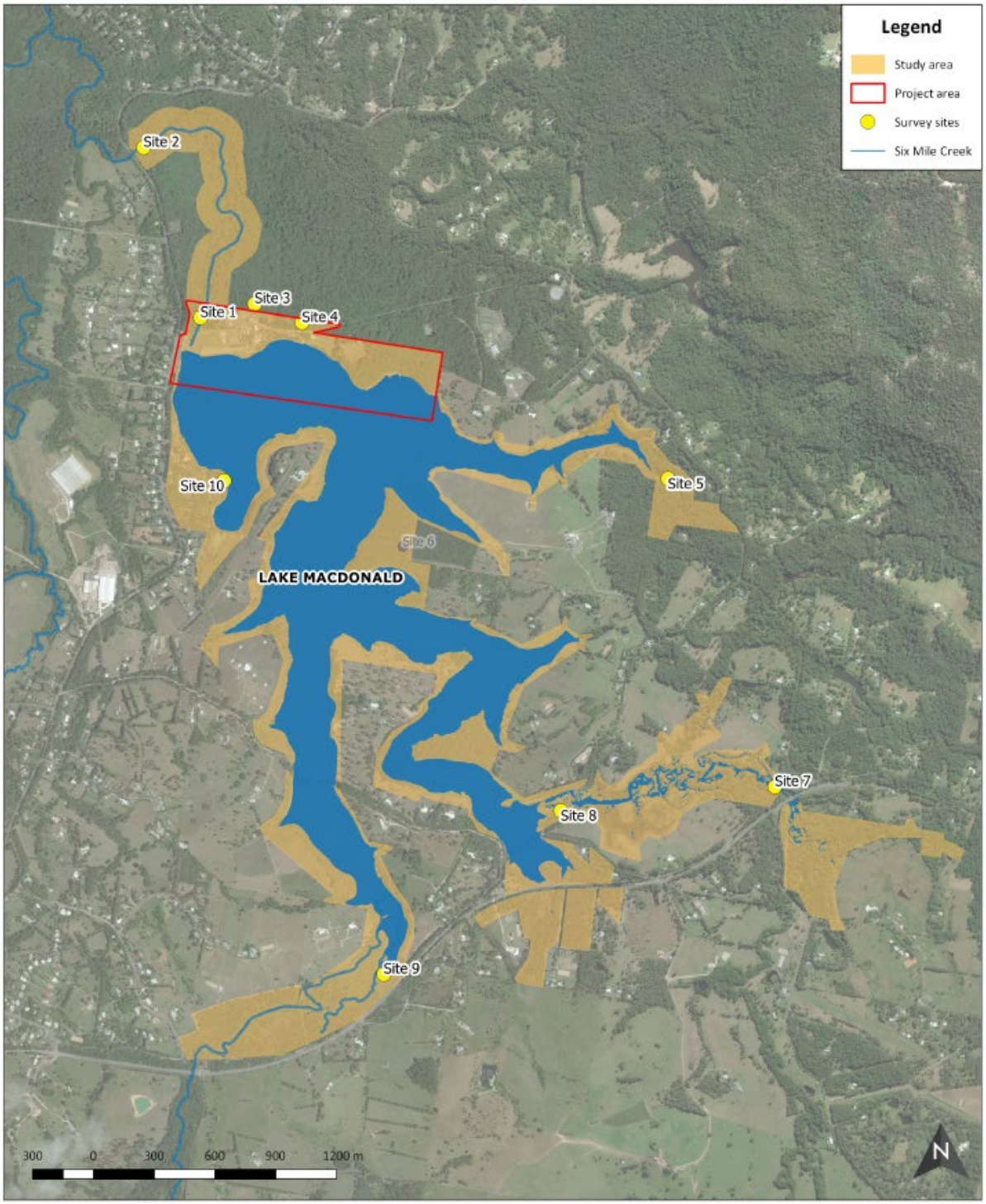
The fauna survey was coordinated and lead by Dr David Sharpe who has more than 20 years' experience as a fauna ecologist. David meets the criteria for a suitably qualified and experienced person as required by the Information sheet: Species Management Program, Requirements for tampering with an animal breeding place in Queensland, by satisfying the following:

- An ecological consultant with experience in conducting surveys for animal breeding places.
- A person who possesses a degree in natural science or similar with experience in conducting surveys for animal breeding places.

The flora survey was conducted by Jon Alexander who has 23 years' experience as a botanist. He meets the requirements of a suitably qualified person as defined under the Protected Plants Flora Survey Guidelines by holding the following:

- A relevant qualification from a recognised institution (e.g. University, TAFE) that results in a thorough knowledge of plant identification and flora surveys. Australian focussed training: 40 points
- Experience within the last two years and a total of at least five years at leading flora surveys in a field-based environment at a rate of no less than five comprehensive botanical surveys that focus on locating and identifying EVNT plants, per year. Qld based field flora surveys experience: 60 points.

For discussion purposes, the impact areas have been separated into a primary (Project Area) and secondary impact area (Study Area) (refer to Figure 3-1). Ten sites were initially identified for survey across both the primary and secondary impact areas, though landowner access was unable to be obtained for site six, resulting in nine sites being assessed for flora and fauna (refer to Figure 3-1).



PROJECT	Lake Macdonald Dam Upgrade
PROJECT NO	30031970
DATE	12-09-2018
CREATED BY	Holly ROBERTS-SIMMONDS
SOURCES	Roadnet, Queensland Spatial

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Figure 3-1 Survey Sites and Impact Areas

Both flora and fauna surveys were conducted over four nights / five days from 12 - 16 February, 2018. During the survey week, weather conditions were hot and humid, and patchy evening thunderstorms occurred daily, although rain was limited in the actual Study Area. Weather data recorded by the Bureau of Meteorology (BoM) at the nearest station at Tewantin RSL Park (040908) is provided in Table 3-1. Temperatures in the 11 days prior to the survey had been cooler, with a total rainfall of 134.2 mm during this time. The Study Area therefore contained standing water suitable for the identification of fauna groups such as frogs which rely on rainfall. The season was also optimal for detection of migratory birds, which were present at the time of survey.

The ecological surveys were conducted under SMEC's animal ethics approval (CA 2017/05/1064) and scientific purposes permit (WISP15242714). Details of the methodologies employed are provided in subsequent sections of this report.

Table 3-1 Weather conditions during the Survey Period and preceding week (BoM)

DATE	RAINFALL (mm)	TEMPERATURE (°C)		HUMIDITY (%) AT 3pm
		MINIMUM	MAXIMUM	
01/02/18	8.2	21.8	24.4	82
02/02/18	29.4	19.9	22.7	99
03/02/18	31.6	18.9	24.8	99
04/02/18	43.4	17.9	26.7	60
05/02/18	7.6	19.5	27.1	54
06/02/18	2.0	19.5	27.2	53
07/02/18	0.2	19.9	27.3	52
08/02/18	9.4	19.1	26.7	57
09/02/18	2.4	19.2	27.4	53
10/02/18	0	19.5	30.3	66
11/02/18	0	21.3	33.3	71
12/02/18	1.8	22.7	29.9	77
13/02/18	0.0	24.9	30.0	81
14/02/18	0.4	23.0	32.4	71
15/02/18	0.2	23.9	33.2	67
16/02/18	0.0	25.6	30.2	80

3.2.1 Regional Ecosystem Verification

The distribution and condition of vegetation communities in the Study Area was determined from the RE map obtained in the desktop database review. Verification of the RE mapping was conducted at sites mapped as remnant vegetation on the Regulated Vegetation Management Map in accordance with the methodology for survey and mapping of REs and vegetation communities in Queensland, Version 4.0 May 2017 (Neldner et al. 2017). Quaternary data were collected as a record of field traverses to verify RE mapping (Neldner et al. 2017). The characteristics identified to refine or confirm vegetation communities are:

- Floristic and structural characteristics of each site including the following for each vegetation strata:

  - dominant flora species
  - height (m)
  - cover (%)
- Landform
- Underlying geology.

Additional variables reflecting vegetation condition and habitat quality (e.g. tree hollows, fallen logs) were described as part of the fauna habitat description (see below). For any areas of potential Threatened Ecological Community (TEC) encountered, an assessment of vegetation survey data was made against TEC threshold criteria (DSEWPC 2011, 2013).

Vegetation community data were recorded in the field and entered into task-specific datasheets. Representative photographs were taken at each vegetation survey site. Capture and delineation of RE and any TEC boundaries was undertaken using a combination of mobile GIS devices, GPS, and delineation from aerial imagery.

3.2.2 Flora Survey

Targeted surveys for threatened flora were informed by the desktop search results and the experience of the ecology survey team, and based on species identified as having potential to occur in the Project Area. Searches for EVNT and MNES flora species were carried out across the following areas:

- Downstream of the dam wall
- Where clearing is likely during construction
- Adjacent to the fauna survey sites
- Within quaternary vegetation assessment sites within the wider Study Area
- During opportunistic meanders throughout the Study Area.

Extensive “random meanders” (Cropper, 1993) were conducted throughout the areas mentioned above. Cumulative species lists of all species encountered were made based on the identification of species in the field for each community type (e.g. RE). Species that could not be identified in the field were sampled and identified using relevant botanical references. Sampling of unknown species was not possible within Tewantin National Park. Where necessary, species confirmation in the National Park was undertaken using photographs, though very few unknown species were encountered.

Counts and ground-truthing of the extent of significant flora was undertaken as well as an assessment of surrounding structural characteristics. Locations of any significant species or plant communities encountered were recorded via GPS and representative photos taken.

3.2.3 Fauna Survey and Fauna Habitat Assessment

Fauna and fauna habitat were assessed across the Study Area using a range of direct and indirect survey methods, including habitat assessments, spotlighting, call playback, diurnal bird surveys, aquatic bird surveys, pitfall trapping and active searches for reptiles. The fauna surveys were conducted in accordance with the Terrestrial Vertebrate Fauna Survey Guidelines for Queensland Version 2.0 (Eyre *et al.* 2014) unless species-specific guidelines were available (e.g. giant barred frog (*Mixophyes iteratus*) surveys were conducted in accordance with the Survey Guidelines for Australia’s Threatened Frogs under the EPBC Act). Surveys were tailored to specifically target EVNT and MNES species that were given a moderate to high probability of occurring following a “likelihood of occurrence” assessment for each conservation significant species returned by the database search results. The locations of the fauna survey sites are shown in Figure 3-2, Figure 3-3 and Figure 3-4. Specific survey locations are shown where they deviate from the survey site, all others, for example spotlighting surveys, commenced at the location of the survey site point.

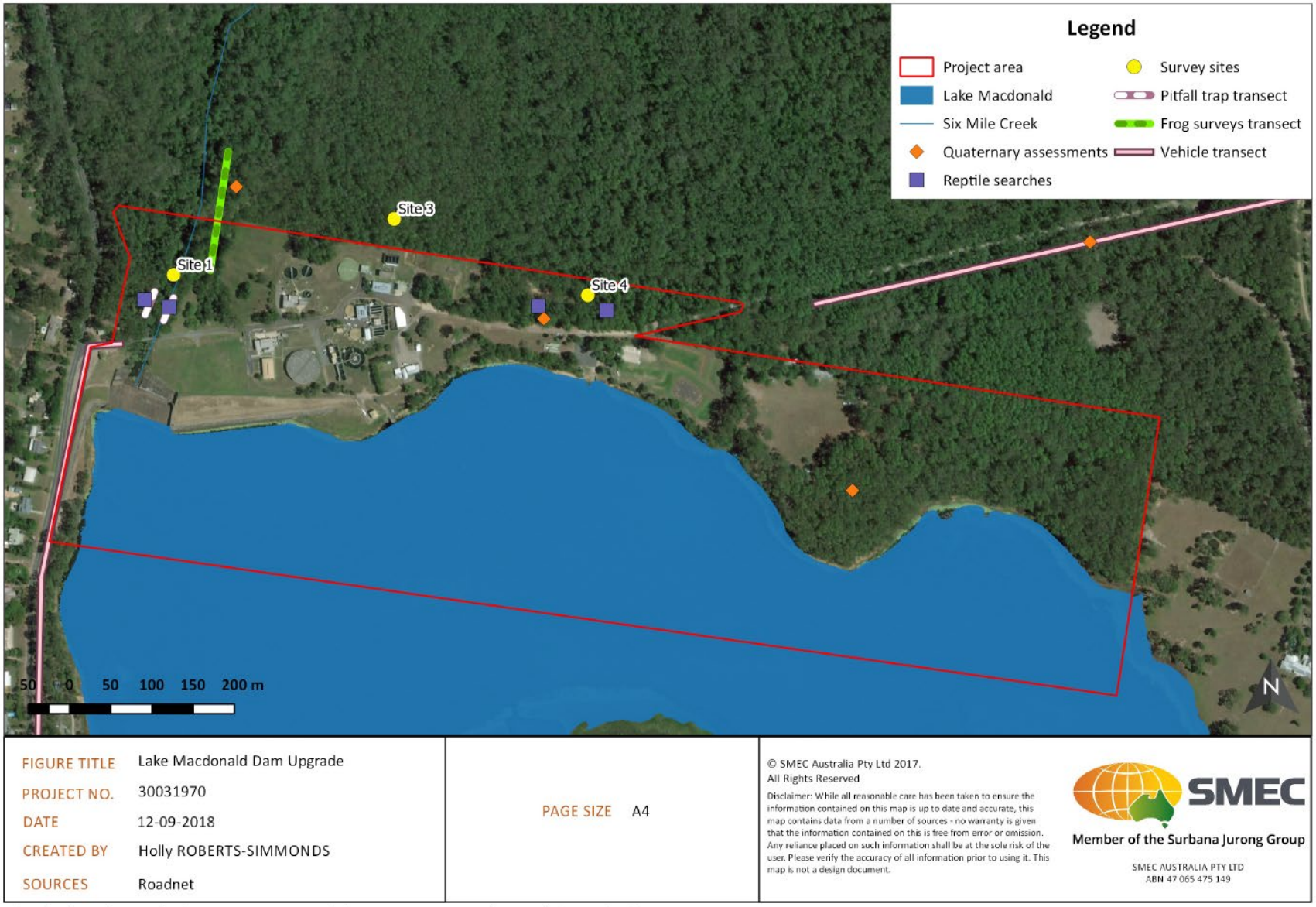

Figure 3-2 Survey Sites - Part 1

Figure 3-3 Survey Sites - Part 2

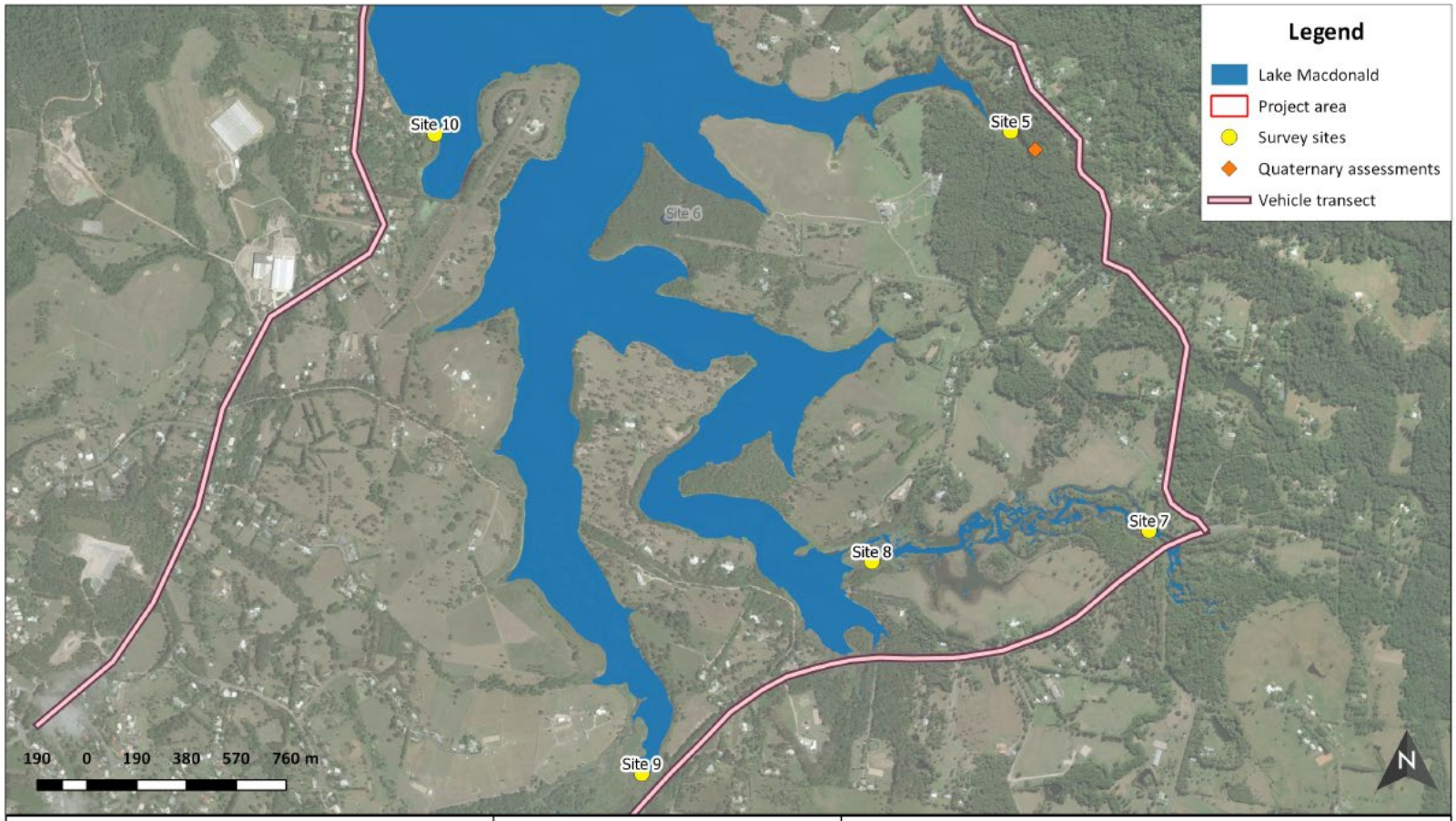

Figure 3-4 Survey Sites - Part 3

Habitat Assessment

Habitat assessments were undertaken at nine sites across the Study Area in accordance with the method described by Biocondition (Eyre *et al.* 2015). This enabled habitat quality to be systematically described. Each habitat assessment was used to describe the floristic and structural characteristics of the site, with the particular aim of describing the types and abundances of resources known to be important to conservation significant species. The characteristics described included:

- The dominant flora species
- The number, height and cover of each vegetation strata
- Tree hollows
- Fallen logs
- Percentage of trees with decorticating bark
- Percentage cover of each groundcover feature (leaf litter, rock, bare earth)
- The types of foraging resources provided (e.g. seasonal nectar and fruit).

The habitat requirements of EVNT and MNES species were then assessed against the availability of broad habitat types (determined from RE mapping and ground-truthing), habitat structure (e.g. density of understorey), and the key habitat features described above. This enabled the likelihood of occurrence to be updated following field work for all conservation significant fauna that were not recorded in the surveys.

Pitfall Traps

Two lines of pitfalls were installed on the west and eastern sides of Six Mile Creek downstream of Lake Macdonald spillway (Site 1). Each line contained five 20 L buckets at approximately 5 m spacing, connected by drift fence with steel pegs for support. An additional 5 m of drift fence was extended beyond the buckets at each end. Buckets were filled with leaf litter and small twigs to provide shelter and a larger piece of branch that would float if the buckets filled with water, although the buckets contained small holes at the bottom for drainage. Traps were checked at dawn, 2-3 hours after sunrise, and again in the afternoon.

It is noted that the survey effort is greater than that specified in the Terrestrial Vertebrate Fauna Survey Guidelines. The pitfalls remained installed for four nights of survey. The pitfalls targeted small to medium reptiles, amphibians and small mammals, though were specifically targeting striped blind snake (*Anilios silvia*) and three-toed snake-tooth skink (*Saiphos reticulatus*).

Spotlighting

Spotlighting was conducted on foot by a team of two, each with a hand-held spotlight. In accordance with the methods specified for koala (*Phascolarctos cinereus*) and the greater glider (*Petauroides volans*), a 250 m transect was walked for 15 minutes at each of the sites identified as containing suitable habitat for these species, making 30 person-minutes of spotlighting per survey. Spotlighting was conducted at Sites 1, 2, 4 and 5 on two occasions each within the survey period. This method primarily targeted nocturnal birds, mammals and amphibians, but also provided an opportunity to listen for any species calling. The spotlighting commenced after dusk for four person hours of survey effort over four nights. Spotlighting was undertaken in accordance with Terrestrial Vertebrate Fauna Survey Guidelines for Queensland Version 2.0 (Eyre et al. 2014).

To search for Giant Barred Frog and the tusked frog (*Adelotus brevis*), 200 m spotlighting transects were undertaken in the evening. Searches were conducted along Six Mile Creek at Sites 1 and 2 for both species, while the Tusked Frog surveys were also undertaken at other sites with still water (e.g. Site 5). Two observers walked along the transect searching the groundcover and low vegetation with a spotlight on two occasions per site during the survey period.

Call Playback

Call playback was conducted in habitat areas for tusked frog and the giant barred frog (Sites 1 and 2). Call playback was undertaken with an initial five-minute listening period, followed by broadcasting of recorded calls through a megaphone. Each call was played for five minutes, followed by a five-minute listening period. Spotlighting was conducted following the listening period in accordance with the Terrestrial Vertebrate Fauna Survey Guidelines. Call playback was conducted twice at suitable sites where targeted threatened frog species had not yet been detected through other methods.

Anabat Bat Detection

Active sampling was undertaken using the hand-held Anabat detector during spotlighting for 15 minutes, along a 250 m transect. This was done twice at each of the four spotlighting sites, totalling two person hours of survey effort. The Anabat was also used to detect bat activity for 30 minutes around dusk while waiting for conditions to become suitable for spotlighting, providing additional survey time for bat detections. The dusk Anabat survey was conducted in forest habitats and over the open waters of Lake Macdonald (e.g. for the fishing bat *Myotis macropus*). Due to rain events each night throughout the field survey, passive sampling (leaving the Anabat unit in suitable habitat overnight) was not conducted.

The Anabat data was analysed using AnaLook software.

Nocturnal Vehicle Transects

Nocturnal vehicle transects targeting the common death adder (*Acanthophis antarcticus*) along forested roadsides were conducted each night before and after the spotlighting surveys. The vehicle drove at a constant speed along sections of road surrounding Lake Macdonald, surveying each route twice, over two nights. Multiple replicates of all roads added up to 26 km of survey. The Terrestrial Vertebrate Fauna Survey Guidelines recommend transects are conducted on warm, humid nights, indicating that conditions during the survey week were ideal.

Active Reptile Searches

Active searches for reptiles were conducted at Site 1 and Site 4, where suitable habitat for targeted species was identified. This comprised two persons for 15 minutes, totalling 30 person minutes per site. The surveys specifically targeted three-toed snake-tooth skink, striped blind snake, and adorned delma (*Delma torquata*). The active search consisted of both destructive and non-destructive means, including looking around and under logs, decorticating bark, raking of leaf litter by hand and inspecting crevices in dead trees. Survey efforts were focused between mid-mornings and midday when reptiles are active, but have not reached their optimal body temperature. The search also looked for amphibians present around vegetation along Six Mile Creek.

Platypus Inspections

Visual inspections for platypus individuals and burrows were conducted where suitable conditions were observed at each survey site. This included Sites 1 and 2 along Six Mile Creek, and along the banks of sections of Lake Macdonald. These were conducted at the time of bird surveys in the early morning and late afternoon.

Diurnal and Aquatic Bird Surveys

Bird surveys were undertaken six times at each of the nine sites. This comprised two surveys in the early morning, two surveys mid-morning, and two in the late afternoon. Each of these was timed to ten minutes, totalling 60 minutes at each site. Observers walked slowly and quietly through the site, looking and listening for bird activity. The type of bird survey (forest or aquatic) at each site is identified in Table 3-2. Surveys targeted EPBC migratory forest species including satin flycatcher (*Myiagra cyanoleuca*) and black-faced monarch (*Monarcha melanopsis*), and threatened and migratory waders at the aquatic sites including and the Australian painted snipe (*Rostratula australis*). Two migratory aerial insectivores, the white-throated needletail (*Hirundapus caudacutus*) and the fork-tailed swift (*Apus pacificus*), were also targeted during the diurnal bird surveys.

Birds were identified visually and/or by call. Where there was uncertainty regarding the identification of a bird call, it was compared to a recorded call to ensure accurate identification. Birds flying overhead were noted as 'offsite' on the datasheets unless otherwise observed during the survey.

Table 3-2 Type of Bird Surveys by Site

SITE	SURVEY TYPE BASED ON LOCATION
1	Forest and aquatic
2	Forest
3	Forest
4	Forest and aquatic
5	Forest and aquatic
6	N/A – not accessible
7	Forest and aquatic
8	Forest and aquatic
9	Aquatic
10	Aquatic and any additional species recorded in the botanic gardens

Glossy Black-cockatoo Searches

Where *Allocasuarina* species were identified in survey sites, the ground was searched for evidence of glossy black-cockatoo (*Calyptorhynchus lathami*) foraging (chewed cones) (Clout 1989; Chapman and Paton 2005) and hollow-bearing trees were inspected for the presence of potential nesting hollows. Sites 1, 4, 5 and 7 were identified as containing *Allocasuarina* species.

Incidental Sightings

While all surveys were being undertaken, an incidental species list was collated to record any additional fauna observations outside the designated surveys. Any visual signs of fauna activity observed during the survey were also recorded, including the following signs:

- Black-breasted button-quail (*Turnix melanogaster*) platelets
- Owl whitewash
- Koala scratches and scats
- Glossy black-cockatoo chewed *Allocasuarina* cones
- Latrine sites of spot-tailed quoll
- Predator scats.

3.2.4 Survey Limitations

The terrestrial ecology survey results are an accurate and true representation of the sites at the time of survey, limited by the area surveyed, site conditions, and seasonal variation at the time of survey. The results do not guarantee the absence of threatened species listed under state or Commonwealth legislation. A summary of the survey limitations is provided below:

- The flora surveys utilised random meander methods and therefore only detect what is seen at that location. It is not a comprehensive list of all species that occur in the Study Area.
- Permission to conduct fauna surveys (e.g. trapping) within the National Park, downstream of the Project area was not obtained. As a result, traps such as pitfalls were located in sub-optimal habitat that was accessible during the survey. Locating traps in sub-optimal habitat marginally reduced the likelihood of capturing target threatened species (e.g. three-toed snake-tooth skink), but provided a better representation of species likely to be encountered and impacted within the Project Area.

- Many fauna species are highly mobile, seasonally variable, occur at low density, or may only utilise a site intermittently. For example, grey goshawk may occur at the site from time to time but was not observed during the survey. The common death adder occurs at low density and its cryptic behaviour (a well-camouflaged ambush predator) makes it difficult to detect. Species such as these cannot be confirmed as permanently absent from the site, despite not being detected during the survey period.

4 Results

4.1 Desktop Analysis

4.1.1 Vegetation Communities

Regional Ecosystems

Review of the regulated vegetation management map (Version 10.1) identified seven REs within the primary and secondary impact areas around Lake Macdonald. One of these is Endangered, four are Of Concern, and two are Least Concern (refer to Figure 4-1 and *Table 4-1*). Version 10.1 of the vegetation management mapping reclassifies some areas that were previously Category X non-remnant vegetation as Category C high value regrowth. REs mapped within the primary and secondary impact areas are noted in *Table 4-1* and presented in Figure 4-1. Regrowth REs mapped within the primary and secondary impact areas are also noted in Table 4-2 and presented in Figure 4-2.

Table 4-1 Mapped Regional Ecosystem Vegetation Communities (Version 10.1)

RE ID	SHORT DESCRIPTION	WETLAND LISTING	VM ACT STATUS	IMPACT AREA
12.3.2 12.3.2 Regrowth	*Eucalyptus grandis* tall open forest on alluvial plains	Riverine wetland or fringing riverine wetland	Of concern	Primary / Secondary
12.3.4 12.3.4 Regrowth	*Melaleuca quinquenervia*, *Eucalyptus robusta* woodland on coastal alluvium	Palustrine wetland	Of concern	Primary
12.9-10.1 12.9-10.1 Regrowth	Tall open forest often with *Eucalyptus resinifera*, *E. grandis*, *E. robusta*, *Corymbia intermedia* on sedimentary rocks. Coastal.	N/A	Of concern	Primary / Secondary
12.9-10.17 12.9-10.17 Regrowth	*Eucalyptus acmenoides*, *E. major, E. siderophloia* +/- *Corymbia citriodora subsp. variegata* woodland on sedimentary rocks	N/A	Least concern	Primary / Secondary
12.3.1 12.3.1 Regrowth	Gallery rainforest (notophyll vine forest) on alluvial plains	Riverine wetland or fringing riverine wetland	Endangered	Secondary Primary (regrowth only)
12.3.11 12.3.11 Regrowth	*Eucalyptus tereticornis* +/- *Eucalyptus siderophloia*, *Corymbia intermedia* open forest on alluvial plains usually near coast	Contains palustrine wetland	Of concern	Secondary Primary (regrowth only)
12.11.2 12.11.2 Regrowth	*Eucalyptus saligna* subsp. *saligna* or *E. grandis*, *E. microcorys*, *Lophostemon confertus* tall open forest on metamorphics +/- interbedded volcanics	N/A	Least concern	Secondary Primary (regrowth only)

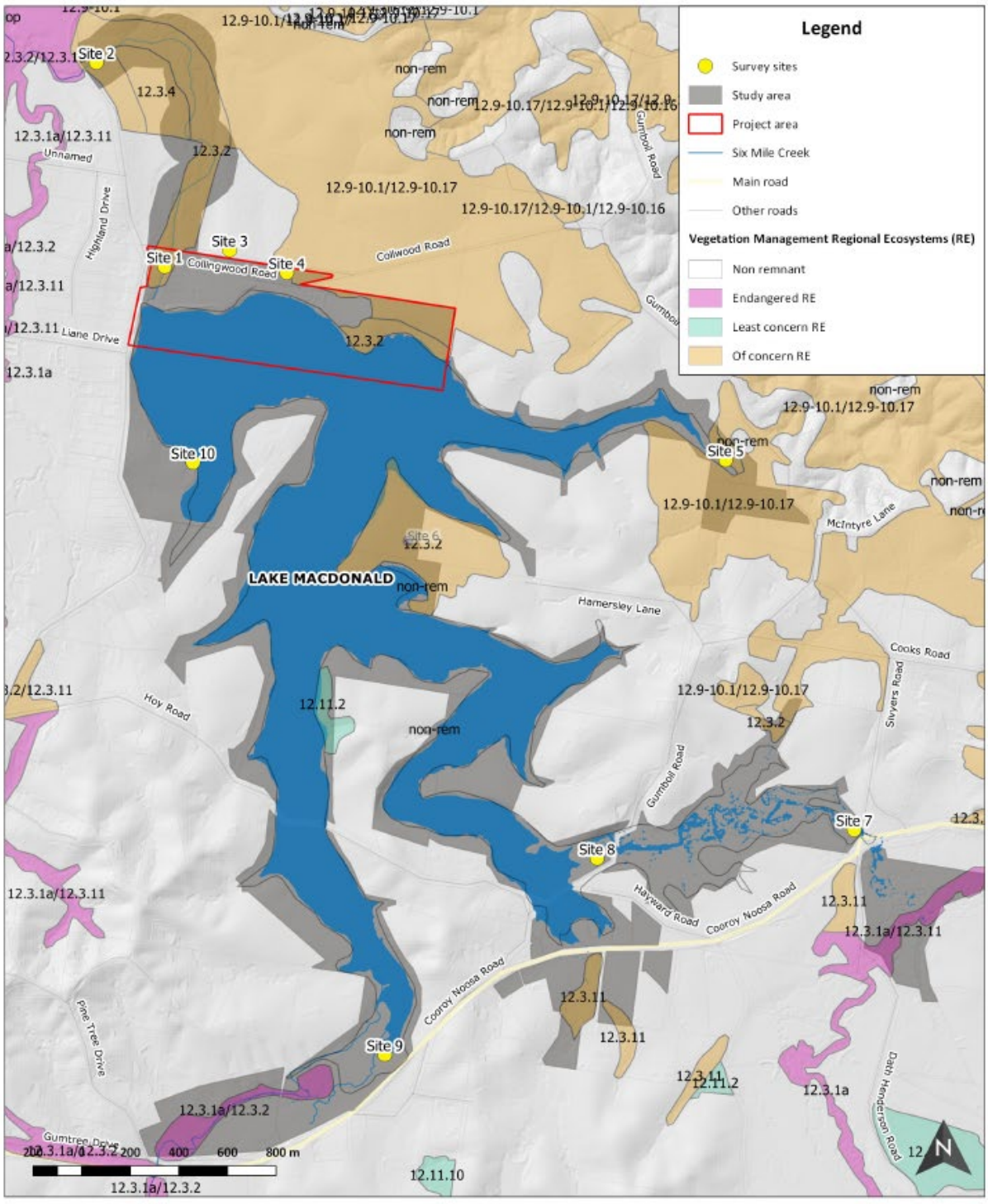

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Figure 4-1 Mapped Regional Ecosystem Vegetation Communities

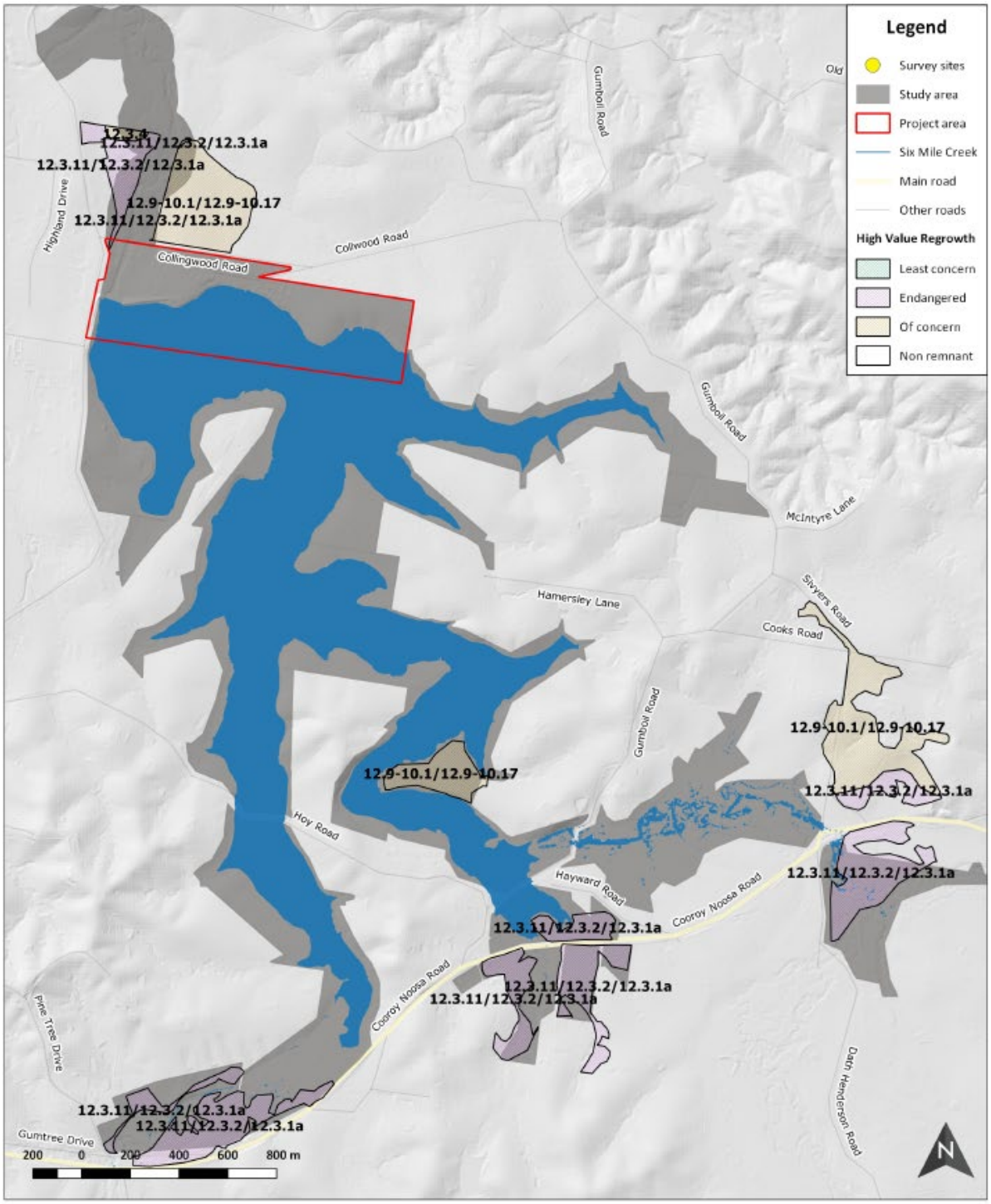

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Figure 4-2 Category C regrowth vegetation

Threatened Ecological Communities

The EPBC Act Protected Matters Search lists three Threatened Ecological Communities (TECs) that are likely to occur within 10 km of the Project Area:

- Subtropical and temperate coastal saltmarsh – Vulnerable under the EPBC Act
- Coastal swamp oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland ecological community – Endangered under the EPBC Act
- Lowland rainforest of subtropical Australia – Critically Endangered under the EPBC Act.

Subtropical and temperate coastal saltmarsh occurs within a narrow margin of the coast in saline environments with regular tidal inundation (DSEWPC 2013). These environments do not exist as far inland as Lake Macdonald. This TEC was not observed during the field survey and would not occur in the Study Area.

The coastal swamp oak community also occurs within coastal areas that have a saline influence. No swamp oak (*Casuarina glauca*) was observed during the field survey and this TEC does not occur within the Study Area.

The TEC lowland rainforest of subtropical Australia is noted in the listing advice (DSEWPC 2011) as occurring between Maryborough in Queensland to the Clarence River in New South Wales on basalt and alluvial soils. The community generally occurs below 300 m sea level where rainfall is higher. Thus, the Study Area is within the geographical range of this TEC and it is below the maximum allowed elevation. The listing advice (DSEWPC 2011) notes this TEC as being equivalent to RE 12.3.1. This RE was not observed in the proposed construction footprint and would not, therefore, be directly impacted by the project. None of the REs in the proposed construction footprint are listed as equivalent to the lowland rainforest TEC.

RE 12.3.1 is mapped at a distance of 1.5 km downstream from the Project Area to the west of Lake Macdonald Drive and also within high value regrowth vegetation along Six Mile Creek (Figure 4-1). This is a sufficient buffer from construction activities to suggest that indirect project impacts in this area are unlikely. RE 12.3.1 is also mapped in relatively small patches to the south and west of the Study Area, but these patches are not directly connected to Lake Macdonald and are well isolated from construction activities (refer to Figure 4-1), suggesting these areas would not be subject to indirect project impacts. Therefore, the project would not have indirect impacts on the lowland rainforest TEC.

Essential Habitat

Essential habitat mapping identifies areas where habitat suitable for EVNT species occurs, as listed under the NC Act. The Vegetation Management Supporting Map Version 10.1 for the Study Area identifies essential habitat for the following species:

- Koala
- Giant barred frog
- Tusked frog
- Cascade tree frog (*Litoria pearsoniana*)
- Glossy black-cockatoo
- Hairy hazelwood (*Symplocos harroldii*).

Vegetation along Six Mile Creek may provide suitable habitat communities for the cascade tree frogs, though the elevation is generally not high enough for this species to occur. Similarly, no *Allocasuarina* species (the seeds of which are the sole food resource for the glossy black-cockatoo) were present. Thus, the glossy black-cockatoo would not actually be present in this area. The Project Area contains actual or potential habitat for the remaining four species.

4.1.2 Threatened Flora Species

The Wildlife Online search completed on 27 August 2018 identified 737 flora species that have been previously recorded within a 10 km radius. Of these species, 21 are listed as Endangered, Vulnerable or Near Threatened (EVNT) under Commonwealth or state legislation. The EPBC Act Protected Matters search identified 19 flora species that have the potential for the species or species habitat to occur within 10 km of the site (27 August 2018). Of the species identified in desktop searches, 12 were listed in both searches, resulting in 28 unique species with potential to occur in the Study Area. A likelihood of occurrence assessment was undertaken for all 28 threatened species listed in the search results (refer to Appendix A for the desktop search results and

Appendix B for the likelihood of occurrence assessment). Fourteen species identified as having a moderate likelihood of occurrence are listed in Table 4-2. The majority of these species grow on higher nutrient soils (basalt, alluvium) in rainforest and/or wet sclerophyll forest.

4.1.3 Threatened Fauna Species

The Wildlife Online search completed on 27 August 2018 identified a total of 320 fauna species within a 10 km radius. The EPBC Act Protected Matters and Wildlife Online searches identified a total of 61 fauna species that have the potential for the species or species habitat to occur within 10 km of the site (27 August 2018). This comprised 53 fauna species on the Protected Matters search, and 15 on the Wildlife Online search with seven species being returned on both searches. A likelihood of occurrence assessment was undertaken for all threatened species listed in the search results. In addition, the Mary River turtle (*Elusor macrurus*) and white-throated snapping turtle (*Elseya albagula*), which were not identified in the desktop searches, have the potential to occur (refer to refer to Appendix A for the complete desktop search results and Appendix B for the likelihood of occurrence assessment). Of the 63 species considered, sixteen have a moderate likelihood of occurrence, while a further five species have a high likelihood are listed in Table 4-3.

Table 4-2 Flora species with a moderate or high likelihood of occurrence in the Study Area

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURENCE
Arthraxon hispidus	Hairy jointgrass	V	V	In soaks, seepages and edges of wetlands in forests and pasture. Dies down in winter. Threats include lantana invasion.	Moderate. May occur in seepages in pasture around the dam and in wet areas in forest.
Bosistoa transversa	Yellow satinheart	V	LC	Grows in wet sclerophyll forest, dry sclerophyll forest and rainforest up to 300m elevation.	Moderate. The Study Area is consistent with the general habitat description and most forested areas are potential habitat.
Cryptostylis hunteriana	Leafless tongue orchid	V	LC	Does not appear to have well defined habitat preferences and is known from a range of communities, including heathlands, heathy woodlands, sedgelands, *Xanthorrheoa spp*. plains, dry sclerophyll forests (shrub/grass sub-formation and shrubby sub-formation), forested wetlands, freshwater wetlands, grasslands, grassy woodlands, rainforests and wet sclerophyll forests (grassy sub-formation). Soils are generally moist and sandy, however it also grows on dry or peaty soils. The larger populations typically occur in woodland dominated by scribbly gum (*Eucalyptus sclerophylla*), silvertop ash (*E. sieberi*), red bloodwood (*Corymbia gummifera*) and black she-oak (*Allocasuarina littoralis*); appears to prefer open areas in the understorey of this community and is often found in association with the large tongue orchid (*C. subulata*) and the tartan tongue orchid (*C. erecta*). Flowers August to February.	Moderate. Study Area consistent with the very general habitat description. The presence of sedimentary rocks in the Study Area suggest that sandy soils may be present in some areas.
Gossia inophloia		-	NT	Shaded and semi-shaded conditions on well-drained soils in and on the margins of subtropical rainforest.	Moderate. Likely to occur in the Study Area, particularly RE 12.3.1 and RE 12.3.2.
Macadamia integrifolia	Macadamia nut	V	V	Rainforest and rainforest edges on ridges, hill slopes, scree slopes and foot slopes, gullies, benches and terrace plains on well-drained, high nutrient soils.	Moderate. Vegetation mapped downstream (RE 12.3.1) is potential habitat for this species.
Mallotus megadontus		-	V	Margins of rainforest near watercourses.	Moderate. Potential habitat in RE 12.3.1 downstream of the existing dam.

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURENCE
Pararistolochia praevenosa	Richmond birdwing vine	-	NT	Subtropical rainforests on the coast and lower ranges (<600 m), with plant communities on nutrient-rich volcanic, alluvial or, uncommonly, sandy soils. Larval food plant of the Richmond birdwing butterfly.	Moderate. Potential habitat in the Study Area, particularly downstream of the existing dam in RE 12.3.1.
Phaius australis	Lesser swamp orchid	E	E	Mostly occurs in mixed swamp forest (e.g. *Melaleuca quinqueneria*, *Lophostemon suaveolens*, *Eucalyptus robusta*) in association with rainforest elements and palms. May occur along ecotones with other habitat types (e.g. heath, open forest). Flowers September-November.	Moderate. Open forests containing *Melaleuca quinquenervia, Eucalyptus robusta* and *Lophostemon suaveolens* are mapped in the Project Area (RE 12.3.4).
Prostanthera spathulata		V	V	Occurs in shrubland on rocky hillslopes and in tall open forest on gently inclined slopes, or flat terrain on the coastal plain (Halford 1998). Associated species include red mahogany (*Eucalyptus resinifera*), *E. racemosa*, pink bloodwood (*Corymbia intermedia*), turpentine (*Syncarpia glomulifera)*, *Lophostemon sp.*, tall saw-sedge (*Gahnia clarkei*) and black-mouth bush (*Melastoma affine*).	Moderate. Suitable floristic associations present below existing dam and adjacent to proposed works.
Ricinocarpos speciosus		-	V	Found in a range of habitats, such as creek banks, rocky slopes, ridge tops, and old floodplains.	Moderate. Potential habitat in the Study Area.
Samadera bidwillii	Quassia	V	V	Lowland rainforest or on rainforest margins occasionally open forest or woodland. Commonly found near temporary or permanent watercourses up to 510 m elevation. Soils include lithosols, skeletal soils, loam soils, sands, silts and sands with clay subsoils.	Moderate. Potential habitat present in the Study Area.
Symplocos harroldii	Hairy hazelwood	-	NT	Sub-tropical and dry rainforest, confined to the area between Beenleigh and Maryborough.	Moderate. Potential habitat in the Study Area, particularly downstream of the existing dam in RE 12.3.1.
Triunia robusta	Glossy spice bush	E	E	Notophyll vine forest, or mixed tall open forest developing a rainforest understorey in the absence of fire, usually within	Moderate. Notophyll vine forest (RE 12.3.1) and tall open forest dominated by

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURENCE
				25 m of streams, on south or south-east facing slopes or river terraces on well-drained soil.	Flooded Gum (RE 12.3.2) present in the Study Area.
Xanthostemon oppositifolius	Southern penda	V	V	Occurs predominantly in riparian communities on slightly acid clayey sands to sandy clays derived from sedimentary and metasedimentary rocks. Associated vegetation includes notophyll vine forest, simple notophyll mixed tall closed forest with *Araucaria cunninghamii* (hoop pine) emergents or in the rainforest understorey developing within tall open forest.	Moderate. Vegetation in the Study Area (RE 12.3.1 and RE 12.3.2) is suitable habitat for this species.

Note: LC = Least Concern, NT = Near Threatened, V = Vulnerable, E = Endangered, CE = Critically Endangered

Table 4-3 Fauna species with a moderate or high likelihood of occurrence in the Study Area

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
Anthochaera phrygia	Regent honeyeater	CE	E	Generally inhabits temperate woodlands and open forests of the inland slopes of south-east Australia. Regarded as an occasional visitor to Queensland, but there is some evidence that a small breeding population exists near Warwick. Infrequent in coastal area where winter flowering Swamp Mahogany, Forest Red Gum and spotted gum/ironbark associations are important.	Moderate, occasional. Winter flowering swamp mahogany, forest red gum and grey ironbark present in the Study Area.
Botaurus poiciloptilus	Australasian bittern	E	LC	Inhabits temperate freshwater wetlands and occasionally estuarine reed beds, with a preference for permanent waterbodies with tall dense vegetation. The species prefers wetlands with dense vegetation, including sedges, rushes and reeds. Freshwater is generally preferred, although dense saltmarsh vegetation in estuaries and flooded grasslands are also used by the species.	Moderate. May occur along the margins of the existing dam.
Calidris ferruginea	Curlew sandpiper	CE, M	E	Intertidal mudflats in sheltered coastal areas, non-tidal swamps, lakes and lagoons near the coast. Occasional occurrence at inland lakes and dams.	Moderate. May occasionally use the lake margins.
Calyptorhynchus lathami lathami	Glossy black-cockatoo	-	V	Occupies coastal woodlands and drier forest areas, open inland woodlands or timbered watercourses where *Casuarina* and *Allocasuarina* species are present. This species is dependent on large hollow-bearing eucalypts for nesting.	Moderate, depending on the availability of *Allocasuarina* spp. in the Study Area. RE 12.9-10.1/12.9-10.17 is the most likely to contain *Allocasuarina* spp.
Cyclopsitta diophthalma coxeni	Coxen's fig-parrot	E	E	Rainforest, particularly stands with figs; sometimes isolated trees.	Moderate. A variety of fig species were identified throughout the Study Area, particularly around waterways e.g. sandpaper fig. Larger figs were observed in relatively low abundance.

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
Erythrotriorchis radiatus	Red goshawk	V	E	Occurs in coastal and sub-coastal areas in woodland and forests, including riverine forests. Favours intermediate density forests to aid hunting of birds. Nest in tall trees, often beside permanent water sources.	Moderate. Suitable habitat for this species occurs in the Study Area. However, it is a highly mobile species with a large territory and the importance of the Study Area is currently unknown.
Lathamus discolor	Swift parrot	CE	E	Breeds exclusive in Tasmania during the summer, migrating to the mainland during winter. Being nectarivorous, winter flowering Eucalypts are important foraging resources on the mainland. Favoured feed trees include winter flowering species such as swamp mahogany (*Eucalyptus robusta*), spotted gum (*Corymbia aculate*), red bloodwood (*C. gummifera*), mugga Ironbark (*E. sideroxylon*), and white box (*E. albens*).	Moderate, occasional. Winter flowering swamp mahogany, forest red gum and grey ironbark present in the Study Area.
Rostratula australis	Australian painted snipe	E	V	Inhabits shallow inland wetlands, either freshwater or brackish water bodies. Nests on the ground amongst tall reed-like vegetation near water, and feeds near the water's edge and on mudflats.	Moderate. Likely to forage around the edges of the existing dam when muddy substrate is exposed. Unlikely to breed in the Study Area as no islands are present.
Turnix melanogaster	Black-breasted button-quail	V	V	Drier low closed forests, particularly semi-evergreen vine thicket, low microphyll vine forest, araucarian microphyll vine forest and araucarian notophyll vine forest; also in low, dense acacia thickets and, in littoral area, in vegetation behind sand dunes. Will use Lantana, particularly when it forms a mosaic with preferred habitat types.	Moderate. May occur in viney or lantana infested areas within RE 12.3.1 (notophyll vine forest) and RE 12.3.2 (tall open forest dominated by flooded gum (*Eucalyptus grandis*).
Maccullochella mariensis	Mary River cod	E	LC	Endemic to the Mary River, but introduced elsewhere. Larger river and creeks. Avoids shallow areas.	High. Known to occur in the Mary River, Lake Macdonald and downstream waterways.

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
Neoceratodus forsteri	Queensland lungfish	V	LC	The species' natural distribution is the Mary, Burnett and Brisbane River systems and (possibly) the Pine River system, but it has been translocated to many other locations. Translocated populations persist in the Coomera, Condamine, Albert and Logan Rivers. Occurs in permanent still or slow-flowing, shallow, vegetated pools with clear or turbid water in which to spawn and feed.	High. Known to occur in the Study Area.
Adelotus brevis	Tusked frog	-	V	Rainforest, wet Eucalypt forest; sometimes dry Eucalypt forest, paperbark forest or flooded grassland. Found near still or slow-moving water, including vertical plants such as reeds and rushes. Habitats include rivers, creeks, wetlands, ponds, dams. Males nest in leaf litter	High. Likely to occur around the existing dam and upstream and downstream where slower moving water is present.
Mixophyes iteratus	Giant barred frog	E	E	Occurs in damp rainforest, and both moist and dry eucalypt forest below 1000 m. Inhabits deep leaf litter and breeds in shallow, flowing rocky streams. Adult frogs generally forage within 20 m of streams, but are capable of dispersing hundreds of metres from streams.	High. Known to occur in Six Mile Creek downstream of the existing dam. Observed during the field survey.
Chalinolobus dwyeri	Large-eared pied bat	V	V	Roosts in disused mine shafts, caves, overhangs and disused Fairy Martin nests for shelter and to raise young. Also potentially roost in tree hollows. Occurs in low to mid-elevation dry open forest and woodlands, preferably with extensive cliffs, caves or gullies. Pied Bat is largely restricted to the interface of sandstone escarpment (for roost habitat) and relatively fertile valleys (for foraging habitat).	Moderate. Sandstone cliffs for roosting within several kilometres of the Study Area. Study Area provides potential foraging habitat.
Dasyurus maculatus maculatus	Spotted-tail quoll (south-eastern	E	V	Utilises a range of habitat types, including rainforest, open forest, woodland, coastal heath and inland riparian forest, from the sub-alpine zone to the coastline. Individual animals	Moderate. Suitable rainforest and open forest is mapped as occurring in the Project Area and further downstream. Rocky cliffs within several kilometres of the, which may provide refuges from

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
	mainland population)			use hollow-bearing trees, fallen logs, small caves, rock crevices, boulder fields and rocky-cliff faces as den sites.	introduced predators and help to stabilise a local population.
Phascolarctos cinereus	Koala	V	V	Inhabits a range of eucalypt forest and woodland communities. Adequate floristic diversity, availability of feed trees (primarily *Eucalyptus tereticornis* and *E. viminalis*) and presence of mature trees very important. Preferred food tree species vary with locality and there are quite distinct regional preferences. They are able to persist in fragmented habitats, and even survive in isolated trees across a predominantly agricultural landscape.	Moderate. Preferred feed trees, such as Swamp Mahogany, Forest Red Gum and Tallowwood are present in the Study Area. Secondary food trees also present.
Pteropus poliocephalus	Grey-headed flying-fox	V	LC	Occur in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps as well as urban gardens and cultivated fruit crops. Roosting camps are commonly found in gullies, close to water, in vegetation with a dense canopy. They travel up to 50 km to forage, on the nectar and pollen of native trees, in particular *Eucalyptus*, *Melaleuca* and *Banksia*, and fruits of rainforest trees and vines.	High. Intermittent occurrence pending fruit or nectar availability. A variety of suitable flowering and fruiting trees present in the Study Area (e.g. swamp mahogany, forest red gum, grey ironbark).
Anilios silvia	Striped blind snake	-	NT	Coastal rainforest; a burrowing snake that feeds on termites; also shelters under rocks, logs and deep leaf litter.	Moderate. May occur in RE 12.3.1 (and possibly RE 12.3.2) depending on the availability of suitable microhabitat.
Saiphos reticulatus	Three-toed snake-tooth skink	V	LC	Rainforest, occasionally moist eucalypt forest, on loamy or sandy soils; a burrowing skink that requires loose soil, leaf litter and rotting logs, and feeds on earthworms and beetle grubs.	Moderate. May occur in notophyll vine forest (RE 12.3.1) and flooded gum-dominated tall open forest (RE 12.3.2) in the Study Area pending the availability of suitable microhabitat.
Elseya albagula	White-throated	CE	E	Found only in the Fitzroy, Burnett and Mary River catchments. Within each catchment populations are fragmented by artificial structures (e.g. dams, weirs) that reduce water	Moderate. Six Mile Creek has not been identified as a Mary River tributary known to contain a significant population.

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
	snapping turtle			quality. Prefers clear, flowing, well-oxygenated waters, which appears to be associated with their physiological adaption to extract oxygen from water via cloacal respiration. Sometimes occurs in non-flowing waters, but typically at much reduced densities. Tends not occur in deeper waters due to reduced oxygen levels.	Indeed, the MNES search did not predict the species to occur within 10 km of the Study Area and there are no locality records within this search area. The existing dam would not be suitable for this species due to the still, deep water.
Elusor macrurus	Mary River turtle	E	E	Endemic to the Mary River catchment. The species uses cloacal respiration, which restricts it to flowing, well-oxygenated sections of streams. Its habitat consists of riffles (particularly productive parts of a river that are shallow with fast-flowing, aerated water) and shallow stretches alternating with deeper, flowing pools. It generally does not occur in impoundments due to reduced oxygen levels. Adults are usually found in areas with underwater shelter, such as sparse to dense macrophyte cover, submerged logs and rock crevices. They bask on logs and rocks. Juveniles occur in rocky areas with sand or gravel on the river bed, based on limited data.	Moderate. Six Mile Creek has not been identified as a Mary River tributary known to contain a significant population of this species. Indeed, the MNES search did not predict the species to occur within 10 km of the Study Area and there are no locality records of the species. Six Mile Creek below the dam is generally unsuitable, however, it is potential habitat for dispersal and migration. Surveys did not find any records in the Study Area, but the dam may be capable of supporting a non-breeding population.

Note: LC = Least Concern, NT = Near Threatened, V = Vulnerable, E = Endangered, CE = Critically Endangered

4.2 Field Survey

4.2.1 Vegetation Communities

Quaternary level floristic assessments determined that the mapped RE communities are generally representative of the on-ground vegetation (refer to Appendix C). Localised areas of basalt derived soils have resulted in small patches of complex notophyll vine forest occurring to the south east of the Scout Camp.

An "Of Concern" RE 12-9.10.1/12.9-10.17 (60/40) is present in and adjacent to the primary impact area. A portion of this will potentially be cleared to facilitate the project construction (laydown areas, site office and amenities, car parking, stockpiles) based on its current configuration.

4.2.2 Flora Species

The flora survey recorded a total of 227 species from 85 families across the Study Area. This comprised 172 native species and 55 exotic species. No species listed as significant under the EPBC Act or NC Act were identified within the primary impact area. However, a number of threatened species have been recorded in the area surrounding Lake Macdonald, outside the Study Area, including a number of records of Southern penda (*Xanthostemon oppositifolius*), which is listed as vulnerable under both state and Commonwealth legislation. The closest of these is on the western side of Lake Macdonald, 350 m south west of the Noosa Botanic Gardens. Other records for this species are generally to the west of the dam and all appear to be on private property. The complete species list for each site is provided in Appendix D.

4.2.3 Fauna Species

The field survey identified six amphibian species, 83 bird species, six reptile species, 10 mammals and one significant invertebrate species (Appendix E). Seven conservation significant species were recorded (Table 4-4).

The caspian tern (migratory under the EPBC Act and Special Least Concern under the NC Act) was observed flying over Lake Macdonald at several locations. Several migratory forest birds were also recorded (Table 4-4).

The giant barred frog, which is Endangered under both the EPBC Act and the NC Act was recorded at Sites 1 and 2 below the dam wall (refer to Figure 4-3 and Figure 4-4). It is likely to be continuously distributed at low density in this habitat area.

The tusked frog, which is Vulnerable under the NC Act, was recorded at Site 4, along Collwood Road, which would be used for construction access (refer to Figure 4-3). It was also recorded at Site 5 in the upper reaches of the lake (Figure 4-5). Six Mile Creek below the dam wall is also potential habitat for this species.

The Richmond birdwing butterfly was observed in flight at the entrance to Site 5, but will not be directly impacted by the project. No food plants for this species were observed during the survey.

Table 4-4 Conservation Significant Fauna Species Identified During Field Survey

FAMILY	SCIENTIFIC NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS
Limnodynastidae	*Adelotus brevis*	Tusked frog		V
Myobatrachidae	*Mixophyes iteratus*	Giant barred frog	E	E
Laridae	*Hydroprogne caspia*	Caspian tern	Migratory	SL
Rhipiduridae	*Rhipidura rufifrons*	Rufous fantail	Migratory	SL
Monarchidae	*Myiagra cyanoleuca*	Satin flycatcher	Migratory	SL
Monarchidae	*Symposiachrus trivirgatus*	Spectacled monarch	Migratory	SL
Papilionidae	*Ornithoptera richmondia*	Richmond birdwing		V

Note: SL = Special Least Concern, V = Vulnerable, E = Endangered

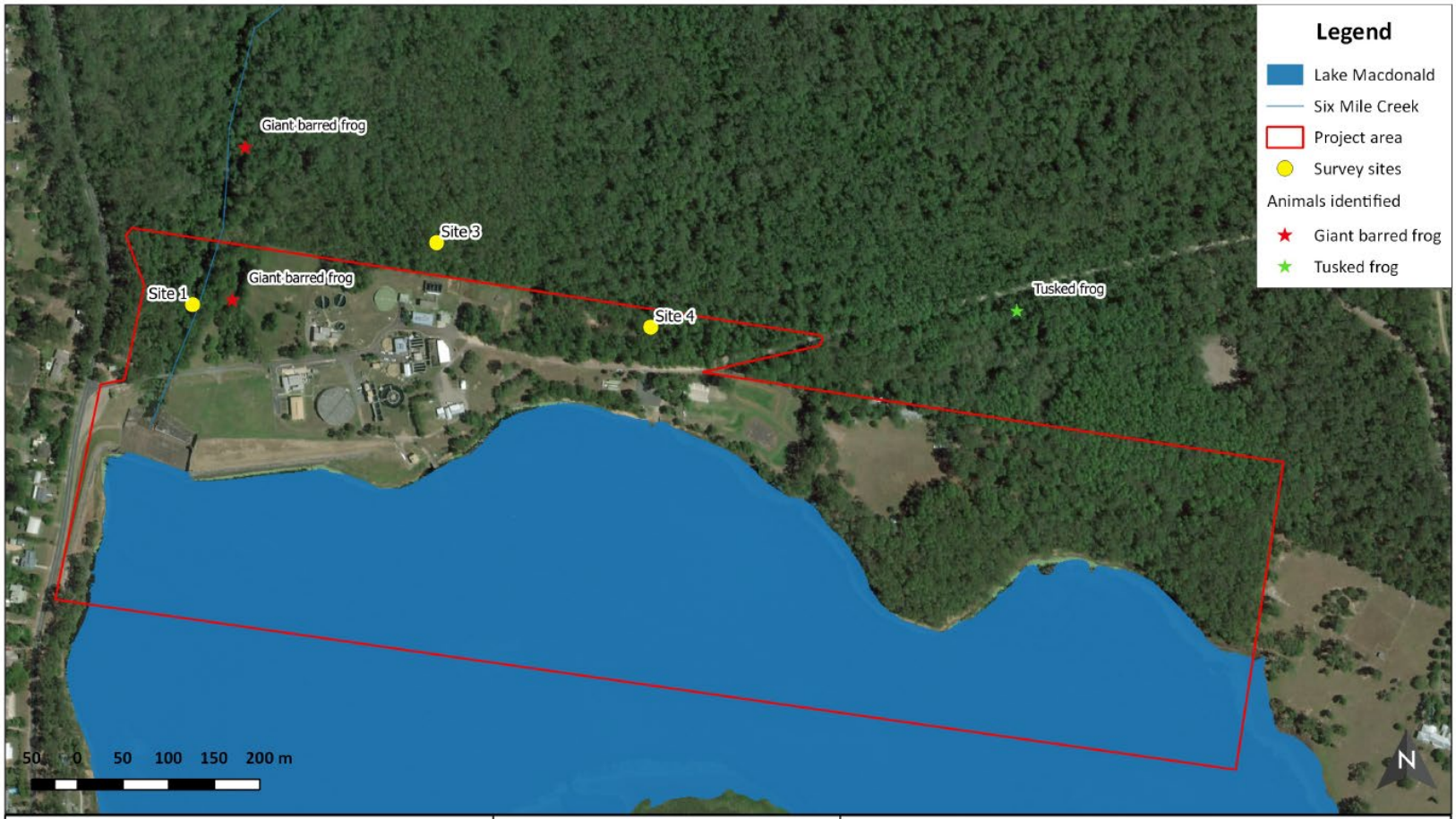

Figure 4-3 Location of conservation significant fauna identified as Site 1, Site 3 and Site 4

Figure 4-4 Location of conservation significant fauna identified at Site 2

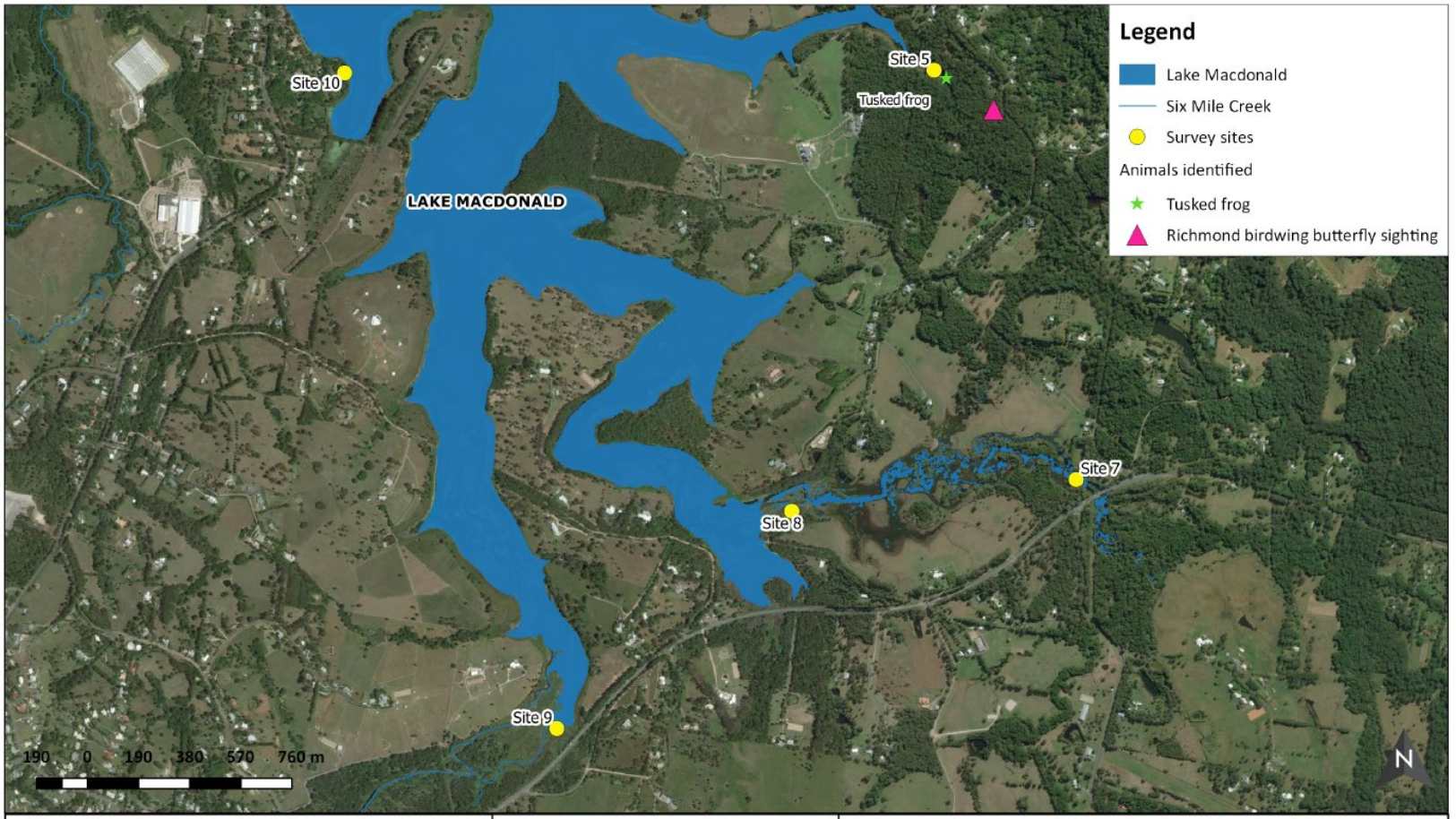

Figure 4-5 Location of conservation significant fauna identified at Site 5 to Site 10

4.2.4 Fauna Habitat Assessment

The field survey revealed a general lack of hollow-bearing trees (live and dead) across the Study Area. The highest density of hollows was observed in the forested areas of Site 5 with three hollow bearing trees within a 25 m x 25 m area. Within the assessment area of Site 1, one hollow bearing tree was observed. No hollows bearing trees were observed within the remaining survey sites. Most hollow-bearing trees at Site 5 were dead trees. Habitat assessment data are provided in Appendix E.

During the field survey, fallen logs were observed at a moderate density across the forested sites, averaging one log per 25 m circular radius. No fallen logs were observed at the wetland sites. Similarly, leaf litter cover ranged from 50-90% and generally has a depth of 5 cm in the forested sites, including Six Mile Creek and Tewantin National Park, while the wetland sites had minimal to no leaf litter.

The survey noted the presence of key flora species, which provide food or foraging habitat for target fauna species, such as Acacia species and winter flowering Eucalypts (e.g. forest red gum and grey ironbark for exudivorous gliders (e.g. feathertail, sugar and squirrel gliders), black she-oak (*Allocasuarina littoralis*) for glossy black-cockatoo and primary koala food trees. Primary koala food tree species observed across the Study Area comprised forest red gum, swamp mahogany and tallowood. Acacia species (primarily *Acacia disparrima*) were observed at all sites except Site 2 and Site 8. Black she-oak was recorded at Site 1, Site 4, Site 5 and Site 7 in low densities. However, no feeding signs attributable to the glossy black-cockatoo were observed.

5 Conclusion

Lake Macdonald provides extensive open water habitats and shallow wetland habitats in the upper reaches and along the fringes of the lake. It is surrounded by a variety of different forest communities (wet and dry Eucalypt forest, swamp forest), which are mapped as various remnant RE vegetation communities. This variation enables a diversity of flora and fauna species to be supported. However, most forest areas lack important habitat features such as hollow-bearing trees and fallen logs, which limits the presence of species that require these mature forest elements. A total of 17 conservation significant flora species and 21 fauna species that have been recorded in the area surrounding Lake Macdonald have a moderate to high probability of occurred in the Study Area based on the presence of suitable habitat.

No TECs were recorded in the Study Area. The RE mapping suggests that no TECs would be affected by the project. However, Of Concern RE 12-9.10.1/12.9-10.17 (60/40) will be affected by construction activities. No threatened flora species were recorded in the Study Area; however, Southern Penda is known to occur within RE 12.3.2 downstream of the dam wall.

Two threatened frogs were recorded during the survey: the giant barred frog and the tusked frog. The giant barred frog occurs along Six Mile Creek downstream of the dam. This area is also potential habitat for the tusked frog, although it was not recorded in this location. The tusked frog was recorded at one site in the upper Lake and also along Collwood Road, which would be used for construction access. It is likely that the population in this location would occur on both sides of the road and individual frogs would cross between foraging and breeding habitat on opposite sides of the road. A Richmond birdwing butterfly was observed within the forest at Site 5. No other threatened fauna species were recorded.

Migratory aquatic and forest birds listed under the EPBC Act were recorded in the Study Area. The aquatic species would use both the open waters and fringing vegetation of Lake Macdonald. The forest migrants utilise moist forest habitats, including habitat within the proposed construction area.

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Appendix A Desktop Search Results

Australian Government
Department of the Environment and Energy

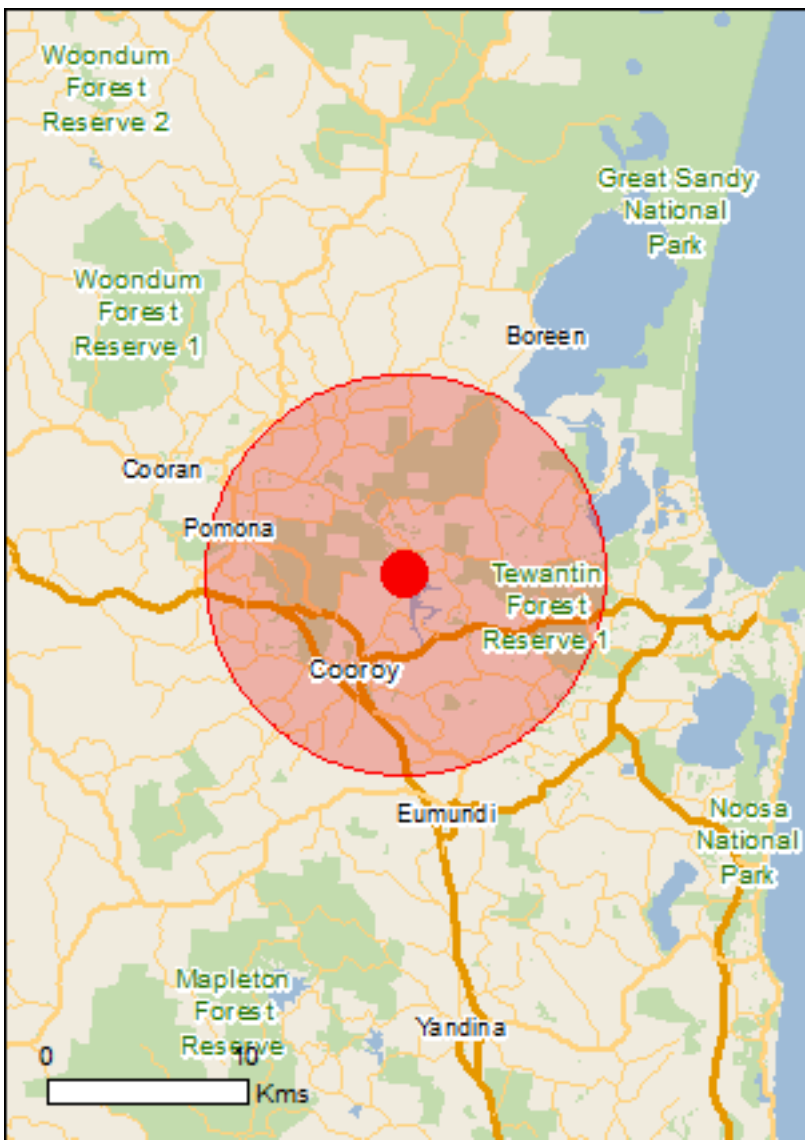
EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

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

Information is available about Environment Assessments and the EPBC Act including significance guidelines, forms and application process details.

Report created: 27/08/18 11:40:10



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

Coordinates
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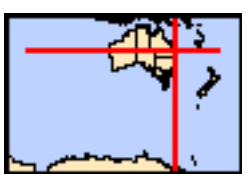

Summary

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:	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
Listed Threatened Species:	72
Listed Migratory Species:	44

Other Matters Protected by the EPBC Act

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

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

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

Commonwealth Land:	None
Commonwealth Heritage Places:	1
Listed Marine Species:	46
Whales and Other Cetaceans:	2
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:	17
Regional Forest Agreements:	None
Invasive Species:	38
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar) [Resource Information]

Name	Proximity
Great sandy strait (including great sandy strait, tin can bay and tin can	30 - 40km 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 likely to occur within area
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community likely to occur within area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area

Listed Threatened Species [Resource Information]

Name	Status	Type of Presence
Birds		
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Cyclopsitta diophthalma coxeni Coxen's Fig-Parrot [59714]	Endangered	Species or species habitat likely to occur within area
Dasyornis brachypterus Eastern Bristlebird [533]	Endangered	Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Species or species habitat may occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area

Name	Status	Type of Presence
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat known to occur within area
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat may occur within area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area
Limosa lapponica baueri Bar-tailed Godwit (baueri), Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat likely to occur within area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [86432]	Critically Endangered	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
Poephila cincta cincta Southern Black-throated Finch [64447]	Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Species or species habitat likely to occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area
Turnix melanogaster Black-breasted Button-quail [923]	Vulnerable	Species or species habitat likely to occur within area
Fish		

Name	Status	Type of Presence
Epinephelus daemelii Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat may occur within area
Maccullochella mariensis Mary River Cod [83806]	Endangered	Species or species habitat known to occur within area
Neoceratodus forsteri Australian Lungfish, Queensland Lungfish [67620]	Vulnerable	Species or species habitat known to occur within area
Frogs		
Litoria olongburensis Wallum Sedge Frog [1821]	Vulnerable	Species or species habitat known to occur within area
Mixophyes fleayi Fleay's Frog [25960]	Endangered	Species or species habitat likely to occur within area
Mixophyes iteratus Giant Barred Frog, Southern Barred Frog [1944]	Endangered	Species or species habitat known to occur within area
Insects		
Argynnis hyperbius inconstans Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area
Phyllodes imperialis smithersi Pink Underwing Moth [86084]	Endangered	Breeding may occur within area
Mammals		
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat likely to occur within area
Dasyurus hallucatus Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat likely to occur within area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat likely to occur within area
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 likely to occur within area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area
Xeromys myoides Water Mouse, False Water Rat, Yirrkoo [66]	Vulnerable	Species or species habitat known to occur within area
Plants		
Acacia attenuata [10690]	Vulnerable	Species or species habitat likely to occur within area
Allocasuarina thalassoscopica [21927]	Endangered	Species or species habitat may occur within

Name	Status	Type of Presence
		area
Archidendron lovelliae Bacon Wood, Tulip Siris [13451]	Vulnerable	Species or species habitat likely to occur within area
Arthraxon hispidus Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area
Baloghia marmorata Marbled Balogia, Jointed Baloghia [8463]	Vulnerable	Species or species habitat likely to occur within area
Bosistoa transversa Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat likely to occur within area
Cryptocarya foetida Stinking Cryptocarya, Stinking Laurel [11976]	Vulnerable	Species or species habitat likely to occur within area
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area
Eucalyptus conglomerata Swamp Stringybark [3160]	Endangered	Species or species habitat likely to occur within area
Floydia praealta Ball Nut, Possum Nut, Big Nut, Beefwood [15762]	Vulnerable	Species or species habitat likely to occur within area
Lepidium peregrinum Wandering Pepper-cress [14035]	Endangered	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 known to occur within area
Macadamia ternifolia Small-fruited Queensland Nut, Gympie Nut [7214]	Vulnerable	Species or species habitat known to occur within area
Phaius australis Lesser Swamp-orchid [5872]	Endangered	Species or species habitat likely to occur within area
Prostanthera spathulata [88266]	Vulnerable	Species or species habitat known to occur within area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area
Sophora fraseri [8836]	Vulnerable	Species or species habitat may occur within area
Triunia robusta Glossy Spice Bush [14747]	Endangered	Species or species habitat known to occur within area
Xanthostemon oppositifolius Penda, Southern Penda, Luya's Hardwood [8738]	Vulnerable	Species or species habitat likely to occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known

Name	Status	Type of Presence
		to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Delma torquata Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Furina dunmalli Dunmall's Snake [59254]	Vulnerable	Species or species habitat may occur within area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Saiphos reticulatus Three-toed Snake-tooth Skink [88328]	Vulnerable	Species or species habitat may occur within area
Sharks		
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Breeding may occur within area

Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat may occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat likely to occur within area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel	Endangered	Species or species

Name	Threatened	Type of Presence
[1060]		habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Species or species habitat likely to occur within area
Migratory Marine Species		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Manta alfredi Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
Manta birostris Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Orcaella brevirostris Irrawaddy Dolphin [45]		Species or species

Name	Threatened	Type of Presence
		habitat likely to occur within area
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	Vulnerable	Breeding may occur within area
Sousa chinensis Indo-Pacific Humpback Dolphin [50]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat known to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat known to occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Monarcha trivirgatus Spectacled Monarch [610]		Species or species habitat known to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to 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
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur

Name	Threatened	Type of Presence within area

Other Matters Protected by the EPBC Act

Commonwealth Heritage Places		[Resource Information]
Name	State	Status
Historic		
Cooroy Post Office	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 known to occur within area
Anous stolidus Common Noddy [825]		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 known 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 known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species

Name	Threatened	Type of Presence
		habitat may occur within area
[Calonectris leucomelas](#) Streaked Shearwater [1077]		Species or species habitat may occur within area
[Diomedea antipodensis](#) Antipodean Albatross [64458]	Vulnerable	Species or species habitat may occur within area
[Diomedea exulans](#) Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area
[Diomedea gibsoni](#) Gibson's Albatross [64466]	Vulnerable*	Species or species habitat may occur within area
[Fregata ariel](#) Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat likely to occur within area
[Fregata minor](#) Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to 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 known 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
[Limosa lapponica](#) Bar-tailed Godwit [844]		Species or species habitat known to occur within area
[Macronectes giganteus](#) Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
[Macronectes halli](#) Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
[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 known to occur within area
[Myiagra cyanoleuca](#) Satin Flycatcher [612]		Species or species habitat known to occur within area
[Numenius madagascariensis](#) Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur

Name	Threatened	Type of Presence within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur within area
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
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Species or species habitat likely to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area

Whales and other Cetaceans		[Resource Information]
Name	Status	Type of Presence
Mammals		
Orcaella brevirostris Irrawaddy Dolphin [45]		Species or species habitat likely to occur within area
Sousa chinensis Indo-Pacific Humpback Dolphin [50]		Species or species habitat likely to occur within area

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
Alyxia	QLD
Cooloothin	QLD
Cooroibah Environmental Reserve	QLD
Great Sandy	QLD
Great Sandy National Park	QLD
Harry Spring	QLD
Johns Property addition to Great Sandy National Park	QLD
Kingsgate Drive	QLD
Mount Cooroy	QLD
Penda Scrub	QLD
Six Mile Creek	QLD
Symplocos	QLD
Tewantin	QLD
Tuchekoi	QLD
Una Corbould	QLD
Woondum	QLD
Yurol	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
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

Name	Status	Type of Presence
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Frogs		
Rhinella marina Cane Toad [83218]		Species or species habitat known to occur within area
Mammals		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Feral deer Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		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		
Annona glabra Pond Apple, Pond-apple Tree, Alligator Apple, Bullock's Heart, Cherimoya, Monkey Apple, Bobwood, Corkwood [6311]		Species or species habitat likely to occur within area
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643]		Species or species habitat likely to occur within area
Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425]		Species or species habitat likely to occur within area
Asparagus africanus Climbing Asparagus, Climbing Asparagus Fern [66907]		Species or species habitat likely to occur within area
Asparagus plumosus Climbing Asparagus-fern [48993]		Species or species

Name	Status	Type of Presence
		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
Dolichandra unguis-cati Cat's Claw Vine, Yellow Trumpet Vine, Cat's Claw Creeper, Funnel Creeper [85119]		Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]		Species or species habitat likely to occur within area
Hymenachne amplexicaulis Hymenachne, Olive Hymenachne, Water Stargrass, West Indian Grass, West Indian Marsh Grass [31754]		Species or species habitat likely to occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat likely to occur within area
Opuntia spp. Prickly Pears [82753]		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
Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Senecio madagascariensis Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]		Species or species habitat likely to occur within area
Reptiles		
Hemidactylus frenatus Asian House Gecko [1708]		Species or species habitat likely to occur within area
Ramphotyphlops braminus Flowerpot Blind Snake, Brahminy Blind Snake, Cacing Besi [1258]		Species or species habitat may occur within area

Nationally Important Wetlands	[Resource Information]
Name	State
Noosa River Wetlands	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

-26.38065 152.93177

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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Search Crit Species List for a Specified Point

Species:	All
Type:	All
Status:	All
Records:	Confirmed
Date:	Since 1980
Latitude:	-26.3807
Longitude:	152.9318
Distance:	10
Email:	kylie.meldrum@smec.com
Date submitted:	Monday 27 Aug 2018 11:40:13
Date extracted:	Monday 27 Aug 2018 11:50:03

The number of records retrieved = 1135

Description of the 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). The second number located after the / indicates the number of specimen records for the taxon.

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Sighting Records	Specimen Records
animals	amphibians	Bufonidae	Rhinella marina	cane toad	Y			108	0
animals	amphibians	Hylidae	Litoria nasuta	striped rocketfrog		C		13	0
animals	amphibians	Hylidae	Litoria rothii	northern laughing treefrog		C		1	0
animals	amphibians	Hylidae	Litoria tyleri	southern laughing treefrog		C		34	0

animals	amphibians	Hylidae	Litoria chloris	orange eyed treefrog	C			2	0
animals	amphibians	Hylidae	Litoria dentata	bleating treefrog	C			2	0
animals	amphibians	Hylidae	Litoria peronii	emerald spotted treefrog	C			32	0
animals	amphibians	Hylidae	Litoria rubella	ruddy treefrog	C			18	0
animals	amphibians	Hylidae	Litoria caerulea	common green treefrog	C			26	0
animals	amphibians	Hylidae	Litoria wilcoxii	eastern stony creek frog	C			25	0
animals	amphibians	Hylidae	Litoria freycineti	wallum rocketfrog	V			3	0
animals	amphibians	Hylidae	Litoria gracilenta	graceful treefrog	C			95	0
animals	amphibians	Hylidae	Litoria verreauxii	whistling treefrog	C			1	0
animals	amphibians	Hylidae	Litoria latopalmata	broad palmed rocketfrog	C			6	0
animals	amphibians	Hylidae	Litoria pearsoniana	cascade treefrog	V			19	1
animals	amphibians	Hylidae	Litoria brevipalmata	green thighed frog	C			14	1
animals	amphibians	Hylidae	Litoria olongburensis	wallum sedgefrog	V	V		2	0
animals	amphibians	Hylidae	Litoria lesueuri sensu lato	stony creek frog	C			11	0
animals	amphibians	Hylidae	Litoria sp.					10	0
animals	amphibians	Hylidae	Litoria fallax	eastern sedgefrog	C			198	0
animals	amphibians	Limnodynastidae	Limnodynastes tasmaniensis	spotted grassfrog	C			1	0
animals	amphibians	Limnodynastidae	Limnodynastes peronii	striped marshfrog	C			78	0
animals	amphibians	Limnodynastidae	Adelotus brevis	tusked frog	V			135	0
animals	amphibians	Limnodynastidae	Limnodynastes terraereginae	scarlet sided pobblebonk	C			15	0
animals	amphibians	Myobatrachidae	Pseudophryne raveni	copper backed broodfrog	C			13	0
animals	amphibians	Myobatrachidae	Crinia parinsignifera	beeping froglet	C			17	2
animals	amphibians	Myobatrachidae	Mixophyes fasciolatus	great barred frog	C			38	0
animals	amphibians	Myobatrachidae	Mixophyes iteratus	giant barred frog	E	E		203	1
animals	amphibians	Myobatrachidae	Crinia signifera	clicking froglet	C			4	0
animals	amphibians	Myobatrachidae	Uperoleia fusca	dusky gungan	C			1	0
animals	amphibians	Myobatrachidae	Crinia tinnula	wallum froglet	V			24	2
animals	amphibians	Myobatrachidae	Uperoleia laevigata	eastern gungan	C			1	0
animals	birds	Acanthizidae	Sericornis frontalis	white-browed scrubwren	C			10	0
animals	birds	Acanthizidae	Gerygone palpebrosa	fairy gerygone	C			1	0
animals	birds	Acanthizidae	Sericornis citreogularis	yellow-throated scrubwren	C			1	0
animals	birds	Acanthizidae	Sericornis magnirostra	large-billed scrubwren	C			2	0
animals	birds	Acanthizidae	Gerygone mouki	brown gerygone	C			1	0
animals	birds	Acanthizidae	Acanthiza lineata	striated thornbill	C			1	0
animals	birds	Acanthizidae	Acanthiza pusilla	brown thornbill	C			15	0
animals	birds	Acanthizidae	Gerygone olivacea	white-throated gerygone	C			8	0
animals	birds	Accipitridae	Haliaeetus leucogaster	white-bellied sea-eagle	C			5	0
animals	birds	Accipitridae	Accipiter novaehollandiae	grey goshawk	C			11	0
animals	birds	Accipitridae	Erythrotriorchis radiatus	red goshawk	E	V		1	0
animals	birds	Accipitridae	Haliastur sphenurus	whistling kite	C			8	0
animals	birds	Accipitridae	Aquila audax	wedge-tailed eagle	C			3	0
animals	birds	Accipitridae	Haliastur indus	brahminy kite	C			10	0
animals	birds	Accipitridae	Elanus axillaris	black-shouldered kite	C			2	0
animals	birds	Accipitridae	Pandion cristatus	eastern osprey	SL			7	0
animals	birds	Accipitridae	Circus approximans	swamp harrier	C			1	0
animals	birds	Accipitridae	Aviceda subcristata	Pacific baza	C			6	0
animals	birds	Aegothelidae	Aegotheles cristatus	Australian owlet-nightjar	C			2	0
animals	birds	Alcedinidae	Ceyx azureus	azure kingfisher	C			2	0
animals	birds	Anatidae	Anas gracilis	grey teal	C			1	0
animals	birds	Anatidae	Nettapus coromandelianus	cotton pygmy-goose	C			1	0
animals	birds	Anatidae	Stictonetta naevosa	freckled duck	C			1	0

animals	birds	Anatidae	Anas platyrhynchos	northern mallard	Y		2	0
animals	birds	Anatidae	Chenonetta jubata	Australian wood duck		C	10	0
animals	birds	Anatidae	Anas superciliosa	Pacific black duck		C	14	0
animals	birds	Anatidae	Aythya australis	hardhead		C	2	0
animals	birds	Anatidae	Cygnus atratus	black swan		C	5	0
animals	birds	Anatidae	Anas castanea	chestnut teal		C	7	0
animals	birds	Anhingidae	Anhinga novaehollandiae	Australasian darter		C	5	0
animals	birds	Apodidae	Hirundapus caudacutus	white-throated needletail		SL	5	0
animals	birds	Ardeidae	Ardea intermedia	intermediate egret		C	2	0
animals	birds	Ardeidae	Egretta garzetta	little egret		C	1	0
animals	birds	Ardeidae	Butorides striata	striated heron		C	1	0
animals	birds	Ardeidae	Ardea pacifica	white-necked heron		C	4	0
animals	birds	Ardeidae	Bubulcus ibis	cattle egret		C	16	0
animals	birds	Ardeidae	Ardea alba modesta	eastern great egret		C	12	0
animals	birds	Ardeidae	Nycticorax caledonicus	nankeen night-heron		C	1	0
animals	birds	Ardeidae	Egretta novaehollandiae	white-faced heron		C	19	0
animals	birds	Artamidae	Cracticus sp.				1	0
animals	birds	Artamidae	Cracticus nigrogularis	pied butcherbird		C	22	0
animals	birds	Artamidae	Artamus leucorynchus	white-breasted woodswallow		C	2	0
animals	birds	Artamidae	Cracticus tibicen	Australian magpie		C	26	0
animals	birds	Artamidae	Strepera graculina	pied currawong		C	18	0
animals	birds	Artamidae	Cracticus torquatus	grey butcherbird		C	21	0
animals	birds	Cacatuidae	Cacatua galerita	sulphur-crested cockatoo		C	8	0
animals	birds	Cacatuidae	Cacatua sanguinea	little corella		C	7	0
animals	birds	Cacatuidae	Eolophus roseicapilla	galah		C	19	0
animals	birds	Cacatuidae	Calyptorhynchus banksii	red-tailed black-cockatoo		C	3	0
animals	birds	Cacatuidae	Calyptorhynchus funereus	yellow-tailed black-cockatoo		C	13	0
animals	birds	Cacatuidae	Calyptorhynchus lathami lathami	glossy black-cockatoo (eastern)		V	8	0
animals	birds	Campephagidae	Coracina lineata	barred cuckoo-shrike		C	1	0
animals	birds	Campephagidae	Coracina novaehollandiae	black-faced cuckoo-shrike		C	17	0
animals	birds	Campephagidae	Coracina tenuirostris	cicadabird		C	6	0
animals	birds	Campephagidae	Coracina papuensis	white-bellied cuckoo-shrike		C	1	0
animals	birds	Campephagidae	Lalage leucomela	varied triller		C	2	0
animals	birds	Charadriidae	Vanellus miles novaehollandiae	masked lapwing (southern subspecies)		C	19	0
animals	birds	Ciconiidae	Ephippiorhynchus asiaticus	black-necked stork		C	20	0
animals	birds	Cisticolidae	Cisticola exilis	golden-headed cisticola		C	3	0
animals	birds	Climacteridae	Cormobates leucophaea metastasis	white-throated treecreeper (southern)		C	5	0
animals	birds	Columbidae	Lopholaimus antarcticus	topknot pigeon		C	2	0
animals	birds	Columbidae	Streptopelia chinensis	spotted dove	Y		12	0
animals	birds	Columbidae	Macropygia amboinensis	brown cuckoo-dove		C	9	0
animals	birds	Columbidae	Ptilinopus regina	rose-crowned fruit-dove		C	1	0
animals	birds	Columbidae	Geopelia striata	peaceful dove		C	6	0
animals	birds	Columbidae	Chalcophaps indica	emerald dove		C	2	0
animals	birds	Columbidae	Geopelia humeralis	bar-shouldered dove		C	12	0
animals	birds	Columbidae	Ptilinopus magnificus	wompoo fruit-dove		C	3	0
animals	birds	Columbidae	Phaps chalcoptera	common bronzewing		C	1	0
animals	birds	Columbidae	Ocyphaps lophotes	crested pigeon		C	17	0
animals	birds	Columbidae	Columba leucomela	white-headed pigeon		C	9	0
animals	birds	Coraciidae	Eurystomus orientalis	dollarbird		C	1	0
animals	birds	Corvidae	Corvus orru	Torresian crow		C	32	0
animals	birds	Cuculidae	Cacomantis variolosus	brush cuckoo		C	1	0

animals	birds	Cuculidae	Centropus phasianinus	pheasant coucal	C	13	0
animals	birds	Cuculidae	Cacomantis flabelliformis	fan-tailed cuckoo	C	13	0
animals	birds	Cuculidae	Scythrops novaehollandiae	channel-billed cuckoo	C	2	0
animals	birds	Cuculidae	Chalcites minutillus barnardi	little bronze-cuckoo	C	1	0
animals	birds	Cuculidae	Chalcites lucidus	shining bronze-cuckoo	C	3	0
animals	birds	Cuculidae	Eudynamys orientalis	eastern koel	C	4	0
animals	birds	Dicruridae	Dicrurus bracteatus	spangled drongo	C	21	0
animals	birds	Estrildidae	Neochmia temporalis	red-browed finch	C	5	0
animals	birds	Estrildidae	Taeniopygia bichenovii	double-barred finch	C	2	0
animals	birds	Estrildidae	Lonchura castaneothorax	chestnut-breasted mannikin	C	1	0
animals	birds	Falconidae	Falco cenchroides	nankeen kestrel	C	1	0
animals	birds	Falconidae	Falco longipennis	Australian hobby	C	2	0
animals	birds	Falconidae	Falco peregrinus	peregrine falcon	C	1	0
animals	birds	Halcyonidae	Todiramphus sanctus	sacred kingfisher	C	5	0
animals	birds	Halcyonidae	Dacelo novaeguineae	laughing kookaburra	C	28	0
animals	birds	Halcyonidae	Todiramphus macleayii	forest kingfisher	C	9	0
animals	birds	Hirundinidae	Hirundo neoxena	welcome swallow	C	25	0
animals	birds	Hirundinidae	Petrochelidon ariel	fairy martin	C	1	0
animals	birds	Hirundinidae	Petrochelidon nigricans	tree martin	C	3	0
animals	birds	Jacanidae	Irediparra gallinacea	comb-crested jacana	C	2	0
animals	birds	Laridae	Chroicocephalus novaehollandiae	silver gull	C	5	0
animals	birds	Laridae	Sternula albifrons	little tern	SL	2	0
animals	birds	Laridae	Chlidonias hybrida	whiskered tern	C	1	0
animals	birds	Laridae	Sterna hirundo	common tern	SL	1	1
animals	birds	Maluridae	Malurus lamberti	variegated fairy-wren	C	3	0
animals	birds	Maluridae	Malurus melanocephalus	red-backed fairy-wren	C	13	0
animals	birds	Megaluridae	Megalurus gramineus	little grassbird	C	1	0
animals	birds	Megaluridae	Megalurus timoriensis	tawny grassbird	C	1	0
animals	birds	Megapodiidae	Alectura lathami	Australian brush-turkey	C	4	0
animals	birds	Meliphagidae	Melithreptus albogularis	white-throated honeyeater	C	12	0
animals	birds	Meliphagidae	Anthochaera chrysoptera	little wattlebird	C	11	0
animals	birds	Meliphagidae	Myzomela sanguinolenta	scarlet honeyeater	C	26	0
animals	birds	Meliphagidae	Manorina melanocephala	noisy miner	C	21	0
animals	birds	Meliphagidae	Lichenostomus melanops	yellow-tufted honeyeater	C	2	0
animals	birds	Meliphagidae	Philemon corniculatus	noisy friarbird	C	23	0
animals	birds	Meliphagidae	Lichmera indistincta	brown honeyeater	C	13	0
animals	birds	Meliphagidae	Phylidonyris niger	white-cheeked honeyeater	C	5	0
animals	birds	Meliphagidae	Entomyzon cyanotis	blue-faced honeyeater	C	20	0
animals	birds	Meliphagidae	Caligavis chrysops	yellow-faced honeyeater	C	3	0
animals	birds	Meliphagidae	Meliphaga lewinii	Lewin's honeyeater	C	26	0
animals	birds	Meliphagidae	Myzomela obscura	dusky honeyeater	C	1	0
animals	birds	Meliphagidae	Ptilotula fusca	fuscous honeyeater	C	1	0
animals	birds	Meliphagidae	Philemon citreogularis	little friarbird	C	4	0
animals	birds	Meropidae	Merops ornatus	rainbow bee-eater	C	12	0
animals	birds	Monarchidae	Carterornis leucotis	white-eared monarch	C	1	0
animals	birds	Monarchidae	Monarcha melanopsis	black-faced monarch	SL	3	0
animals	birds	Monarchidae	Symposiachrus trivirgatus	spectacled monarch	SL	2	0
animals	birds	Monarchidae	Grallina cyanoleuca	magpie-lark	C	24	0
animals	birds	Monarchidae	Myiagra inquieta	restless flycatcher	C	2	0
animals	birds	Monarchidae	Myiagra rubecula	leaden flycatcher	C	3	0
animals	birds	Motacillidae	Anthus novaeseelandiae	Australasian pipit	C	1	0

animals	birds	Nectariniidae	Dicaeum hirundinaceum	mistletoebird		C		14	0
animals	birds	Neosittidae	Daphoenositta chrysoptera	varied sittella		C		3	0
animals	birds	Oriolidae	Oriolus sagittatus	olive-backed oriole		C		4	0
animals	birds	Oriolidae	Sphecotheres vieilloti	Australasian figbird		C		12	0
animals	birds	Pachycephalidae	Colluricincla megarhyncha	little shrike-thrush		C		8	0
animals	birds	Pachycephalidae	Pachycephala rufiventris	rufous whistler		C		13	0
animals	birds	Pachycephalidae	Pachycephala pectoralis	golden whistler		C		15	0
animals	birds	Pachycephalidae	Colluricincla harmonica	grey shrike-thrush		C		12	0
animals	birds	Pardalotidae	Pardalotus striatus	striated pardalote		C		22	0
animals	birds	Pardalotidae	Pardalotus punctatus	spotted pardalote		C		7	0
animals	birds	Passeridae	Passer domesticus	house sparrow	Y			1	0
animals	birds	Pelecanidae	Pelecanus conspicillatus	Australian pelican		C		13	0
animals	birds	Petroicidae	Petroica rosea	rose robin		C		3	0
animals	birds	Petroicidae	Tregellasia capito	pale-yellow robin		C		1	0
animals	birds	Petroicidae	Eopsaltria australis	eastern yellow robin		C		13	0
animals	birds	Phalacrocoracidae	Microcarbo melanoleucos	little pied cormorant		C		5	0
animals	birds	Phalacrocoracidae	Phalacrocorax carbo	great cormorant		C		3	0
animals	birds	Phalacrocoracidae	Phalacrocorax varius	pied cormorant		C		3	0
animals	birds	Phalacrocoracidae	Phalacrocorax sulcirostris	little black cormorant		C		7	0
animals	birds	Phasianidae	Coturnix ypsilophora	brown quail		C		6	0
animals	birds	Phasianidae	Excalfactoria chinensis	king quail		C		1	0
animals	birds	Pittidae	Pitta versicolor	noisy pitta		C		2	0
animals	birds	Podargidae	Podargus strigoides	tawny frogmouth		C		7	0
animals	birds	Podicipedidae	Tachybaptus novaehollandiae	Australasian grebe		C		7	0
animals	birds	Psittacidae	Trichoglossus haematodus moluccanus	rainbow lorikeet		C		33	0
animals	birds	Psittacidae	Platycercus adscitus palliceps	pale-headed rosella (southern form)		C		3	0
animals	birds	Psittacidae	Trichoglossus chlorolepidotus	scaly-breasted lorikeet		C		13	0
animals	birds	Psittacidae	Platycercus adscitus	pale-headed rosella		C		10	0
animals	birds	Psittacidae	Aprosmictus erythropterus	red-winged parrot		C		6	0
animals	birds	Psittacidae	Parvipsitta pusilla	little lorikeet		C		1	0
animals	birds	Psittacidae	Alisterus scapularis	Australian king-parrot		C		8	0
animals	birds	Psophodidae	Psophodes olivaceus	eastern whipbird		C		15	0
animals	birds	Ptilonorhynchidae	Ailuroedus crassirostris	green catbird		C		3	0
animals	birds	Rallidae	Gallirallus philippensis	buff-banded rail		C		1	0
animals	birds	Rallidae	Lewinia pectoralis	Lewin's rail		C		1	0
animals	birds	Rallidae	Fulica atra	Eurasian coot		C		6	0
animals	birds	Rallidae	Gallinula tenebrosa	dusky moorhen		C		5	0
animals	birds	Rallidae	Porphyrio melanotus	purple swamphen		C		7	0
animals	birds	Recurvirostridae	Himantopus himantopus	black-winged stilt		C		3	0
animals	birds	Rhipiduridae	Rhipidura rufifrons	rufous fantail		SL		6	0
animals	birds	Rhipiduridae	Rhipidura albiscapa	grey fantail		C		20	0
animals	birds	Rhipiduridae	Rhipidura leucophrys	willie wagtail		C		20	0
animals	birds	Scolopacidae	Numenius phaeopus	whimbrel		SL		1	0
animals	birds	Scolopacidae	Numenius madagascariensis	eastern curlew		E	CE	15	0
animals	birds	Strigidae	Ninox boobook	southern boobook		C		13	0
animals	birds	Strigidae	Ninox strenua	powerful owl		V		1	0
animals	birds	Threskiornithidae	Threskiornis molucca	Australian white ibis		C		13	0
animals	birds	Threskiornithidae	Threskiornis spinicollis	straw-necked ibis		C		9	0
animals	birds	Threskiornithidae	Platalea flavipes	yellow-billed spoonbill		C		2	0
animals	birds	Threskiornithidae	Threskiornis sp.					2	0
animals	birds	Threskiornithidae	Platalea regia	royal spoonbill		C		6	0

animals	birds	Timaliidae	Zosterops lateralis	silvereye		C	10	0
animals	birds	Turdidae	Zoothera heinei	russet-tailed thrush		C	1	1
animals	birds	Turnicidae	Turnix varius	painted button-quail		C	1	0
animals	birds	Turnicidae	Turnix maculosus	red-backed button-quail		C	1	0
animals	birds	Tytonidae	Tyto novaehollandiae	masked owl		C	1	0
animals	insects	Lycaenidae	Acrodipsas cuprea variabilis	copper ant-blue			1	0
animals	insects	Nymphalidae	Euploea corinna	common crow			1	0
animals	insects	Nymphalidae	Acraea andromacha andromacha	glasswing			1	0
animals	insects	Nymphalidae	Tirumala hamata hamata	blue tiger			1	0
animals	insects	Nymphalidae	Melanitis leda bankia	evening brown			2	0
animals	insects	Nymphalidae	Danaus plexippus	monarch	Y		5	0
animals	insects	Papilionidae	Graphium choredon	blue triangle			1	0
animals	insects	Pieridae	Delias sp.				1	0
animals	insects	Pieridae	Belenois java teutonia	caper white			1	0
animals	insects	Pieridae	Delias nigrina	black jezebel			1	0
animals	insects	Pieridae	Pieris rapae	cabbage white	Y		1	0
animals	malacostracans	Parastacidae	Cherax depressus				2	0
animals	malacostracans	Parastacidae	Tenuibranchiurus glypticus	swamp crayfish		E	3	0
animals	mammals	Acrobatidae	Acrobates pygmaeus	feathertail glider		C	1	0
animals	mammals	Canidae	Vulpes vulpes	red fox	Y		4	0
animals	mammals	Dasyuridae	Planigale maculata	common planigale		C	1	0
animals	mammals	Dasyuridae	Antechinus flavipes flavipes	yellow-footed antechinus (south-east Queensland)		C	5	0
animals	mammals	Dasyuridae	Antechinus flavipes sensu lato	yellow-footed antechinus		C	1	0
animals	mammals	Emballonuridae	Saccolaimus flaviventris	yellow-bellied sheathtail bat		C	1	0
animals	mammals	Felidae	Felis catus	cat	Y		1	0
animals	mammals	Leporidae	Lepus europaeus	European brown hare	Y		1	0
animals	mammals	Macropodidae	Macropus sp.				1	0
animals	mammals	Macropodidae	Macropus giganteus	eastern grey kangaroo		C	5	0
animals	mammals	Macropodidae	Wallabia bicolor	swamp wallaby		C	5	0
animals	mammals	Miniopteridae	Miniopterus sp.				2	0
animals	mammals	Miniopteridae	Miniopterus australis	little bent-wing bat		C	17	0
animals	mammals	Miniopteridae	Miniopterus schreibersii oceanensis	eastern bent-wing bat		C	1	0
animals	mammals	Molossidae	Mormopterus sp.				2	0
animals	mammals	Molossidae	Mormopterus lumsdenae	northern free-tailed bat		C	5	0
animals	mammals	Molossidae	Mormopterus ridei	eastern free-tailed bat		C	3	0
animals	mammals	Molossidae	Tadarida australis	white-striped freetail bat		C	7	0
animals	mammals	Muridae	Melomys sp.				5	0
animals	mammals	Muridae	Mus musculus	house mouse	Y		3	0
animals	mammals	Muridae	Rattus rattus	black rat	Y		1	0
animals	mammals	Muridae	Rattus lutreolus	swamp rat		C	1	0
animals	mammals	Muridae	Rattus fuscipes	bush rat		C	18	0
animals	mammals	Muridae	Melomys burtoni	grassland melomys		C	5	0
animals	mammals	Muridae	Melomys cervinipes	fawn-footed melomys		C	9	0
animals	mammals	Muridae	Hydromys chrysogaster	water rat		C	5	0
animals	mammals	Muridae	Rattus sp.				2	0
animals	mammals	Ornithorhynchidae	Ornithorhynchus anatinus	platypus		SL	12	0
animals	mammals	Peramelidae	Isoodon macrourus	northern brown bandicoot		C	7	0
animals	mammals	Petauridae	Petaurus norfolcensis	squirrel glider		C	4	0
animals	mammals	Petauridae	Petaurus breviceps	sugar glider		C	1	0
animals	mammals	Phalangeridae	Trichosurus caninus	short-eared possum		C	8	0

animals	mammals	Phalangeridae	Trichosurus vulpecula	common brushtail possum	C			5	0
animals	mammals	Phascolarctidae	Phascolarctos cinereus	koala	V	V		22	0
animals	mammals	Pseudocheiridae	Pseudocheirus peregrinus	common ringtail possum	C			11	0
animals	mammals	Pteropodidae	Pteropus scapulatus	little red flying-fox	C			1	0
animals	mammals	Pteropodidae	Pteropus poliocephalus	grey-headed flying-fox	C	V		7	0
animals	mammals	Pteropodidae	Pteropus alecto	black flying-fox	C			7	0
animals	mammals	Rhinolophidae	Rhinolophus megaphyllus	eastern horseshoe-bat	C			1	0
animals	mammals	Tachyglossidae	Tachyglossus aculeatus	short-beaked echidna	SL			6	0
animals	mammals	Vespertilionidae	Scotorepens orion	south-eastern broad-nosed bat	C			2	0
animals	mammals	Vespertilionidae	Nyctophilus gouldi	Gould's long-eared bat	C			1	0
animals	mammals	Vespertilionidae	Vespadelus pumilus	eastern forest bat	C			2	0
animals	mammals	Vespertilionidae	Chalinolobus gouldii	Gould's wattled bat	C			4	0
animals	mammals	Vespertilionidae	Chalinolobus nigrogriseus	hoary wattled bat	C			1	0
animals	mammals	Vespertilionidae	Kerivoula papuensis	golden-tipped bat	C			1	0
animals	mammals	Vespertilionidae	Nyctophilus bifax	northern long-eared bat	C			2	0
animals	mammals	Vespertilionidae	Myotis macropus	large-footed myotis	C			1	0
animals	mammals	Vespertilionidae	Scotorepens greyii	little broad-nosed bat	C			1	0
animals	ray-finned fishes	Anguillidae	Anguilla australis	southern shortfin eel				10	0
animals	ray-finned fishes	Anguillidae	Anguilla reinhardtii	longfin eel				14	0
animals	ray-finned fishes	Eleotridae	Hypseleotris compressa	empire gudgeon				48	0
animals	ray-finned fishes	Eleotridae	Hypseleotris galii	firetail gudgeon				35	0
animals	ray-finned fishes	Eleotridae	Gobiomorphus australis	striped gudgeon				44	0
animals	ray-finned fishes	Melanotaeniidae	Rhadinocentrus ornatus	ornate rainbowfish				38	0
animals	ray-finned fishes	Melanotaeniidae	Melanotaenia duboulayi	crimsonspotted rainbowfish				21	0
animals	ray-finned fishes	Percichthyidae	Maccullochella mariensis	Mary River cod		E		1	1
animals	ray-finned fishes	Plotosidae	Tandanus tandanus	freshwater catfish				9	0
animals	ray-finned fishes	Poeciliidae	Gambusia holbrooki	mosquitofish	Y			34	0
animals	ray-finned fishes	Poeciliidae	Xiphophorus maculatus	platy	Y			6	0
animals	ray-finned fishes	Retropinnidae	Retropinna semoni	Australian smelt				2	0
animals	ray-finned fishes	Synbranchidae	Ophisternon gutturale	swamp eel				14	0
animals	ray-finned fishes	Terapontidae	Leiopotherapon unicolor	spangled perch				2	0
animals	reptiles	Agamidae	Pogona barbata	bearded dragon			C	3	0
animals	reptiles	Agamidae	Intellagama lesueurii	eastern water dragon			C	37	0
animals	reptiles	Boidae	Morelia spilota	carpet python			C	4	0
animals	reptiles	Chelidae	Wollumbinia latisternum	saw-shelled turtle			C	1	0
animals	reptiles	Colubridae	Tropidonophis mairii	freshwater snake			C	2	0
animals	reptiles	Colubridae	Boiga irregularis	brown tree snake			C	1	0
animals	reptiles	Colubridae	Dendrelaphis punctulatus	green tree snake			C	3	0
animals	reptiles	Diplodactylidae	Oedura tryoni	southern spotted velvet gecko			C	1	0
animals	reptiles	Elapidae	Cryptophis nigrescens	eastern small-eyed snake			C	4	0
animals	reptiles	Elapidae	Pseudechis porphyriacus	red-bellied black snake			C	1	0
animals	reptiles	Elapidae	Cacophis krefftii	dwarf crowned snake			C	1	0
animals	reptiles	Elapidae	Demansia psammophis	yellow-faced whipsnake			C	3	0
animals	reptiles	Elapidae	Hemiaspis signata	black-bellied swamp snake			C	2	0
animals	reptiles	Pygopodidae	Lialis burtonis	Burton's legless lizard			C	3	0
animals	reptiles	Scincidae	Cryptoblepharus pulcher pulcher	elegant snake-eyed skink			C	5	0
animals	reptiles	Scincidae	Eroticoscincus graciloides	elf skink			C	3	0
animals	reptiles	Scincidae	Ophioscincus ophioscincus	yolk-bellied snake-skink			C	1	0
animals	reptiles	Scincidae	Cyclodomorphus gerrardii	pink-tongued lizard			C	1	0
animals	reptiles	Scincidae	Calyptotis lepidorostrum	cone-eared calyptotis			C	2	0
animals	reptiles	Scincidae	Lampropholis delicata	dark-flecked garden sunskink			C	11	0

animals	reptiles	Scincidae	Anomalopus verreauxii	three-clawed worm-skink	C	1	0
animals	reptiles	Scincidae	Ctenotus spaldingi	straight-browed ctenotus	C	2	0
animals	reptiles	Scincidae	Tiliqua scincoides	eastern blue-tongued lizard	C	2	0
animals	reptiles	Scincidae	Ctenotus taeniolatus	copper-tailed skink	C	1	0
animals	reptiles	Scincidae	Bellatorias frerei	major skink	C	1	0
animals	reptiles	Scincidae	Carlia vivax	tussock rainbow-skink	C	2	0
animals	reptiles	Scincidae	Concinnia tenuis	bar-sided skink	C	3	0
animals	reptiles	Scincidae	Eulamprus quoyii	eastern water skink	C	1	0
animals	reptiles	Scincidae	Concinnia martini	dark bar-sided skink	C	3	0
animals	reptiles	Typhlopidae	Anilios silvia	striped blind snake	NT	1	0
animals	reptiles	Varanidae	Varanus varius	lace monitor	C	4	0
fungi	lecanoromycetes	Agyriaceae	Trapelia coarctata		C	1	1
fungi	lecanoromycetes	Catillariaceae	Solenopsora elixiana		C	2	2
fungi	lecanoromycetes	Cladoniaceae	Cladonia floerkeana		C	1	1
fungi	lecanoromycetes	Cladoniaceae	Cladonia praetermissa var. praetermissa		C	1	1
fungi	lecanoromycetes	Cladoniaceae	Cladonia scabriuscula		C	1	1
fungi	lecanoromycetes	Cladoniaceae	Cladonia pertricosa		C	1	1
fungi	lecanoromycetes	Cladoniaceae	Cladia aggregata		C	2	2
fungi	lecanoromycetes	Graphidaceae	Glyphis scyphulifera		C	1	1
fungi	lecanoromycetes	Graphidaceae	Sarcographa oculata		C	2	2
fungi	lecanoromycetes	Icmadophilaceae	Dibaeis sorediata		C	1	1
fungi	lecanoromycetes	Lecanoraceae	Ramboldia sanguinolenta		C	1	1
fungi	lecanoromycetes	Lobariaceae	Sticta rutilans		C	1	1
fungi	lecanoromycetes	Parmeliaceae	Usnea rubicunda		C	1	1
fungi	lecanoromycetes	Parmeliaceae	Usnea himantodes		C	1	1
fungi	lecanoromycetes	Parmeliaceae	Parmelinopsis jamesii		C	1	1
fungi	lecanoromycetes	Parmeliaceae	Parmotrema austrosinense		C	1	1
fungi	lecanoromycetes	Parmeliaceae	Xanthoparmelia remanella		C	1	1
fungi	lecanoromycetes	Parmeliaceae	Xanthoparmelia subprolixa		C	1	1
fungi	lecanoromycetes	Parmeliaceae	Xanthoparmelia hypoconstictica		C	1	1
fungi	lecanoromycetes	Parmeliaceae	Usnea dasaea		C	2	2
fungi	lecanoromycetes	Parmeliaceae	Usnea baileyi		C	2	2
fungi	lecanoromycetes	Pertusariaceae	Pertusaria subventosa		C	1	1
fungi	lecanoromycetes	Physciaceae	Buellia		C	2	2
fungi	lecanoromycetes	Physciaceae	Physcia poncinsii		C	1	1
fungi	lecanoromycetes	Physciaceae	Dirinaria aegialita		C	1	1
fungi	lecanoromycetes	Ramalinaceae	Ramalina inflata subsp. perpusilla		C	1	1
fungi	lecanoromycetes	Ramalinaceae	Ramalina peruviana		C	1	1
fungi	lecanoromycetes	Ramalinaceae	Ramalina dumeticola		C	1	1
fungi	lecanoromycetes	Teloschistaceae	Caloplaca		C	1	1
fungi	uncertain	Ascomycota	Cordyceps meneristitis		C	1	1
fungi	uncertain	Fungus	Fungus		C	1	1
fungi	uncertain	Lichen	Lichen		C	3	3
fungi		Basidiomycota	Gyroporus		C	1	1
fungi		Basidiomycota	Hexagonia		C	1	1
fungi		Basidiomycota	Phellinus		C	1	1
fungi		Basidiomycota	Xerocomus		C	1	1
fungi		Basidiomycota	Campanella		C	1	1
fungi		Basidiomycota	Cystangium		C	1	1
fungi		Basidiomycota	Nigrofomes		C	1	1
fungi		Basidiomycota	Thelephora		C	1	1

fungi		Basidiomycota	Macowanites		C	1	1
fungi		Basidiomycota	Fistulinella		C	1	1
fungi		Basidiomycota	Basidiomycota		C	1	1
fungi		Basidiomycota	Strobilomyces		C	1	1
fungi		Basidiomycota	Fomitopsis feei		C	1	1
fungi		Basidiomycota	Amanita flavella		C	1	1
fungi		Basidiomycota	Amauroderma rude		C	1	1
fungi		Basidiomycota	Fuscoporia gilva		C	1	1
fungi		Basidiomycota	Polyporus badius		C	1	1
fungi		Basidiomycota	Armillaria fumosa		C	1	1
fungi		Basidiomycota	Tylopilus balloui		C	1	1
fungi		Basidiomycota	Ganoderma chalceum		C	1	1
fungi		Basidiomycota	Laccaria lateritia		C	1	1
fungi		Basidiomycota	Amanita subvaginata		C	1	1
fungi		Basidiomycota	Ramaria lorithamnus		C	1	1
fungi		Basidiomycota	Hebeloma aminophilum		C	1	1
fungi		Basidiomycota	Mycena toyerlaricola		C	1	1
fungi		Basidiomycota	Clitocybe australiana		C	1	1
fungi		Basidiomycota	Laccaria canaliculata		C	2	2
fungi		Basidiomycota	Mycena roseilignicola		C	1	1
fungi		Basidiomycota	Pisolithus marmoratus		C	1	1
fungi		Basidiomycota	Porphyrellus brunneus		C	1	1
fungi		Basidiomycota	Amanita roseolamellata		C	2	2
fungi		Basidiomycota	Cantharellus concinnus		C	1	1
fungi		Basidiomycota	Gloeophyllum abietinum		C	2	2
fungi		Basidiomycota	Hygrocybe graminicolor		C	1	1
fungi		Basidiomycota	Laetiporus portentosus		C	1	1
fungi		Basidiomycota	Chalciporus ovalisporus		C	1	1
fungi		Basidiomycota	Macrolepiota dolichaula		C	1	1
fungi		Basidiomycota	Gloeophyllum concentricum		C	1	1
fungi		Basidiomycota	Cantharellus ochraceoravus		C	1	1
fungi		Basidiomycota	Phylloporus leucomycelinus		C	1	1
fungi		Basidiomycota	Amanita		C	2	2
fungi		Basidiomycota	Corticium		C	4	4
fungi		Basidiomycota	Laccaria		C	2	2
fungi		Basidiomycota	Boletus		C	1	1
fungi		Basidiomycota	Calocera		C	1	1
fungi		Basidiomycota	Gymnopus		C	1	1
plants	conifers	Araucariaceae	Agathis robusta	kauri pine	C	3	0
plants	conifers	Araucariaceae	Araucaria cunninghamii	hoop pine	C	7	0
plants	conifers	Araucariaceae	Araucaria cunninghamii var. cunninghamii		C	2	0
plants	conifers	Podocarpaceae	Podocarpus spinulosus	dwarf plum-pine	C	2	1
plants	ferns	Aspleniaceae	Asplenium australasicum		C	1	0
plants	ferns	Blechnaceae	Doodia aspera	prickly rasp fern	C	1	0
plants	ferns	Blechnaceae	Doodia linearis		C	1	1
plants	ferns	Blechnaceae	Blechnum indicum	swamp water fern	C	1	0
plants	ferns	Blechnaceae	Blechnum camfieldii		C	1	0
plants	ferns	Blechnaceae	Blechnum cartilagineum	gristle fern	C	5	1
plants	ferns	Blechnaceae	Blechnum patersonii subsp. queenslandicum		C	1	0
plants	ferns	Cyatheaceae	Cyathea leichhardtiana	prickly tree fern	C	2	1
plants	ferns	Dennstaedtiaceae	Hypolepis muelleri	swamp bracken	C	1	1

plants	ferns	Dennstaedtiaceae	Pteridium esculentum	common bracken		C	11	0
plants	ferns	Dicksoniaceae	Calochlaena dubia			C	10	1
plants	ferns	Lindsaeaceae	Lindsaea microphylla	lacy wedge fern		C	1	0
plants	ferns	Lindsaeaceae	Lindsaea incisa			C	1	1
plants	ferns	Nephrolepidaceae	Nephrolepis cordifolia	fishbone fern		C	1	1
plants	ferns	Ophioglossaceae	Ophioglossum reticulatum			C	1	1
plants	ferns	Polypodiaceae	Belvisia mucronata var. mucronata			C	1	1
plants	ferns	Polypodiaceae	Platycerium superbum	staghorn fern		C	3	0
plants	ferns	Pteridaceae	Adiantum formosum			C	2	1
plants	ferns	Pteridaceae	Adiantum aethiopicum			C	1	0
plants	ferns	Pteridaceae	Vittaria ensiformis			C	1	1
plants	ferns	Pteridaceae	Pellaea falcata			C	1	0
plants	ferns	Pteridaceae	Pellaea nana			C	4	2
plants	ferns	Pteridaceae	Adiantum hispidulum			C	2	0
plants	ferns	Schizaeaceae	Schizaea dichotoma	branched comb fern		C	2	0
plants	ferns	Thelypteridaceae	Christella dentata	creek fern		C	2	0
plants	higher dicots	Acanthaceae	Pseuderanthemum variabile	pastel flower		C	1	1
plants	higher dicots	Acanthaceae	Harnieria hygrophiloides	white karambal		C	2	1
plants	higher dicots	Acanthaceae	Graptophyllum spinigerum			C	1	1
plants	higher dicots	Acanthaceae	Hypoestes phyllostachya		Y		2	2
plants	higher dicots	Acanthaceae	Dyschoriste depressa		Y		1	1
plants	higher dicots	Acanthaceae	Hygrophila costata		Y		4	4
plants	higher dicots	Acanthaceae	Thunbergia alata	black-eyed Susan	Y		1	1
plants	higher dicots	Adoxaceae	Viburnum odoratissimum var. awabuki	sweet viburnum `emerald lustre?	Y		2	2
plants	higher dicots	Anacardiaceae	Euroschinus falcatus var. falcatus			C	1	1
plants	higher dicots	Anacardiaceae	Schinus terebinthifolius		Y		1	1
plants	higher dicots	Anacardiaceae	Euroschinus falcatus			C	1	0
plants	higher dicots	Apiaceae	Cyclospermum leptophyllum		Y		1	1
plants	higher dicots	Apiaceae	Platysace lanceolata			C	3	3
plants	higher dicots	Araliaceae	Astrotricha longifolia	star hair bush		C	1	1
plants	higher dicots	Araliaceae	Schefflera actinophylla	umbrella tree		C	1	1
plants	higher dicots	Araliaceae	Trachymene procumbens	creeping wild parsnip		C	1	1
plants	higher dicots	Araliaceae	Astrotricha umbrosa			C	3	3
plants	higher dicots	Araliaceae	Polyscias murrayi			C	1	0
plants	higher dicots	Araliaceae	Polyscias elegans	celery wood		C	7	0
plants	higher dicots	Asteraceae	Galinsoga parviflora	yellow weed	Y		2	2
plants	higher dicots	Asteraceae	Erechtites valerianifolius forma valerianifolius		Y		1	1
plants	higher dicots	Asteraceae	Sphagneticola trilobata		Y		1	1
plants	higher dicots	Asteraceae	Gamochaeta pensylvanica		Y		1	1
plants	higher dicots	Asteraceae	Sigesbeckia orientalis	Indian weed		C	1	1
plants	higher dicots	Asteraceae	Erigeron primulifolius		Y		1	1
plants	higher dicots	Asteraceae	Cotula australis	common cotula		C	1	1
plants	higher dicots	Asteraceae	Eclipta prostrata	white eclipta	Y		1	1
plants	higher dicots	Asteraceae	Soliva anthemifolia	dwarf jo jo weed	Y		1	1
plants	higher dicots	Asteraceae	Calyptocarpus vialis	creeping cinderella weed	Y		1	1
plants	higher dicots	Asteraceae	Coreopsis lanceolata		Y		1	1
plants	higher dicots	Asteraceae	Cyanthillium cinereum			C	1	1
plants	higher dicots	Asteraceae	Ageratum houstonianum	blue billygoat weed	Y		7	5
plants	higher dicots	Asteraceae	Centipeda minima subsp. minima			C	1	1
plants	higher dicots	Asteraceae	Gamochaeta antillana		Y		1	1
plants	higher dicots	Asteraceae	Gamochaeta coarctata		Y		1	1

plants	higher dicots	Asteraceae	Hypochaeris radicata	catsear	Y			2	2
plants	higher dicots	Asteraceae	Synedrella nodiflora		Y			1	1
plants	higher dicots	Asteraceae	Sphaeromorphaea australis			C		1	1
plants	higher dicots	Basellaceae	Anredera cordifolia	Madeira vine	Y			1	0
plants	higher dicots	Bignoniaceae	Campsis radicans		Y			1	1
plants	higher dicots	Bignoniaceae	Dolichandra unguis-cati	cat's claw creeper	Y			1	0
plants	higher dicots	Bignoniaceae	Pandorea jasminoides			C		2	2
plants	higher dicots	Bignoniaceae	Pandorea pandorana	wonga vine		C		1	0
plants	higher dicots	Brassicaceae	Lepidium virginicum	Virginian peppercress	Y			1	1
plants	higher dicots	Brassicaceae	Cardamine flexuosa	wood bittercress	Y			2	2
plants	higher dicots	Brassicaceae	Lepidium didymum		Y			1	1
plants	higher dicots	Burseraceae	Canarium australasicum	mango bark		C		2	0
plants	higher dicots	Byttneriaceae	Seringia arborescens			C		2	2
plants	higher dicots	Byttneriaceae	Lasiopetalum sp. (Coochin Hills L.S.Smith 14050)			C		1	1
plants	higher dicots	Byttneriaceae	Commersonia viscidula			C		6	6
plants	higher dicots	Byttneriaceae	Commersonia bartramia	brown kurrajong		C		4	1
plants	higher dicots	Cactaceae	Opuntia monacantha		Y			1	1
plants	higher dicots	Caesalpiniaceae	Senna pendula var. glabrata	Easter cassia	Y			2	0
plants	higher dicots	Caesalpiniaceae	Mezoneuron scortechinii			C		6	3
plants	higher dicots	Caesalpiniaceae	Mezoneuron nitens			C		1	0
plants	higher dicots	Campanulaceae	Wahlenbergia gracilis	sprawling bluebell		C		1	1
plants	higher dicots	Campanulaceae	Lobelia trigonocaulis	forest lobelia		C		1	1
plants	higher dicots	Campanulaceae	Lobelia purpurascens	white root		C		2	1
plants	higher dicots	Campanulaceae	Lobelia anceps			C		1	1
plants	higher dicots	Campanulaceae	Lobelia quadrangularis			C		3	3
plants	higher dicots	Capparaceae	Capparis arborea	brush caper berry		C		1	0
plants	higher dicots	Caprifoliaceae	Lonicera japonica	Japanese honeysuckle	Y			1	1
plants	higher dicots	Caryophyllaceae	Stellaria media	chickweed	Y			1	1
plants	higher dicots	Caryophyllaceae	Drymaria cordata subsp. cordata		Y			1	1
plants	higher dicots	Caryophyllaceae	Cerastium glomeratum	mouse ear chickweed	Y			1	1
plants	higher dicots	Casuarinaceae	Allocasuarina rigida subsp. exsul			V		7	7
plants	higher dicots	Casuarinaceae	Allocasuarina littoralis			C		20	3
plants	higher dicots	Casuarinaceae	Allocasuarina torulosa			C		16	0
plants	higher dicots	Celastraceae	Hippocratea barbata	knotvine		C		1	0
plants	higher dicots	Celastraceae	Hedraianthera porphyropetala	hedrianthera		C		2	0
plants	higher dicots	Celastraceae	Denhamia pittosporoides			C		2	0
plants	higher dicots	Celastraceae	Denhamia celastroides	broad-leaved boxwood		C		3	1
plants	higher dicots	Celastraceae	Celastrus subspicata	large-leaved staffvine		C		1	0
plants	higher dicots	Cleomaceae	Tarenaya hassleriana		Y			1	1
plants	higher dicots	Cornaceae	Alangium villosum subsp. tomentosum			C		1	0
plants	higher dicots	Cornaceae	Alangium villosum					1	0
plants	higher dicots	Crassulaceae	Crassula sieberiana			C		1	1
plants	higher dicots	Cucurbitaceae	Nothoalsomitra suberosa			NT		5	1
plants	higher dicots	Cunoniaceae	Pseudoweinmannia lachnocarpa	rose marara		C		2	0
plants	higher dicots	Cunoniaceae	Schizomeria ovata	white cherry		C		3	1
plants	higher dicots	Cunoniaceae	Bauera capitata	clustered bauera		C		1	0
plants	higher dicots	Dilleniaceae	Hibbertia aspera			C		2	0
plants	higher dicots	Dilleniaceae	Hibbertia scandens			C		3	1
plants	higher dicots	Dilleniaceae	Hibbertia vestita			C		6	1
plants	higher dicots	Dilleniaceae	Hibbertia stricta			C		1	1
plants	higher dicots	Ebenaceae	Diospyros pentamera	myrtle ebony		C		3	0

plants	higher dicots	Ebenaceae	Diospyros fasciculosa	grey ebony		C	2	0
plants	higher dicots	Ebenaceae	Diospyros yandina			C	2	1
plants	higher dicots	Ebenaceae	Diospyros geminata	scaly ebony		C	1	0
plants	higher dicots	Elaeagnaceae	Elaeagnus triflora var. triflora			C	2	1
plants	higher dicots	Elaeagnaceae	Elaeagnus triflora			C	1	1
plants	higher dicots	Elaeocarpaceae	Elaeocarpus eumundi	Eumundi quandong		C	4	0
plants	higher dicots	Elaeocarpaceae	Elaeocarpus grandis	blue quandong		C	2	1
plants	higher dicots	Elaeocarpaceae	Elaeocarpus obovatus	blueberry ash		C	3	0
plants	higher dicots	Elaeocarpaceae	Tetratheca thymifolia			C	1	0
plants	higher dicots	Elaeocarpaceae	Elaeocarpus reticulatus	ash quandong		C	10	0
plants	higher dicots	Elaeocarpaceae	Sloanea australis subsp. australis			C	1	1
plants	higher dicots	Elaeocarpaceae	Sloanea australis subsp. parviflora			C	1	0
plants	higher dicots	Elatinaceae	Elatine gratioloides	waterwort		C	1	1
plants	higher dicots	Ericaceae	Leucopogon leptospermoides			C	1	0
plants	higher dicots	Ericaceae	Epacris microphylla			C	1	0
plants	higher dicots	Ericaceae	Epacris obtusifolia	common heath		C	1	0
plants	higher dicots	Ericaceae	Leucopogon rupicola			C	2	2
plants	higher dicots	Ericaceae	Monotoca scoparia	prickly broom heath		C	4	2
plants	higher dicots	Ericaceae	Acrotriche aggregata	red cluster heath		C	9	5
plants	higher dicots	Ericaceae	Agiortia pedicellata			C	3	3
plants	higher dicots	Ericaceae	Leucopogon pimeleoides			C	4	2
plants	higher dicots	Ericaceae	Trochocarpa laurina	tree heath		C	6	0
plants	higher dicots	Euphorbiaceae	Homalanthus stillingiifolius			C	4	4
plants	higher dicots	Euphorbiaceae	Homalanthus populifolius			C	1	1
plants	higher dicots	Euphorbiaceae	Tragia novae-hollandiae	stinging-vine		C	2	0
plants	higher dicots	Euphorbiaceae	Ricinocarpos pinifolius	wedding bush		C	1	0
plants	higher dicots	Euphorbiaceae	Ricinocarpos speciosus			V	3	3
plants	higher dicots	Euphorbiaceae	Euphorbia hyssopifolia		Y		1	1
plants	higher dicots	Euphorbiaceae	Monotaxis macrophylla			C	4	4
plants	higher dicots	Euphorbiaceae	Mallotus philippensis	red kamala		C	3	0
plants	higher dicots	Euphorbiaceae	Mallotus mollissimus			C	3	3
plants	higher dicots	Euphorbiaceae	Alchornea ilicifolia	native holly		C	1	0
plants	higher dicots	Euphorbiaceae	Mallotus megadontus			V	6	6
plants	higher dicots	Euphorbiaceae	Macaranga tanarius	macaranga		C	1	0
plants	higher dicots	Euphorbiaceae	Claoxylon australe	brittlewood		C	1	0
plants	higher dicots	Euphorbiaceae	Baloghia marmorata	jointed baloghia		V	V	9	3
plants	higher dicots	Euphorbiaceae	Baloghia inophylla	scrub bloodwood		C	5	0
plants	higher dicots	Euphorbiaceae	Acalypha australis		Y		1	1
plants	higher dicots	Euphorbiaceae	Acalypha nemorum	hairy acalypha		C	2	2
plants	higher dicots	Euphorbiaceae	Mallotus discolor	white kamala		C	3	2
plants	higher dicots	Fabaceae	Austrosteenisia blackii var. blackii			C	1	0
plants	higher dicots	Fabaceae	Macrotyloma axillare var. axillare		Y		1	1
plants	higher dicots	Fabaceae	Crotalaria lanceolata subsp. lanceolata		Y		1	1
plants	higher dicots	Fabaceae	Platylobium			C	1	0
plants	higher dicots	Fabaceae	Vigna parkeri		Y		2	2
plants	higher dicots	Fabaceae	Aotus lanigera	pointed aotus		C	2	2
plants	higher dicots	Fabaceae	Aotus ericoides	common aotus		C	2	2
plants	higher dicots	Fabaceae	Hovea acutifolia			C	8	1
plants	higher dicots	Fabaceae	Pultenaea retusa			C	3	1
plants	higher dicots	Fabaceae	Pultenaea villosa	hairy bush pea		C	6	0
plants	higher dicots	Fabaceae	Desmodium intortum		Y		1	1

plants	higher dicots	Fabaceae	Indigofera arrecta		Y			1	1
plants	higher dicots	Fabaceae	Jacksonia scoparia			C		1	0
plants	higher dicots	Fabaceae	Kennedia rubicunda	red Kennedy pea		C		1	0
plants	higher dicots	Fabaceae	Lotononis bainesii	lotononis	Y			1	1
plants	higher dicots	Fabaceae	Oxylobium robustum	tree shaggy pea		C		4	4
plants	higher dicots	Fabaceae	Trifolium pratense		Y			1	1
plants	higher dicots	Fabaceae	Callerya megasperma	native wisteria		C		4	0
plants	higher dicots	Fabaceae	Desmodium uncinatum		Y			2	2
plants	higher dicots	Fabaceae	Glycine clandestina			C		1	0
plants	higher dicots	Fabaceae	Daviesia umbellulata			C		3	1
plants	higher dicots	Fabaceae	Dillwynia floribunda			C		1	1
plants	higher dicots	Fabaceae	Dillwynia glaberrima			C		1	0
plants	higher dicots	Fabaceae	Phyllota phylicoides	yellow peabush		C		2	0
plants	higher dicots	Fabaceae	Platylobium formosum	flat pea		C		4	0
plants	higher dicots	Fabaceae	Pultenaea petiolaris			C		1	1
plants	higher dicots	Fabaceae	Stylosanthes viscosa		Y			1	1
plants	higher dicots	Fabaceae	Gompholobium pinnatum	poor mans gold		C		1	0
plants	higher dicots	Fabaceae	Gompholobium virgatum			C		1	1
plants	higher dicots	Fabaceae	Desmodium heterocarpon			C		1	0
plants	higher dicots	Fabaceae	Podolobium ilicifolium			C		3	2
plants	higher dicots	Fabaceae	Castanospermum australe	black bean		C		3	0
plants	higher dicots	Fabaceae	Desmodium rhytidophyllum			C		1	0
plants	higher dicots	Fabaceae	Trifolium repens var. repens	white clover	Y			1	1
plants	higher dicots	Fabaceae	Neonotonia wightii var. wightii		Y			1	1
plants	higher dicots	Fabaceae	Crotalaria incana subsp. purpurascens		Y			1	1
plants	higher dicots	Geraniaceae	Geranium homeanum			C		1	1
plants	higher dicots	Goodeniaceae	Dampiera purpurea			C		1	1
plants	higher dicots	Goodeniaceae	Goodenia rotundifolia			C		5	1
plants	higher dicots	Goodeniaceae	Goodenia sp. (Mt Castletower M.D.Crisp 2753)			C		1	1
plants	higher dicots	Goodeniaceae	Dampiera			C		2	0
plants	higher dicots	Goodeniaceae	Goodenia hederacea			C		1	0
plants	higher dicots	Haloragaceae	Gonocarpus humilis			C		1	1
plants	higher dicots	Haloragaceae	Gonocarpus			C		1	1
plants	higher dicots	Lentibulariaceae	Utricularia aurea	golden bladderwort		C		2	2
plants	higher dicots	Loranthaceae	Amylotheca dictyophleba			C		1	0
plants	higher dicots	Lythraceae	Cuphea carthagenensis		Y			2	2
plants	higher dicots	Malpighiaceae	Stigmaphyllon ciliatum		Y			1	1
plants	higher dicots	Malvaceae	Hibiscus splendens	pink hibiscus		C		2	1
plants	higher dicots	Malvaceae	Hibiscus diversifolius subsp. diversifolius			C		2	2
plants	higher dicots	Malvaceae	Hibiscus tridactylites			C		1	1
plants	higher dicots	Malvaceae	Hibiscus heterophyllus			C		1	0
plants	higher dicots	Martyniaceae	Proboscidea lutea		Y			1	1
plants	higher dicots	Melastomataceae	Melastoma malabathricum subsp. malabathricum			C		4	0
plants	higher dicots	Meliaceae	Synoum glandulosum subsp. glandulosum			C		4	0
plants	higher dicots	Meliaceae	Dysoxylum mollissimum subsp. molle	miva mahogany		C		1	1
plants	higher dicots	Meliaceae	Anthocarapa nitidula	incense cedar		C		2	0
plants	higher dicots	Meliaceae	Dysoxylum rufum			C		2	0
plants	higher dicots	Meliaceae	Toona ciliata	red cedar		C		1	0
plants	higher dicots	Meliaceae	Synoum glandulosum			C		7	0
plants	higher dicots	Mimosaceae	Archidendron lovelliae	bacon wood		V	V	1	1

plants	higher dicots	Mimosaceae	Archidendron grandiflorum	lace flower tree		C			1	0
plants	higher dicots	Mimosaceae	Pararchidendron pruinosum			C			2	0
plants	higher dicots	Mimosaceae	Acacia baueri subsp. baueri	tiny wattle		V			1	1
plants	higher dicots	Mimosaceae	Acacia leiocalyx subsp. leiocalyx			C			1	1
plants	higher dicots	Mimosaceae	Acacia disparrima subsp. disparrima			C			10	3
plants	higher dicots	Mimosaceae	Acacia penninervis var. longiracemosa			C			1	1
plants	higher dicots	Mimosaceae	Acacia leichhardtii			C			1	0
plants	higher dicots	Mimosaceae	Acacia penninervis			C			2	0
plants	higher dicots	Mimosaceae	Acacia melanoxylon	blackwood		C			7	0
plants	higher dicots	Mimosaceae	Acacia hubbardiana			C			7	3
plants	higher dicots	Mimosaceae	Acacia aulacocarpa			C			6	6
plants	higher dicots	Mimosaceae	Neptunia oleracea		Y				1	1
plants	higher dicots	Mimosaceae	Acacia ulicifolia			C			1	1
plants	higher dicots	Mimosaceae	Acacia longissima			C			7	3
plants	higher dicots	Mimosaceae	Acacia juncifolia			C			1	1
plants	higher dicots	Mimosaceae	Acacia complanata	flatstem wattle		C			1	0
plants	higher dicots	Mimosaceae	Acacia cincinnata			C			1	1
plants	higher dicots	Mimosaceae	Acacia viscidula			C			1	1
plants	higher dicots	Mimosaceae	Acacia oshanesii			C			5	0
plants	higher dicots	Mimosaceae	Acacia maidenii	Maiden's wattle		C			7	0
plants	higher dicots	Mimosaceae	Acacia attenuata			V	V		7	4
plants	higher dicots	Mimosaceae	Acacia mangium			C			1	1
plants	higher dicots	Moraceae	Maclura cochinchinensis	cockspur thorn		C			3	0
plants	higher dicots	Moraceae	Trophis scandens			C			3	0
plants	higher dicots	Moraceae	Ficus coronata	creek sandpaper fig		C			3	1
plants	higher dicots	Moraceae	Fatoua villosa		Y				1	1
plants	higher dicots	Moraceae	Ficus obliqua			C			1	0
plants	higher dicots	Moraceae	Ficus fraseri	white sandpaper fig		C			1	1
plants	higher dicots	Moraceae	Trophis scandens subsp. scandens			C			5	1
plants	higher dicots	Moraceae	Ficus macrophylla			C			1	0
plants	higher dicots	Moraceae	Ficus watkinsiana	green-leaved Moreton Bay fig		C			2	0
plants	higher dicots	Myrsinaceae	Myrsine variabilis			C			2	0
plants	higher dicots	Myrsinaceae	Myrsine angusta			C			1	1
plants	higher dicots	Myrsinaceae	Ardisia crenata		Y				3	3
plants	higher dicots	Myrsinaceae	Embelia australiana	embelia		C			4	0
plants	higher dicots	Myrsinaceae	Myrsine subsessilis			C			1	0
plants	higher dicots	Myrsinaceae	Tapeinosperma pseudojambosa	tapeinosperma		C			1	0
plants	higher dicots	Myrtaceae	Gossia hillii			C			7	5
plants	higher dicots	Myrtaceae	Gossia bidwillii			C			2	0
plants	higher dicots	Myrtaceae	Gossia inophloia			NT			3	2
plants	higher dicots	Myrtaceae	Syncarpia hillii	Fraser Island satinay		C			1	1
plants	higher dicots	Myrtaceae	Syzygium oleosum	blue cherry		C			7	0
plants	higher dicots	Myrtaceae	Eucalyptus crebra	narrow-leaved red ironbark		C			5	0
plants	higher dicots	Myrtaceae	Gossia acmenoides			C			1	0
plants	higher dicots	Myrtaceae	Melaleuca sieberi			C			6	0
plants	higher dicots	Myrtaceae	Syzygium australe	scrub cherry		C			1	0
plants	higher dicots	Myrtaceae	Baeckea frutescens			C			4	1
plants	higher dicots	Myrtaceae	Calytrix tetragona	fringe myrtle		C			1	0
plants	higher dicots	Myrtaceae	Corymbia gummifera	red bloodwood		C			6	0
plants	higher dicots	Myrtaceae	Decaspermum humile	silky myrtle		C			2	1
plants	higher dicots	Myrtaceae	Eucalyptus exserta	Queensland peppermint		C			4	3

plants	higher dicots	Myrtaceae	Eucalyptus grandis	flooded gum	C		20	0
plants	higher dicots	Myrtaceae	Eucalyptus robusta	swamp mahogany	C		3	0
plants	higher dicots	Myrtaceae	Melaleuca salicina		C		6	0
plants	higher dicots	Myrtaceae	Rhodamnia argentea	white myrtle	C		1	0
plants	higher dicots	Myrtaceae	Austromyrtus dulcis	midgen berry	C		7	0
plants	higher dicots	Myrtaceae	Corymbia intermedia	pink bloodwood	C		30	0
plants	higher dicots	Myrtaceae	Rhodamnia acuminata	cooloola ironwood	C		2	1
plants	higher dicots	Myrtaceae	Rhodamnia rubescens		C		1	0
plants	higher dicots	Myrtaceae	Sannantha bidwillii		C		13	1
plants	higher dicots	Myrtaceae	Syzygium luehmannii		C		2	0
plants	higher dicots	Myrtaceae	Corymbia grandifolia		C		1	0
plants	higher dicots	Myrtaceae	Eucalyptus cloeziana	Gympie messmate	C		1	0
plants	higher dicots	Myrtaceae	Eucalyptus montivaga		C		1	0
plants	higher dicots	Myrtaceae	Eucalyptus pilularis	blackbutt	C		27	0
plants	higher dicots	Myrtaceae	Eucalyptus propinqua	small-fruited grey gum	C		10	0
plants	higher dicots	Myrtaceae	Eucalyptus tindaliae	Queensland white stringybark	C		2	0
plants	higher dicots	Myrtaceae	Homoranthus virgatus	twiggy homoranthus	C		2	1
plants	higher dicots	Myrtaceae	Backhousia myrtifolia	carrol	C		4	1
plants	higher dicots	Myrtaceae	Corymbia trachyphloia		C		8	0
plants	higher dicots	Myrtaceae	Eucalyptus acmenoides		C		13	1
plants	higher dicots	Myrtaceae	Eucalyptus microcorys		C		25	0
plants	higher dicots	Myrtaceae	Eucalyptus resinifera	red mahogany	C		20	0
plants	higher dicots	Myrtaceae	Lophostemon confertus	brush box	C		40	0
plants	higher dicots	Myrtaceae	Melaleuca pachyphylla		C		1	1
plants	higher dicots	Myrtaceae	Syncarpia glomulifera		C		28	0
plants	higher dicots	Myrtaceae	Tristaniopsis laurina		C		1	1
plants	higher dicots	Myrtaceae	Backhousia subargentea		C		1	1
plants	higher dicots	Myrtaceae	Eucalyptus biturbinata		C		1	0
plants	higher dicots	Myrtaceae	Eucalyptus eugenioides		C		1	0
plants	higher dicots	Myrtaceae	Lophostemon suaveolens	swamp box	C		12	1
plants	higher dicots	Myrtaceae	Melaleuca alternifolia		C		1	0
plants	higher dicots	Myrtaceae	Melaleuca linariifolia	snow-in summer	C		1	0
plants	higher dicots	Myrtaceae	Rhodomyrtus psidioides	native guava	C		9	5
plants	higher dicots	Myrtaceae	Waterhousea floribunda	weeping lilly pilly	C		2	0
plants	higher dicots	Myrtaceae	Eucalyptus conglomerata	swamp stringybark	E	E	3	2
plants	higher dicots	Myrtaceae	Eucalyptus latisinensis		C		3	2
plants	higher dicots	Myrtaceae	Eucalyptus siderophloia		C		4	0
plants	higher dicots	Myrtaceae	Eucalyptus tereticornis		C		4	0
plants	higher dicots	Myrtaceae	Leptospermum petersonii		C		3	3
plants	higher dicots	Myrtaceae	Leptospermum trinervium	woolly tea-tree	C		9	0
plants	higher dicots	Myrtaceae	Melaleuca quinquenervia	swamp paperbark	C		16	0
plants	higher dicots	Myrtaceae	Leptospermum juniperinum	prickly tea-tree	C		1	1
plants	higher dicots	Myrtaceae	Leptospermum microcarpum	small-fruited tea-tree	C		5	4
plants	higher dicots	Myrtaceae	Archirhodomyrtus beckleri	rose myrtle	C		6	6
plants	higher dicots	Myrtaceae	Leptospermum semibaccatum	wallum tea-tree	C		2	0
plants	higher dicots	Myrtaceae	Pilidiostigma rhytispermum		C		9	2
plants	higher dicots	Myrtaceae	Leptospermum polygalifolium	tantoon	C		7	3
plants	higher dicots	Myrtaceae	Xanthostemon oppositifolius	southern penda	V	V	11	9
plants	higher dicots	Myrtaceae	Acmena hemilampra subsp. hemilampra		C		1	1
plants	higher dicots	Myrtaceae	Eucalyptus racemosa subsp. racemosa	scribbly gum	C		3	1
plants	higher dicots	Myrtaceae	Corymbia citriodora subsp. variegata		C		1	1

plants	higher dicots	Myrtaceae	Syncarpia glomulifera subsp. glomulifera			C		9	1
plants	higher dicots	Ochnaceae	Ochna serrulata	ochna	Y			2	1
plants	higher dicots	Oleaceae	Notelaea punctata			C		3	2
plants	higher dicots	Oleaceae	Jasminum simplicifolium subsp. australiense			C		1	1
plants	higher dicots	Oleaceae	Notelaea longifolia			C		4	0
plants	higher dicots	Oleaceae	Notelaea johnsonii	veinless mock-olive		C		1	0
plants	higher dicots	Oleaceae	Ligustrum sinense	small-leaved privet	Y			3	2
plants	higher dicots	Oleaceae	Olea paniculata			C		4	1
plants	higher dicots	Onagraceae	Ludwigia octovalvis	willow primrose		C		5	5
plants	higher dicots	Onagraceae	Ludwigia peploides subsp. montevidensis			C		1	1
plants	higher dicots	Onagraceae	Oenothera rosea	rose evening primrose	Y			1	1
plants	higher dicots	Onagraceae	Ludwigia repens		Y			1	1
plants	higher dicots	Oxalidaceae	Oxalis debilis var. corymbosa	pink shamrock	Y			1	1
plants	higher dicots	Passifloraceae	Passiflora pallida		Y			1	1
plants	higher dicots	Passifloraceae	Passiflora herbertiana subsp. herbertiana	native passionfruit		C		1	1
plants	higher dicots	Passifloraceae	Passiflora subpeltata	white passion flower	Y			1	0
plants	higher dicots	Petiveriaceae	Rivina humilis		Y			2	0
plants	higher dicots	Phyllanthaceae	Glochidion sumatranum	umbrella cheese tree		C		3	0
plants	higher dicots	Phyllanthaceae	Cleistanthus cunninghamii	omega		C		4	1
plants	higher dicots	Phyllanthaceae	Actephila lindleyi	actephila		C		2	2
plants	higher dicots	Phyllanthaceae	Breynia oblongifolia			C		6	1
plants	higher dicots	Phyllanthaceae	Glochidion ferdinandi			C		10	0
plants	higher dicots	Picrodendraceae	Petalostigma triloculare	forest quinine		C		5	1
plants	higher dicots	Picrodendraceae	Petalostigma quadriloculare			C		1	0
plants	higher dicots	Picrodendraceae	Micrantheum ericoides			C		5	5
plants	higher dicots	Picrodendraceae	Dissiliaria baloghioides	hauer		C		2	2
plants	higher dicots	Pittosporaceae	Pittosporum venulosum			C		1	0
plants	higher dicots	Pittosporaceae	Auranticarpa rhombifolia			C		1	1
plants	higher dicots	Pittosporaceae	Pittosporum multiflorum			C		2	0
plants	higher dicots	Pittosporaceae	Billardiera scandens			C		6	1
plants	higher dicots	Pittosporaceae	Pittosporum revolutum	yellow pittosporum		C		6	0
plants	higher dicots	Pittosporaceae	Pittosporum undulatum	sweet pittosporum		C		1	0
plants	higher dicots	Pittosporaceae	Pittosporum spinescens			C		2	0
plants	higher dicots	Pittosporaceae	Pittosporum tinifolium			C		1	1
plants	higher dicots	Plantaginaceae	Bacopa caroliniana		Y			1	1
plants	higher dicots	Plantaginaceae	Callitriche sonderi			C		1	1
plants	higher dicots	Polygalaceae	Polygala paniculata		Y			1	1
plants	higher dicots	Polygonaceae	Persicaria lapathifolia	pale knotweed		C		2	2
plants	higher dicots	Polygonaceae	Persicaria subsessilis	hairy knotweed		C		1	1
plants	higher dicots	Polygonaceae	Persicaria attenuata			C		1	1
plants	higher dicots	Polygonaceae	Persicaria strigosa			C		1	1
plants	higher dicots	Portulacaceae	Calandrinia pickeringii			C		1	1
plants	higher dicots	Proteaceae	Banksia spinulosa var. collina			C		3	0
plants	higher dicots	Proteaceae	Banksia robur	broad-leaved banksia		C		9	2
plants	higher dicots	Proteaceae	Triunia robusta			E	E	7	7
plants	higher dicots	Proteaceae	Floydia praealta	ball nut		V	V	2	0
plants	higher dicots	Proteaceae	Hakea florulenta	three-nerved willow hakea		C		2	1
plants	higher dicots	Proteaceae	Banksia spinulosa			C		8	0
plants	higher dicots	Proteaceae	Grevillea reptans			C		1	1
plants	higher dicots	Proteaceae	Persoonia virgata	small-leaved geebung		C		9	1
plants	higher dicots	Proteaceae	Grevillea hilliana			C		2	1

plants	higher dicots	Proteaceae	Helicia glabriflora	pale oak		C			3	2
plants	higher dicots	Proteaceae	Banksia integrifolia			C			3	0
plants	higher dicots	Proteaceae	Macadamia ternifolia	bopple nut		V	V		3	2
plants	higher dicots	Proteaceae	Persoonia cornifolia	broad-leaved geebung		C			1	0
plants	higher dicots	Proteaceae	Stenocarpus sinuatus	wheel of fire		C			4	0
plants	higher dicots	Proteaceae	Macadamia integrifolia	macadamia nut		V	V		1	0
plants	higher dicots	Proteaceae	Persoonia stradbrokensis			C			1	1
plants	higher dicots	Putranjivaceae	Drypetes deplanchei	grey boxwood		C			6	0
plants	higher dicots	Rhamnaceae	Pomaderris ferruginea			C			2	2
plants	higher dicots	Rhamnaceae	Alphitonia petriei	pink ash		C			7	2
plants	higher dicots	Rhamnaceae	Alphitonia excelsa	soap tree		C			13	0
plants	higher dicots	Rhamnaceae	Pomaderris crassifolia			V			1	1
plants	higher dicots	Rhamnaceae	Emmenosperma cunninghamii			C			1	1
plants	higher dicots	Rosaceae	Rubus ellipticus	yellow raspberry	Y				2	2
plants	higher dicots	Rosaceae	Rubus moluccanus			C			2	0
plants	higher dicots	Rosaceae	Rhaphiolepis indica	Indian hawthorn	Y				1	1
plants	higher dicots	Rosaceae	Rubus moluccanus var. trilobus			C			1	1
plants	higher dicots	Rubiaceae	Everistia vacciniifolia var. nervosa			C			1	1
plants	higher dicots	Rubiaceae	Oldenlandia corymbosa var. corymbosa		Y				1	1
plants	higher dicots	Rubiaceae	Atractocarpus benthamianus subsp. glaber			C			5	5
plants	higher dicots	Rubiaceae	Coelospermum paniculatum var. paniculatum			C			1	1
plants	higher dicots	Rubiaceae	Atractocarpus benthamianus			C			1	0
plants	higher dicots	Rubiaceae	Cyclophyllum coprosmoides			C			3	0
plants	higher dicots	Rubiaceae	Gynochthodes jasminoides			C			11	1
plants	higher dicots	Rubiaceae	Atractocarpus fitzalanii			C			2	0
plants	higher dicots	Rubiaceae	Atractocarpus chartaceus			C			2	0
plants	higher dicots	Rubiaceae	Psychotria loniceroides	hairy psychotria		C			5	0
plants	higher dicots	Rubiaceae	Hodgkinsonia ovatiflora	golden ash		C			2	0
plants	higher dicots	Rubiaceae	Gynochthodes canthoides			C			1	0
plants	higher dicots	Rubiaceae	Gynochthodes umbellata			C			3	3
plants	higher dicots	Rubiaceae	Spermacoce brachystema			C			1	1
plants	higher dicots	Rutaceae	Halfordia kendack	saffron heart		C			2	0
plants	higher dicots	Rutaceae	Acronychia laevis	glossy acronychia		C			5	1
plants	higher dicots	Rutaceae	Zieria furfuracea			C			1	0
plants	higher dicots	Rutaceae	Boronia falcifolia	wallum boronia		C			2	0
plants	higher dicots	Rutaceae	Medicosma forsteri			C			1	1
plants	higher dicots	Rutaceae	Melicope elleryana			C			2	1
plants	higher dicots	Rutaceae	Zieria minutiflora			C			4	0
plants	higher dicots	Rutaceae	Bosistoa transversa	three-leaved bosistoa		C	V		3	2
plants	higher dicots	Rutaceae	Clausena brevistyla	clausena		C			1	1
plants	higher dicots	Rutaceae	Melicope micrococca	white evodia		C			1	0
plants	higher dicots	Rutaceae	Pentaceras australe	bastard crow's ash		C			2	1
plants	higher dicots	Rutaceae	Acronychia pubescens	hairy acronychia		C			7	5
plants	higher dicots	Rutaceae	Flindersia australis	crow's ash		C			1	0
plants	higher dicots	Rutaceae	Flindersia bennettii			C			5	1
plants	higher dicots	Rutaceae	Acronychia pauciflora	soft acronychia		C			2	0
plants	higher dicots	Rutaceae	Acronychia wilcoxiana	silver aspen		C			4	1
plants	higher dicots	Rutaceae	Flindersia schottiana	bumpy ash		C			7	1
plants	higher dicots	Rutaceae	Medicosma cunninghamii	pinkheart		C			5	3
plants	higher dicots	Rutaceae	Acronychia oblongifolia	common acronychia		C			1	0
plants	higher dicots	Rutaceae	Bouchardatia neurococca	union nut		C			3	1

plants	higher dicots	Rutaceae	Philotheca glasshousiensis			C	5	5
plants	higher dicots	Rutaceae	Zanthoxylum brachyacanthum			C	2	1
plants	higher dicots	Rutaceae	Zieria furfuracea subsp. euthadenia			C	1	1
plants	higher dicots	Rutaceae	Philotheca difformis subsp. smithiana			C	3	3
plants	higher dicots	Rutaceae	Zieria minutiflora subsp. minutiflora			C	2	2
plants	higher dicots	Rutaceae	Sarcomelicope simplicifolia subsp. simplicifolia	yellow aspen		C	3	2
plants	higher dicots	Rutaceae	Zieria laxiflora	wallum zieria		C	3	1
plants	higher dicots	Rutaceae	Zieria smithii			C	7	0
plants	higher dicots	Rutaceae	Eriostemon				1	0
plants	higher dicots	Rutaceae	Phebalium			C	2	0
plants	higher dicots	Rutaceae	Phebalium woombye	wallum phebalium		C	2	0
plants	higher dicots	Salicaceae	Scolopia braunii	flintwood		C	2	1
plants	higher dicots	Sapindaceae	Jagera pseudorhus			C	1	0
plants	higher dicots	Sapindaceae	Arytera divaricata	coogera		C	3	0
plants	higher dicots	Sapindaceae	Dodonaea triquetra	large-leaved hop bush		C	12	0
plants	higher dicots	Sapindaceae	Atalaya salicifolia			C	1	0
plants	higher dicots	Sapindaceae	Cupaniopsis serrata	smooth tuckeroo		C	6	1
plants	higher dicots	Sapindaceae	Sarcopteryx stipata	steelwood		C	1	0
plants	higher dicots	Sapindaceae	Alectryon tomentosus			C	1	0
plants	higher dicots	Sapindaceae	Alectryon reticulatus	wild quince		C	1	1
plants	higher dicots	Sapindaceae	Elattostachys nervosa	green tamarind		C	4	2
plants	higher dicots	Sapindaceae	Diploglottis australis	native tamarind		C	3	0
plants	higher dicots	Sapindaceae	Mischocarpus anodontus	veiny pearfruit		C	1	1
plants	higher dicots	Sapindaceae	Mischocarpus pyriformis			C	5	0
plants	higher dicots	Sapindaceae	Toechima tenax	pitted-leaf steelwood		C	3	0
plants	higher dicots	Sapindaceae	Guioa acutifolia	northern guioa		C	3	0
plants	higher dicots	Sapindaceae	Harpullia pendula			C	5	1
plants	higher dicots	Sapotaceae	Planchonella cotinifolia var. pubescens			C	1	0
plants	higher dicots	Sapotaceae	Planchonella chartacea			C	2	0
plants	higher dicots	Sapotaceae	Pleioluma queenslandica			C	5	1
plants	higher dicots	Sapotaceae	Planchonella myrsinifolia			C	2	1
plants	higher dicots	Sapotaceae	Planchonella australis			C	3	1
plants	higher dicots	Scrophulariaceae	Myoporum boninense subsp. australe			C	1	1
plants	higher dicots	Scrophulariaceae	Myoporum acuminatum	coastal boobialla		C	1	1
plants	higher dicots	Simaroubaceae	Ailanthus triphysa	white siris		C	1	0
plants	higher dicots	Sparrmanniaceae	Triumfetta rhomboidea	chinese burr	Y		1	1
plants	higher dicots	Sterculiaceae	Brachychiton discolor			C	1	0
plants	higher dicots	Sterculiaceae	Argyrodendron trifoliolatum	booyong		C	3	0
plants	higher dicots	Sterculiaceae	Brachychiton populneus subsp. populneus			C	1	0
plants	higher dicots	Sterculiaceae	Argyrodendron sp. (Kin Kin W.D.Francis AQ81198)	rusty tulip oak				
						C	2	0
plants	higher dicots	Sterculiaceae	Sterculia quadrifida	peanut tree		C	2	0
plants	higher dicots	Stylidiaceae	Stylidium tenerum			C	1	1
plants	higher dicots	Stylidiaceae	Stylidium debile	frail trigger plant		C	1	1
plants	higher dicots	Surianaceae	Guilfoylia monostylis	guilfoylia		C	3	1
plants	higher dicots	Symplocaceae	Symplocos stawellii			C	1	0
plants	higher dicots	Symplocaceae	Symplocos harroldii	hairy hazelwood		NT	18	13
plants	higher dicots	Symplocaceae	Symplocos			C	1	0
plants	higher dicots	Symplocaceae	Symplocos thwaitesii	buff hazelwood		C	3	0
plants	higher dicots	Thymelaeaceae	Wikstroemia indica	tie bush		C	4	2
plants	higher dicots	Thymelaeaceae	Pimelea linifolia			C	1	0

plants	higher dicots	Ulmaceae	Trema tomentosa var. aspera			C	1	0
plants	higher dicots	Ulmaceae	Celtis sinensis	Chinese elm	Y		1	1
plants	higher dicots	Ulmaceae	Celtis paniculata	native celtis		C	1	0
plants	higher dicots	Ulmaceae	Aphananthe philippinensis			C	5	0
plants	higher dicots	Urticaceae	Dendrocnide moroides	Gympie stinger		C	1	0
plants	higher dicots	Violaceae	Viola hederacea			C	1	0
plants	higher dicots	Violaceae	Afrohybanthus enneaspermus			C	1	0
plants	higher dicots	Violaceae	Viola betonicifolia subsp. betonicifolia			C	1	1
plants	higher dicots	Viscaceae	Notothixos cornifolius	kurrajong mistletoe		C	1	1
plants	higher dicots	Vitaceae	Cayratia clematidea	slender grape		C	1	0
plants	higher dicots	Vitaceae	Tetrastigma nitens	shining grape		C	2	0
plants	higher dicots	Vitaceae	Cissus hypoglauca			C	8	0
plants	higher dicots	Vitaceae	Cissus antarctica			C	3	0
plants	higher dicots	Vitaceae	Cissus sterculiifolia			C	1	0
plants	higher dicots	Vitaceae	Clematicissus opaca			C	1	1
plants	liverworts	Frullaniaceae	Frullania monocera var. depauperata			C	1	1
plants	liverworts	Frullaniaceae	Frullania rostrata			C	2	2
plants	liverworts	Frullaniaceae	Frullania allanii			C	1	1
plants	liverworts	Geocalycaceae	Chiloscyphus semiteres			C	3	3
plants	liverworts	Lejeuneaceae	Acrolejeunea aulacophora			C	1	1
plants	liverworts	Lepidoziaceae	Lepidozia			C	2	2
plants	liverworts	Liverwort	Liverwort			C	1	1
plants	lower dicots	Annonaceae	Melodorum leichhardtii			C	2	0
plants	lower dicots	Annonaceae	Polyalthia nitidissima	polyalthia		C	1	0
plants	lower dicots	Apocynaceae	Melodinus acutiflorus	bellbird vine		C	1	1
plants	lower dicots	Apocynaceae	Vincetoxicum carnosum			C	1	1
plants	lower dicots	Apocynaceae	Tabernaemontana pandacaqui	banana bush		C	5	1
plants	lower dicots	Apocynaceae	Hoya australis subsp. australis			C	1	0
plants	lower dicots	Apocynaceae	Cynanchum viminale subsp. brunonianum			C	1	1
plants	lower dicots	Apocynaceae	Parsonsia straminea	monkey rope		C	6	1
plants	lower dicots	Apocynaceae	Melodinus australis	southern melodinus		C	6	0
plants	lower dicots	Apocynaceae	Marsdenia hemiptera	rusty vine		C	1	1
plants	lower dicots	Apocynaceae	Parsonsia lilacina	crisped silkpod		C	1	1
plants	lower dicots	Apocynaceae	Neisosperma poweri			C	1	1
plants	lower dicots	Apocynaceae	Marsdenia fraseri	narrow-leaved milk vine		C	2	2
plants	lower dicots	Apocynaceae	Alyxia ruscifolia			C	4	0
plants	lower dicots	Apocynaceae	Alyxia magnifolia			C	10	3
plants	lower dicots	Apocynaceae	Parsonsia rotata	veinless silkpod		C	2	1
plants	lower dicots	Apocynaceae	Carissa ovata	currantbush		C	3	0
plants	lower dicots	Aristolochiaceae	Pararistolochia praevenosa			NT	1	0
plants	lower dicots	Atherospermataceae	Daphnandra apatela			C	1	0
plants	lower dicots	Boraginaceae	Echium plantagineum	Paterson's curse	Y		1	1
plants	lower dicots	Boraginaceae	Ehretia acuminata			C	1	0
plants	lower dicots	Cabombaceae	Cabomba caroliniana var. caroliniana	cabomba	Y		3	3
plants	lower dicots	Convolvulaceae	Ipomoea indica	blue morning-glory	Y		2	1
plants	lower dicots	Convolvulaceae	Ipomoea alba	moon flower	Y		1	1
plants	lower dicots	Convolvulaceae	Dichondra repens	kidney weed		C	1	0
plants	lower dicots	Eupomatiaceae	Eupomatia laurina	bolwarra		C	2	0
plants	lower dicots	Eupomatiaceae	Eupomatia bennettii	small bolwarra		C	2	1
plants	lower dicots	Lamiaceae	Plectranthus graveolens	flea bush		C	1	1
plants	lower dicots	Lamiaceae	Vitex melicopea			C	1	1

plants	lower dicots	Lamiaceae	Stachys arvensis	stagger weed	Y				1	1
plants	lower dicots	Lamiaceae	Westringia glabra			C			1	1
plants	lower dicots	Lamiaceae	Vitex lignum-vitae			C			1	0
plants	lower dicots	Lamiaceae	Gmelina leichhardtii	white beech		C			1	0
plants	lower dicots	Lamiaceae	Callicarpa pedunculata	velvet leaf		C			2	1
plants	lower dicots	Lamiaceae	Westringia tenuicaulis	tufted westringia		C			1	1
plants	lower dicots	Lamiaceae	Clerodendrum tomentosum			C			3	0
plants	lower dicots	Lamiaceae	Prostanthera spathulata			V	V		6	6
plants	lower dicots	Lamiaceae	Clerodendrum floribundum			C			3	0
plants	lower dicots	Lamiaceae	Plectranthus parviflorus			C			2	2
plants	lower dicots	Lauraceae	Endiandra sieberi	hard corkwood		C			6	0
plants	lower dicots	Lauraceae	Litsea			C			1	0
plants	lower dicots	Lauraceae	Cassytha glabella			C			1	0
plants	lower dicots	Lauraceae	Litsea leefeana			C			5	2
plants	lower dicots	Lauraceae	Cryptocarya			C			1	0
plants	lower dicots	Lauraceae	Endiandra			C			1	0
plants	lower dicots	Lauraceae	Cryptocarya macdonaldii	McDonald's laurel		C			10	3
plants	lower dicots	Lauraceae	Cryptocarya glaucescens			C			8	1
plants	lower dicots	Lauraceae	Beilschmiedia elliptica	grey walnut		C			2	0
plants	lower dicots	Lauraceae	Cryptocarya microneura	murrogun		C			4	1
plants	lower dicots	Lauraceae	Endiandra lowiana			C			2	2
plants	lower dicots	Lauraceae	Neolitsea australiensis	green bolly gum		C			1	0
plants	lower dicots	Lauraceae	Cryptocarya triplinervis var. pubens			C			1	0
plants	lower dicots	Lauraceae	Cryptocarya erythroxylon	pigeonberry ash		C			1	0
plants	lower dicots	Lauraceae	Cryptocarya laevigata			C			2	1
plants	lower dicots	Lauraceae	Cryptocarya obovata	pepperberry		C			1	1
plants	lower dicots	Lauraceae	Cryptocarya foetida	stinking cryptocarya		V	V		1	1
plants	lower dicots	Lauraceae	Cinnamomum camphora	camphor laurel	Y				3	1
plants	lower dicots	Lauraceae	Neolitsea dealbata	white bolly gum		C			7	1
plants	lower dicots	Lauraceae	Endiandra discolor	domatia tree		C			6	0
plants	lower dicots	Lauraceae	Cinnamomum oliveri	Oliver's sassafras		C			1	0
plants	lower dicots	Lauraceae	Cassytha pubescens	downy devil's twine		C			4	0
plants	lower dicots	Lauraceae	Litsea reticulata			C			2	0
plants	lower dicots	Lauraceae	Beilschmiedia obtusifolia	hard bolly gum		C			2	0
plants	lower dicots	Lauraceae	Cryptocarya triplinervis			C			1	0
plants	lower dicots	Lauraceae	Cryptocarya sclerophylla	totempole		C			5	4
plants	lower dicots	Linderniaceae	Artanema fimbriatum			C			2	2
plants	lower dicots	Linderniaceae	Lindernia crustacea			C			1	1
plants	lower dicots	Loganiaceae	Strychnos psilosperma	strychnine tree		C			2	2
plants	lower dicots	Loganiaceae	Logania albiflora			C			5	2
plants	lower dicots	Menispermaceae	Stephania japonica var. discolor			C			1	0
plants	lower dicots	Menispermaceae	Stephania japonica			C			3	0
plants	lower dicots	Menispermaceae	Pleogyne australis	wiry grape		C			1	0
plants	lower dicots	Menispermaceae	Hypserpa decumbens			C			2	1
plants	lower dicots	Menispermaceae	Legnephora moorei			C			1	0
plants	lower dicots	Menispermaceae	Carronia multisepalea			C			3	1
plants	lower dicots	Menispermaceae	Tinospora smilacina	snakevine		C			1	0
plants	lower dicots	Menyanthaceae	Nymphoides indica	water snowflake		C			1	1
plants	lower dicots	Monimiaceae	Wilkiea austroqueenslandica	smooth wilkiea		C			1	0
plants	lower dicots	Monimiaceae	Wilkiea macrophylla	large-leaved wilkiea		C			3	0
plants	lower dicots	Monimiaceae	Wilkiea huegeliana	veiny wilkiea		C			6	0

plants	lower dicots	Piperaceae	Piper			C	1	0
plants	lower dicots	Piperaceae	Piper hederaceum			C	2	0
plants	lower dicots	Piperaceae	Peperomia tetraphylla			C	1	1
plants	lower dicots	Ranunculaceae	Ranunculus sessiliflorus var. sessiliflorus			C	1	1
plants	lower dicots	Solanaceae	Solanum seaforthianum	Brazilian nightshade	Y		1	0
plants	lower dicots	Solanaceae	Solanum			C	2	0
plants	lower dicots	Solanaceae	Duboisia				1	0
plants	lower dicots	Solanaceae	Browallia viscosa		Y		1	1
plants	lower dicots	Solanaceae	Solanum densevestitum			C	1	1
plants	lower dicots	Solanaceae	Duboisia myoporoides			C	2	1
plants	lower dicots	Verbenaceae	Lantana camara	lantana	Y		6	0
plants	lower dicots	Verbenaceae	Verbena incompta		Y		1	1
plants	lower dicots	Verbenaceae	Duranta erecta	duranta	Y		2	2
plants	lower dicots	Winteraceae	Tasmannia insipida	brush pepperbush		C	6	1
plants	monocots	Alismataceae	Sagittaria platyphylla	sagittaria	Y		2	2
plants	monocots	Araceae	Alocasia brisbanensis			C	1	0
plants	monocots	Araceae	Gymnostachys anceps	settler's flax		C	6	0
plants	monocots	Araceae	Pothos longipes			C	2	1
plants	monocots	Arecaceae	Linospadix monostachyos	walking stick palm		C	3	0
plants	monocots	Arecaceae	Livistona australis	cabbage tree palm		C	21	0
plants	monocots	Arecaceae	Calamus muelleri	lawyer vine		C	8	0
plants	monocots	Arecaceae	Archontophoenix cunninghamiana	piccabeen palm		C	10	0
plants	monocots	Burmanniaceae	Burmannia disticha			C	1	1
plants	monocots	Commelinaceae	Callisia repens		Y		1	1
plants	monocots	Commelinaceae	Tradescantia fluminensis		Y		1	1
plants	monocots	Cyperaceae	Gahnia aspera			C	7	0
plants	monocots	Cyperaceae	Scleria levis			C	1	1
plants	monocots	Cyperaceae	Caustis blakei			C	3	0
plants	monocots	Cyperaceae	Gahnia clarkei	tall sawsedge		C	14	2
plants	monocots	Cyperaceae	Fimbristylis furva			C	1	1
plants	monocots	Cyperaceae	Cyperus pilosus			C	1	1
plants	monocots	Cyperaceae	Cyperus bowmanni			C	1	1
plants	monocots	Cyperaceae	Cyperus prolifer	dwarf papyrus	Y		1	1
plants	monocots	Cyperaceae	Baumea rubiginosa	soft twigrush		C	1	1
plants	monocots	Cyperaceae	Carex breviculmis			C	1	1
plants	monocots	Cyperaceae	Carex horsfieldii			C	1	1
plants	monocots	Cyperaceae	Caustis recurvata			C	3	0
plants	monocots	Cyperaceae	Cyperus aquatilis			C	1	1
plants	monocots	Cyperaceae	Fuirena umbellata			C	1	1
plants	monocots	Cyperaceae	Gahnia sieberiana	sword grass		C	1	0
plants	monocots	Cyperaceae	Isolepis inundata	swamp club rush		C	2	2
plants	monocots	Cyperaceae	Cyperus leiocaulon			C	1	1
plants	monocots	Cyperaceae	Rhynchospora rubra			C	1	1
plants	monocots	Cyperaceae	Schoenus vaginatus			C	1	1
plants	monocots	Cyperaceae	Scleria sphacelata			C	1	0
plants	monocots	Cyperaceae	Cyperus curvistylis			C	1	1
plants	monocots	Cyperaceae	Cyperus sphacelatus		Y		1	1
plants	monocots	Cyperaceae	Fimbristylis velata			C	1	1
plants	monocots	Cyperaceae	Tetraria capillaris			C	1	1
plants	monocots	Cyperaceae	Cyathochaeta diandra	sheath rush		C	1	1
plants	monocots	Cyperaceae	Schoenus brevifolius			C	5	1

plants	monocots	Cyperaceae	Schoenus yarrabensis			C	1	1
plants	monocots	Cyperaceae	Eleocharis equisetina			C	3	3
plants	monocots	Cyperaceae	Lepidosperma laterale			C	7	0
plants	monocots	Cyperaceae	Cyperus stradbrokensis			C	2	2
plants	monocots	Cyperaceae	Fimbristylis dichotoma	common fringe-rush		C	1	1
plants	monocots	Cyperaceae	Fimbristylis ferruginea			C	1	1
plants	monocots	Cyperaceae	Fimbristylis depauperata			C	1	1
plants	monocots	Cyperaceae	Fimbristylis schoenoides			C	1	1
plants	monocots	Cyperaceae	Schoenus apogon var. apogon			C	1	1
plants	monocots	Cyperaceae	Caustis blakei subsp. blakei			C	4	4
plants	monocots	Cyperaceae	Baumea juncea	bare twigrush		C	1	1
plants	monocots	Cyperaceae	Carex brunnea			C	2	2
plants	monocots	Dioscoreaceae	Dioscorea transversa	native yam		C	4	1
plants	monocots	Flagellariaceae	Flagellaria indica	whip vine		C	11	0
plants	monocots	Hemerocallidaceae	Dianella			C	2	1
plants	monocots	Hemerocallidaceae	Dianella caerulea			C	10	0
plants	monocots	Hemerocallidaceae	Geitonoplesium cymosum	scrambling lily		C	10	1
plants	monocots	Hypoxidaceae	Hypoxis pratensis var. pratensis			C	1	1
plants	monocots	Iridaceae	Patersonia fragilis			C	2	0
plants	monocots	Juncaceae	Juncus cognatus		Y		1	1
plants	monocots	Juncaceae	Juncus prismatocarpus	branching rush		C	1	1
plants	monocots	Juncaginaceae	Triglochin striata	streaked arrowgrass		C	1	1
plants	monocots	Laxmanniaceae	Lomandra laxa	broad-leaved matrush		C	2	2
plants	monocots	Laxmanniaceae	Cordyline rubra	red-fruited palm lily		C	11	0
plants	monocots	Laxmanniaceae	Lomandra hystrix			C	2	0
plants	monocots	Laxmanniaceae	Sowerbaea juncea	vanilla plant		C	1	0
plants	monocots	Laxmanniaceae	Lomandra confertifolia subsp. confertifolia			C	2	2
plants	monocots	Laxmanniaceae	Lomandra multiflora			C	7	0
plants	monocots	Laxmanniaceae	Cordyline petiolaris	large-leaved palm lily		C	1	0
plants	monocots	Laxmanniaceae	Lomandra confertifolia			C	5	0
plants	monocots	Laxmanniaceae	Lomandra multiflora subsp. multiflora			C	1	0
plants	monocots	Laxmanniaceae	Lomandra longifolia			C	11	0
plants	monocots	Orchidaceae	Arthrochilus			C	1	0
plants	monocots	Orchidaceae	Cymbidium suave			C	1	0
plants	monocots	Orchidaceae	Corybas barbarae	helmet orchid		C	4	4
plants	monocots	Orchidaceae	Cymbidium madidum			C	1	0
plants	monocots	Orchidaceae	Arthrochilus irritabilis	leafy elbow orchid		C	1	1
plants	monocots	Orchidaceae	Cryptostylis subulata	large tounge orchid		C	4	3
plants	monocots	Orchidaceae	Pterostylis baptistii	king greenhood		C	2	2
plants	monocots	Orchidaceae	Acianthus amplexicaulis			C	1	1
plants	monocots	Orchidaceae	Geodorum densiflorum	pink nodding orchid		C	1	0
plants	monocots	Pandanaceae	Freycinetia scandens			C	1	0
plants	monocots	Poaceae	Echinochloa telmatophila	swamp barnyard grass		C	1	1
plants	monocots	Poaceae	Rytidosperma longifolium			C	1	0
plants	monocots	Poaceae	Cymbopogon queenslandicus			C	1	1
plants	monocots	Poaceae	Aristida benthamii var. benthamii			C	1	1
plants	monocots	Poaceae	Ottochloa			C	2	0
plants	monocots	Poaceae	Melinis repens	red natal grass	Y		1	0
plants	monocots	Poaceae	Panicum simile			C	1	1
plants	monocots	Poaceae	Panicum effusum			C	1	0
plants	monocots	Poaceae	Urochloa mutica		Y		1	1

plants	monocots	Poaceae	Ottochloa nodosa			C	3	1
plants	monocots	Poaceae	Sporobolus laxus			C	1	1
plants	monocots	Poaceae	Themeda triandra	kangaroo grass		C	17	0
plants	monocots	Poaceae	Entolasia stricta	wiry panic		C	7	0
plants	monocots	Poaceae	Digitaria ciliaris	summer grass	Y		1	1
plants	monocots	Poaceae	Eragrostis curvula		Y		1	1
plants	monocots	Poaceae	Setaria palmifolia	palm grass	Y		1	1
plants	monocots	Poaceae	Setaria sphacelata		Y		1	1
plants	monocots	Poaceae	Imperata cylindrica	blady grass		C	9	0
plants	monocots	Poaceae	Melinis minutiflora	molasses grass	Y		3	2
plants	monocots	Poaceae	Paspalum plicatulum	plicatulum	Y		2	2
plants	monocots	Poaceae	Cymbopogon refractus	barbed-wire grass		C	4	0
plants	monocots	Poaceae	Paspalum mandiocanum		Y		1	1
plants	monocots	Poaceae	Paspalum paniculatum	Russell River grass	Y		1	1
plants	monocots	Poaceae	Sporobolus africanus	Parramatta grass	Y		1	1
plants	monocots	Poaceae	Cenchrus purpurascens			C	1	1
plants	monocots	Poaceae	Eragrostis unioloides		Y		1	1
plants	monocots	Poaceae	Oplismenus imbecillis			C	1	1
plants	monocots	Poaceae	Sporobolus natalensis		Y		1	1
plants	monocots	Poaceae	Sporobolus pyramidalis		Y		1	1
plants	monocots	Poaceae	Urochloa subquadripara		Y		1	1
plants	monocots	Pontederiaceae	Pontederia cordata		Y		1	1
plants	monocots	Restionaceae	Empodisma minus	spreading rope rush		C	1	0
plants	monocots	Restionaceae	Leptocarpus tenax			C	1	1
plants	monocots	Restionaceae	Lepyrodia imitans			C	2	2
plants	monocots	Restionaceae	Baloskion tetraphyllum			C	1	0
plants	monocots	Restionaceae	Baloskion tetraphyllum subsp. meiostachyum			C	4	0
plants	monocots	Ripogonaceae	Ripogonum elseyanum	hairy supplejack		C	1	0
plants	monocots	Ripogonaceae	Ripogonum brevifolium	small-leaved supplejack		C	1	0
plants	monocots	Smilacaceae	Smilax australis	barbed-wire vine		C	9	0
plants	monocots	Smilacaceae	Smilax glyciphylla	sweet sarsaparilla		C	6	0
plants	monocots	Typhaceae	Sparganium subglobosum	floating bur-reed		C	1	1
plants	monocots	Xanthorrhoeaceae	Xanthorrhoea latifolia			C	1	0
plants	monocots	Xanthorrhoeaceae	Xanthorrhoea macronema			C	5	0
plants	monocots	Xanthorrhoeaceae	Xanthorrhoea fulva	swamp grasstree		C	2	0
plants	monocots	Xanthorrhoeaceae	Xanthorrhoea johnsonii			C	1	0
plants	monocots	Xanthorrhoeaceae	Xanthorrhoea latifolia subsp. latifolia			C	1	0
plants	monocots	Xyridaceae	Xyris complanata	yellow-eye		C	1	0
plants	monocots	Zingiberaceae	Alpinia caerulea	wild ginger		C	6	0
plants	monocots	Zingiberaceae	Alpinia arundelliana			C	1	0
plants	monocots	Zingiberaceae	Hedychium gardnerianum	ginger lily	Y		1	1
plants	mosses	Aulacomniaceae	Mesochaete undulata			C	1	1
plants	mosses	Bryophyte	Bryophyte			C	7	7
plants	mosses	Calymperaceae	Syrrhopodon armatus			C	2	2
plants	mosses	Dicranaceae	Sclerodontium pallidum subsp. pallidum			C	1	1
plants	mosses	Fissidentaceae	Fissidens			C	1	1
plants	mosses	Fissidentaceae	Fissidens pallidus			C	1	1
plants	mosses	Funariaceae	Funaria			C	2	2
plants	mosses	Hypnaceae	Hypnum cupressiforme			C	1	1
plants	mosses	Leucobryaceae	Leucobryum candidum			C	1	1
plants	mosses	Leucobryaceae	Campylopus			C	2	2

plants	mosses	Leucobryaceae	Leucobryum		C	1	1
plants	mosses	Leucobryaceae	Campylopus clavatus		C	1	1
plants	mosses	Leucobryaceae	Campylopus introflexus		C	2	2
plants	mosses	Orthotrichaceae	Macromitrium repandum		C	1	1
plants	mosses	Rhizogoniaceae	Pyrrhobryum		C	1	1
plants	mosses	Rhizogoniaceae	Pyrrhobryum paramattense		C	1	1
plants	mosses	Sematophyllaceae	Sematophyllum subpinnatum		C	1	1
plants	uncertain	Indet.	Indet.		C	14	0
plants		Lygodiaceae	Lygodium microphyllum	snake fern	C	2	1
plants		Pylaisiadelphaceae	Wijkia extenuata		C	1	1
plants		Pylaisiadelphaceae	Wijkia		C	1	1
plants		Tectariaceae	Arthropteris tenella	climbing fern	C	1	0

Department of Natural Resources, Mines and Energy

Vegetation management report

For Lot: 5 Plan: RP209009

Current as at 03/09/2018

Queensland Government

This publication has been compiled by Operations Support, Department of Natural Resources, Mines and Energy.

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, 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. 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. 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. 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 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: 5 Plan: RP209009, 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
5	RP209009	Freehold	https://apps.information.qld.gov.au/data/cadastre/GenerateSmartMap?q=5\RP209009

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: 5 Plan: RP209009, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)
Noosa Shire

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

Catchment(s)
Mary

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: 5 Plan: RP209009

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: 8.07ha

Vegetation category	Area (ha)
Category X	8.07

Table 4

Category	Colour on Map	Description	Requirements / options
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 is considered accepted development on freehold land, indigenous land and leasehold land for agriculture and grazing purposes. 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
non-rem	None	X	8.07	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

No records

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.

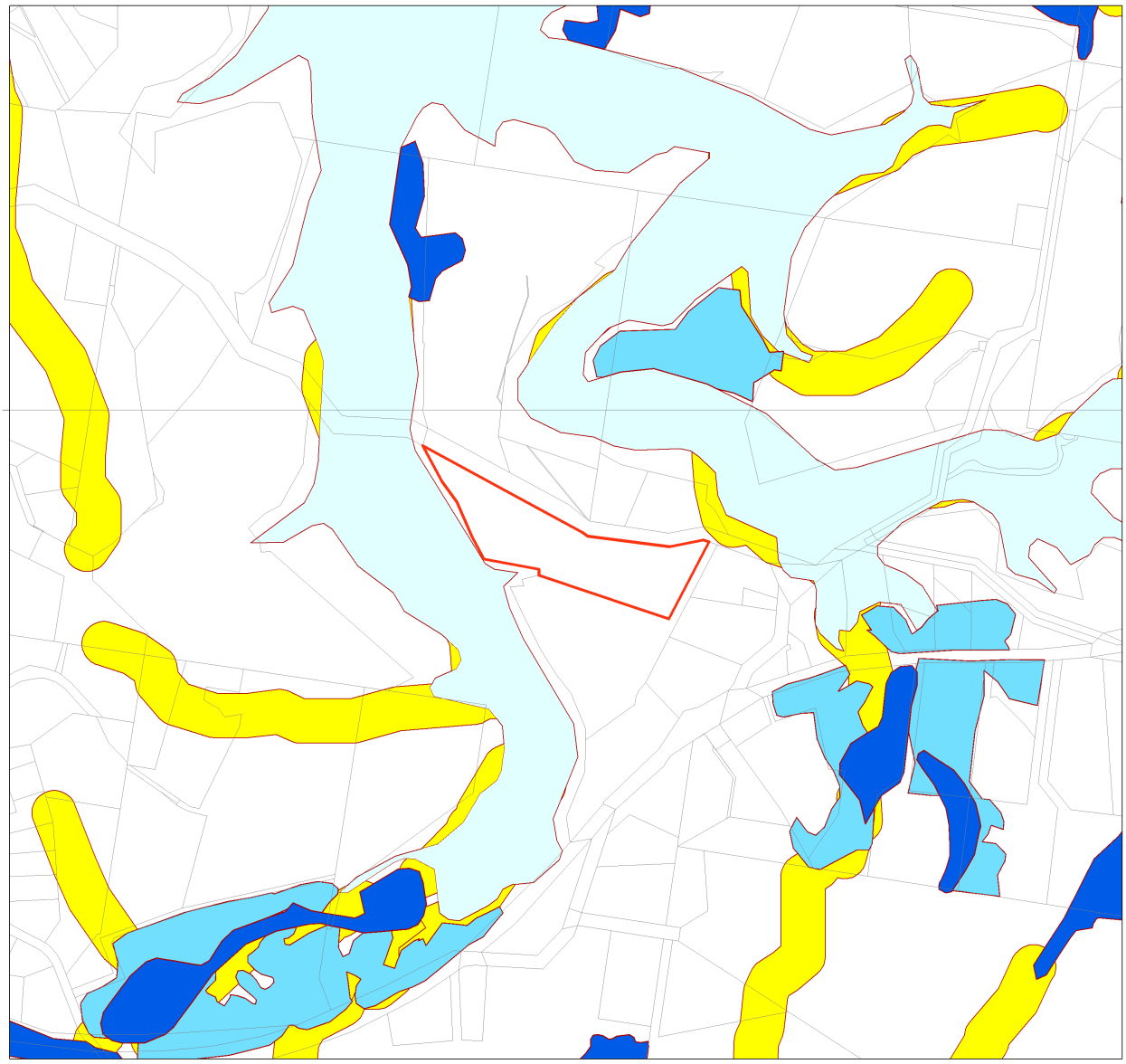
Coastal/non coastal map

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

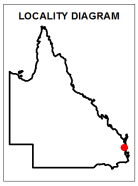


Regulated Vegetation Management Map

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

0 130 260 390 520 650 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.

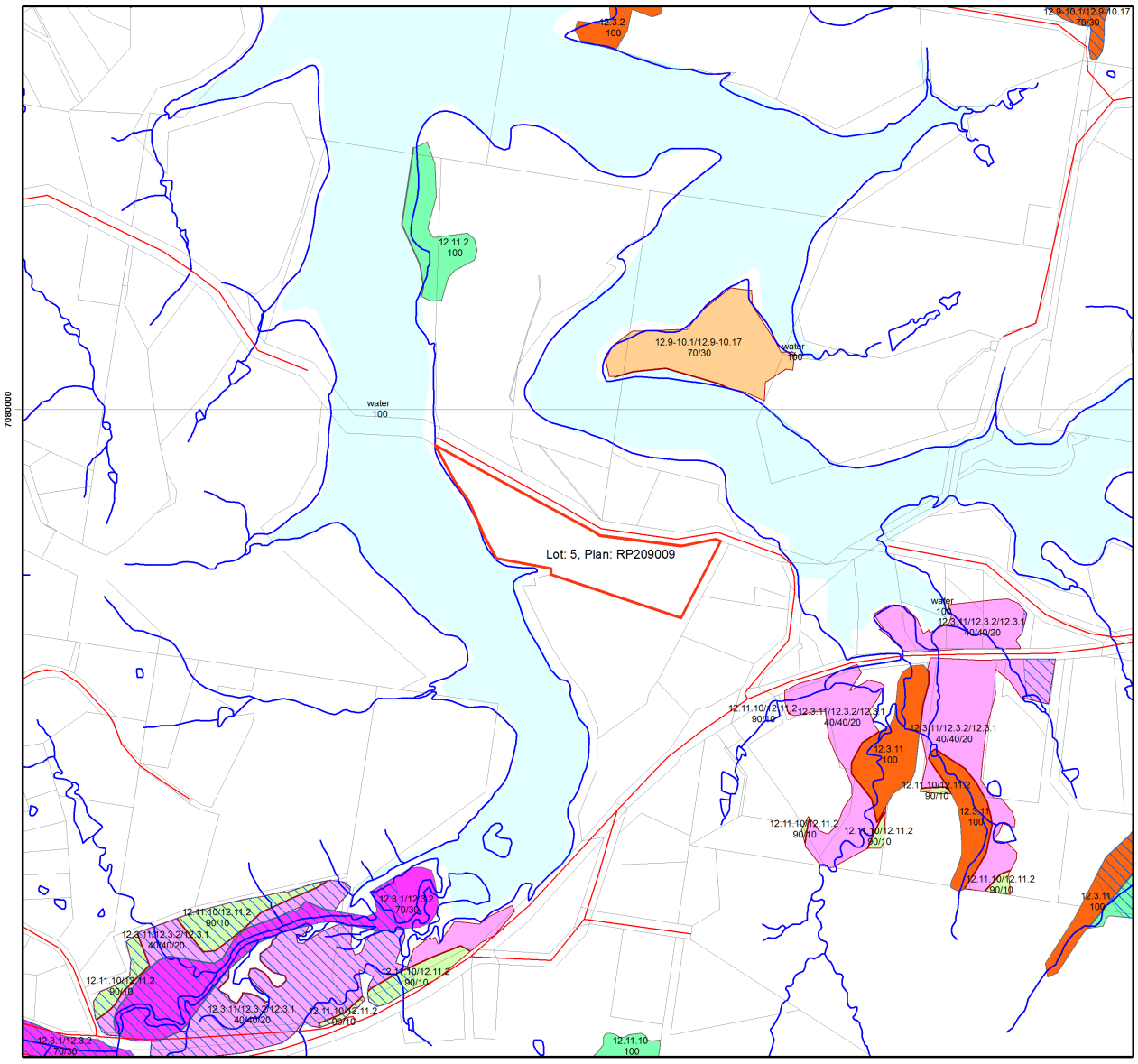
Additional information required for the assessment of vegetation values is provided in the accompanying "Vegetation Management Supporting map". For further information go to the web site: www.dnrme.qld.gov.au or contact the Department of Natural Resources, Mines and Energy.

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



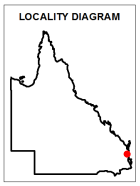
Vegetation Management Supporting Map

Legend

- Lot and Plan
- Category A or B area containing endangered regional ecosystems
- Category A or B area containing of concern regional ecosystems
- Category A or B area that is a least concern regional ecosystem
- Category A or B area under Section 20AH
  These areas are edged in yellow and filled with the remnant RE Status
- Category C area containing endangered regional ecosystems
- Category C area containing of concern regional ecosystems
- Category C area that is a least concern regional ecosystem
- Category C area under Section 20AI
  These areas are edged in purple and filled with the remnant RE Status
- Non Remnant
- Water
- Wetland on the vegetation management wetlands map
- Essential habitat on the essential habitat map
- Essential habitat species record
- Watercourses and drainage features on the vegetation management watercourse and drainage features map
  (Stream order shown as black number against stream where available)
- Roads
- National Parks, State Forest and other reserves
- Cadastral line
  Property boundaries shown are provided as a locational aid only

Queensland Government

LOCALITY DIAGRAM



N

0 100 200 300 400 500 m

This product is projected into:
GDA 1994 MGA Zone 56

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

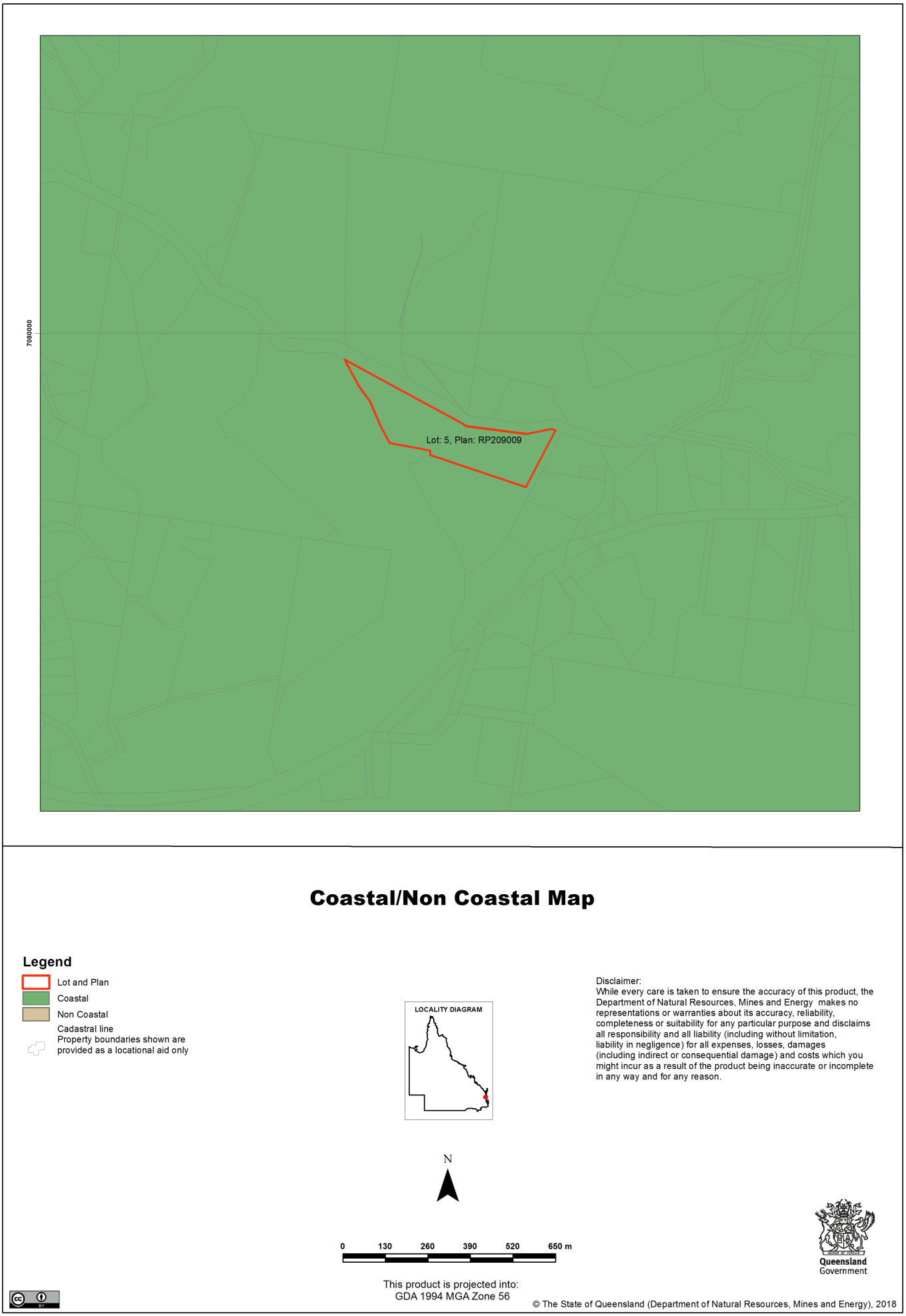
Regional ecosystem linework has been compiled at a scale of 1:100 000, except in designated areas where a compilation scale of 1:50 000 is available. Linework should be used as a guide only. The positional accuracy of RE data mapped at a scale of 1:100 000 is +/- 100 metres.

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

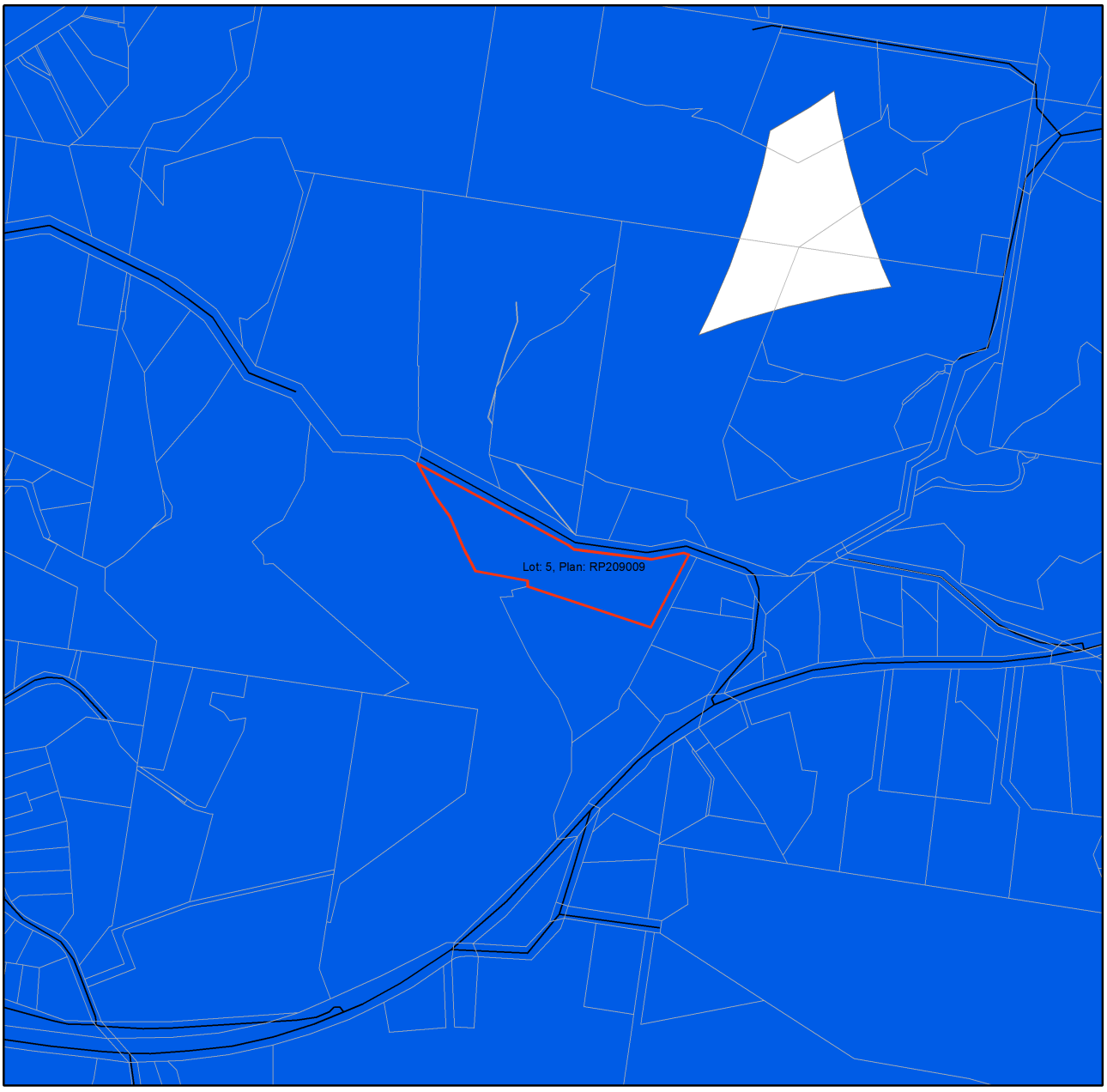
Additional information may be required for the purposes of land clearing or assessment of a regional ecosystem map or PMAV applications. For further information go to the web site: www.dnrme.qld.gov.au or contact the Department of Natural Resources, Mines and Energy.

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

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

0 100 200 300 400 500 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*	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.

Department of Natural Resources, Mines and Energy

Vegetation management report

For Lot: 1 Plan: RP193959

Current as at 03/09/2018

Queensland Government

This publication has been compiled by Operations Support, Department of Natural Resources, Mines and Energy.

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, 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. 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. 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. 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 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: 1 Plan: RP193959, 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
1	RP193959	Freehold	https://apps.information.qld.gov.au/data/cadastre/GenerateSmartMap?q=1\RP193959
C	RP193959	Easement	https://apps.information.qld.gov.au/data/cadastre/GenerateSmartMap?q=C\RP193959

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: 1 Plan: RP193959, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)
Noosa Shire

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

Catchment(s)
Mary

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: 1 Plan: RP193959

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: 14.91ha

Vegetation category	Area (ha)
Category B	3.97
Category C	8.94
Category R	1.04
Category X	0.96

Table 4

Category	Colour on Map	Description	Requirements / options
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 is considered accepted development on freehold land, indigenous land and leasehold land for agriculture and grazing purposes. 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
12.11.10	Least concern	C	2.04	Notophyll vine forest +/- Araucaria cunninghamii on metamorphics +/- interbedded volcanics	Dense
12.11.2	Least concern	C	0.23	Eucalyptus saligna subsp. saligna or E. grandis, E. microcorys, Lophostemon confertus tall open forest on metamorphics +/- interbedded volcanics	Mid-dense
12.3.1	Endangered	B	2.78	Gallery rainforest (notophyll vine forest) on alluvial plains	Dense
12.3.1	Endangered	C	1.33	Gallery rainforest (notophyll vine forest) on alluvial plains	Dense
12.3.11	Of concern	C	2.67	Eucalyptus tereticornis +/- Eucalyptus siderophloia, Corymbia intermedia open forest on alluvial plains usually near coast	Mid-dense
12.3.2	Of concern	B	1.19	Eucalyptus grandis tall open forest on alluvial plains	Mid-dense
12.3.2	Of concern	C	2.67	Eucalyptus grandis tall open forest on alluvial plains	Mid-dense
non-rem	None	R	1.04	None	None
non-rem	None	X	0.96	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
7608	Symplocos harroldii	hairy hazelwood	NT	microphyll vine forest; simple notophyll to complex notophyll vine forest; riparian rainforest sometimes with Melaleuca quinquenervia, Eucalyptus tereticornis, or Eucalyptus grandis emergents; tall to very tall open forest of Eucalyptus grandis, E. resinifera and Syncarpia glomulifera; wet sclerophyll forest of Lophostemon confertus, Eucalyptus grandis, Araucaria cunninghamii and Agathis robusta emergents; woodland to tall open forest Eucalyptus spp. with rainforest species understorey along drainage lines	0 to 300 m	sand, loam to clay loam soil sometimes shallow and stony	creek bank, alluvial terrace, stony ridge or hill slope

Label	Regional Ecosystem (mandatory unless otherwise specified)
7608	12.2.3, 12.3.1, 12.3.20, 12.3.11, 12.9-10.16, 12.11.5, 12.11.10

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.

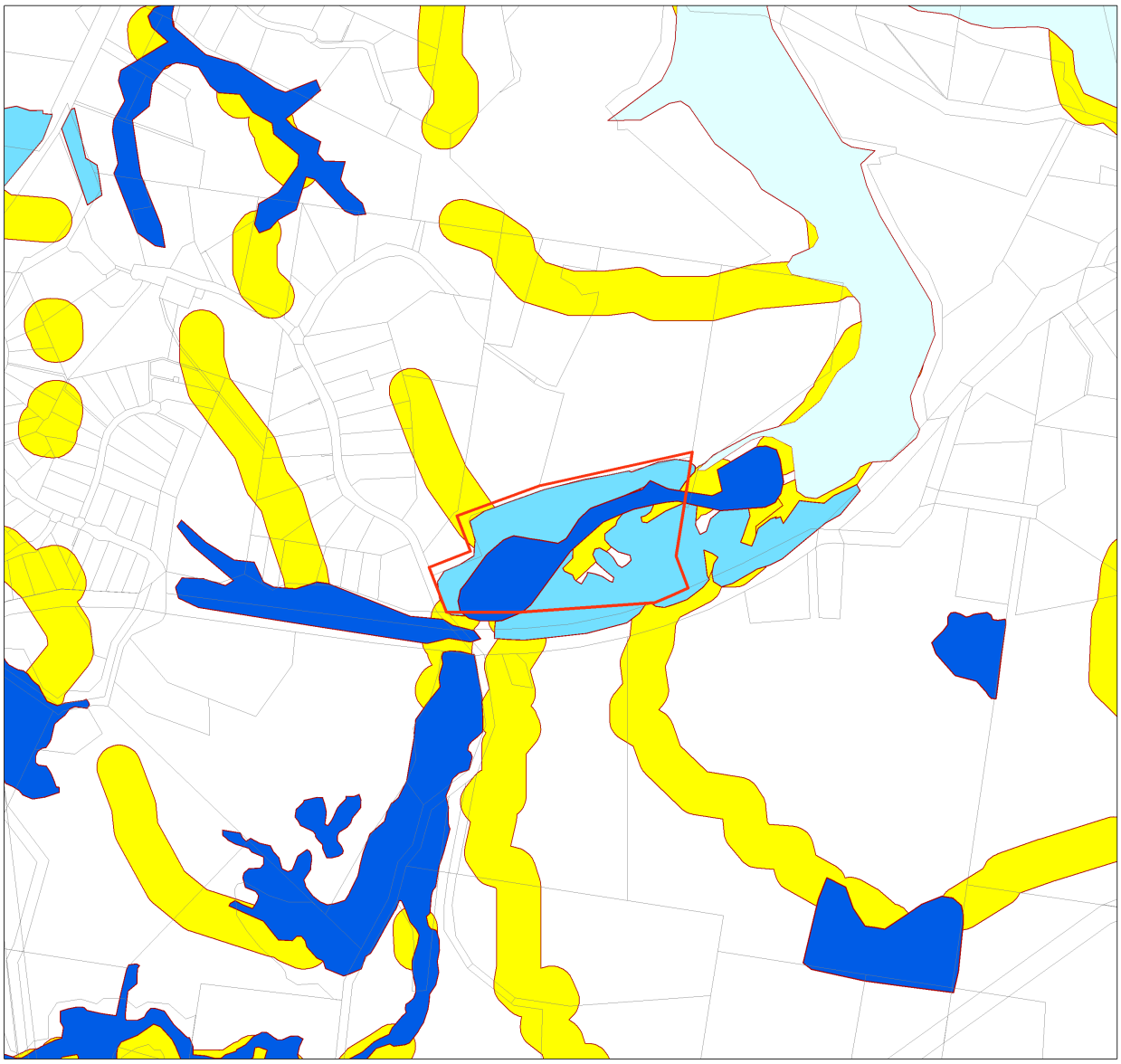
Coastal/non coastal map

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

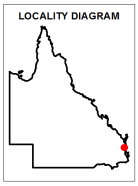


Regulated Vegetation Management Map

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

0 130 260 390 520 650 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.

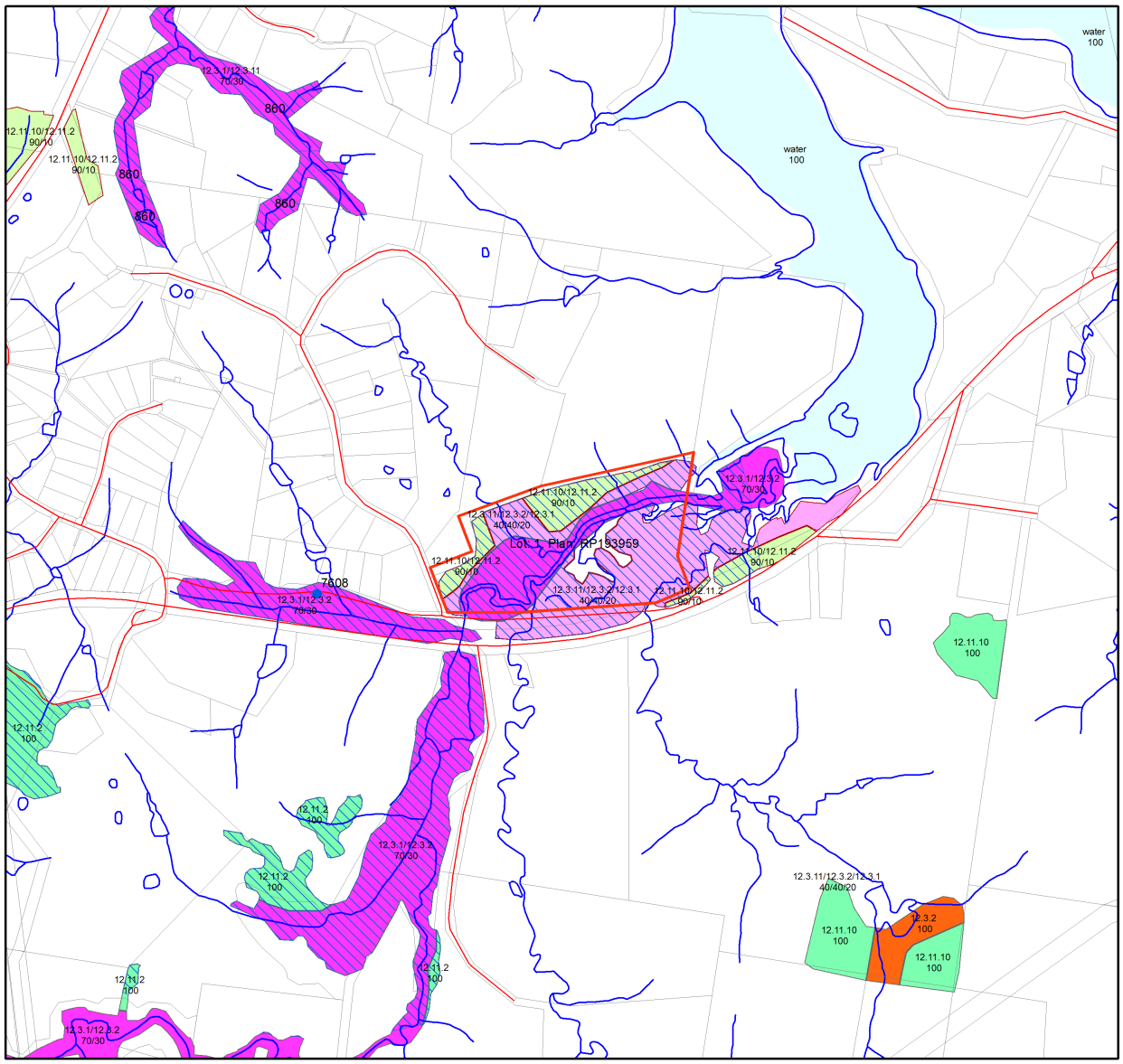
Additional information required for the assessment of vegetation values is provided in the accompanying "Vegetation Management Supporting map". For further information go to the web site: www.dnrme.qld.gov.au or contact the Department of Natural Resources, Mines and Energy.

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



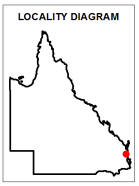
Vegetation Management Supporting Map

Legend

- Lot and Plan
- Category A or B area containing endangered regional ecosystems
- Category A or B area containing of concern regional ecosystems
- Category A or B area that is a least concern regional ecosystem
- Category A or B area under Section 20AH
  These areas are edged in yellow and filled with the remnant RE Status
- Category C area containing endangered regional ecosystems
- Category C area containing of concern regional ecosystems
- Category C area that is a least concern regional ecosystem
- Category C area under Section 20AI
  These areas are edged in purple and filled with the remnant RE Status
- Non Remnant
- Water
- Wetland on the vegetation management wetlands map
- Essential habitat on the essential habitat map
- Essential habitat species record
- Watercourses and drainage features on the vegetation management watercourse and drainage features map
  (Stream order shown as black number against stream where available)
- Roads
- National Parks, State Forest and other reserves
- Cadastral line
  Property boundaries shown are provided as a locational aid only

Queensland Government

LOCALITY DIAGRAM



N

0 100 200 300 400 500 m

This product is projected into:
GDA 1994 MGA Zone 56

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

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

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

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

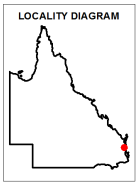
5.3 Coastal/non coastal map

Coastal/Non Coastal Map

Legend

- Lot and Plan
- Coastal
- Non Coastal
- Cadastral line
  Property boundaries shown are provided as a locational aid only

LOCALITY DIAGRAM



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N

0 130 260 390 520 650 m

This product is projected into:
GDA 1994 MGA Zone 56

Queensland Government

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

0 100 200 300 400 500 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*	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.

Department of Natural Resources, Mines and Energy

Vegetation management report

For Lot: 118 Plan: MCH814

Current as at 03/09/2018

Queensland Government

This publication has been compiled by Operations Support, Department of Natural Resources, Mines and Energy.

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, 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. 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. 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. 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 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: 118 Plan: MCH814, 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
118	MCH814	Freehold	https://apps.information.qld.gov.au/data/cadastre/GenerateSmartMap?q=118\MCH814
C	SP236975	Easement	https://apps.information.qld.gov.au/data/cadastre/GenerateSmartMap?q=C\SP236975
B	SP236975	Easement	https://apps.information.qld.gov.au/data/cadastre/GenerateSmartMap?q=B\SP236975
D	SP267259	Easement	https://apps.information.qld.gov.au/data/cadastre/GenerateSmartMap?q=D\SP267259

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: 118 Plan: MCH814, in relation to natural and administrative boundaries.

Table 2: Property location details

Local Government(s)
Noosa Shire

Bioregion(s)	Subregion(s)
Southeast Queensland	Sunshine Coast - Gold Coast Lowlands
Southeast Queensland	Great Sandy

Catchment(s)
Mary

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: 118 Plan: MCH814

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: 65.73ha

Vegetation category	Area (ha)
Category B	8.16
Category R	0.77
Category Water	46.58
Category X	10.22

Table 4

Category	Colour on Map	Description	Requirements / options
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 is considered accepted development on freehold land, indigenous land and leasehold land for agriculture and grazing purposes. 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
12.3.2	Of concern	B	4.00	Eucalyptus grandis tall open forest on alluvial plains	Mid-dense
12.9-10.1	Of concern	B	2.50	Tall open forest often with Eucalyptus resinifera, E. grandis, E. robusta, Corymbia intermedia on sedimentary rocks. Coastal	Mid-dense
12.9-10.17	Least concern	B	1.67	Eucalyptus acmenoides, E. major, E. siderophloia +/- Corymbia citriodora subsp. variegata woodland on sedimentary rocks	Sparse
non-rem	None	R	0.77	None	None
non-rem	None	X	10.22	None	None
water	None	Water	46.58	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
1171	Calyptorhynchus lathami	glossy black-cockatoo	V	Lowland and highland eucalypt forest and woodland, including riparian, callitris and brigalow scrub areas, with Casuarina (C. glauca, C. cristata)/Allocasuarina spp. (A. torulosa, A. littoralis). Nest in large vertical hollow (1-2m deep, 25-50cm diameter) up to 28m above ground in tall slightly isolated tree usually near principal food source (Allocasuarina/Casuarina).	Sea level to 1200m.	None	None
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.
595	Litoria pearsoniana	cascade tree frog	V	Under stones and in low vegetation along relatively large (upstream catchment volume >1000GL) fast flowing rocky streams in subtropical vine forest (complex notophyll) and wet sclerophyll forest, especially where palms present in midstorey, and occasionally along perennial densely vegetated streams in open forest adjacent to rainforest.	100-1000m.	None	Near/in streams.
676	Mixophyes iteratus	giant barred frog	E	Adjacent to slow-moving permanent streams (up to 7m wide) and rivers in lowland open/moist forest (e.g. Eucalyptus grandis, E. saligna), uncommon beside shallow, rocky streams (>2m wide) with rapids in montane subtropical vine forest/rainforest and moist eucalypt forest.	100-1000m	None	Near watercourses.
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

Label	Scientific Name	Common Name	NCA Status	Vegetation Community	Altitude	Soils	Position in Landscape
7608	Symplocos harroldii	hairy hazelwood	NT	microphyll vine forest; simple notophyll to complex notophyll vine forest; riparian rainforest sometimes with Melaleuca quinquenervia, Eucalyptus tereticornis, or Eucalyptus grandis emergents; tall to very tall open forest of Eucalyptus grandis, E. resinifera and Syncarpia glomulifera; wet sclerophyll forest of Lophostemon confertus, Eucalyptus grandis, Araucaria cunninghamii and Agathis robusta emergents; woodland to tall open forest Eucalyptus spp. with rainforest species understorey along drainage lines	0 to 300 m	sand, loam to clay loam soil sometimes shallow and stony	creek bank, alluvial terrace, stony ridge or hill slope

Label	Regional Ecosystem (mandatory unless otherwise specified)
1171	6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5, 6.3.8, 6.3.9, 6.3.16, 6.3.17, 6.3.18, 6.3.24, 6.3.25, 6.4.1, 6.4.2, 6.4.3, 6.5.1, 6.5.2, 6.5.3, 6.5.5, 6.5.17, 6.5.19, 6.7.2, 6.7.5, 6.7.6, 8.2.1, 8.2.3, 8.2.4, 8.2.6, 8.2.7, 8.2.8, 8.2.12, 8.2.13, 8.2.14, 8.3.2, 8.3.3, 8.3.5, 8.3.6, 8.3.8, 8.3.11, 8.3.13, 8.5.1, 8.5.2, 8.5.3, 8.5.5, 8.5.6, 8.9.1, 8.11.1, 8.11.3, 8.11.4, 8.11.5, 8.11.6, 8.11.8, 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, 8.12.31, 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, 9.3.9, 9.3.11, 9.3.13, 9.3.14, 9.3.15, 9.3.16, 9.3.17, 9.3.18, 9.3.19, 9.3.20, 9.3.21, 9.3.22, 9.3.23, 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, 9.5.16, 9.7.1, 9.7.2, 9.7.3, 9.7.5, 9.7.6, 9.8.1, 9.8.2, 9.8.4, 9.8.5, 9.8.6, 9.8.9, 9.8.10, 9.8.11, 9.10.1, 9.10.3, 9.10.4, 9.10.5, 9.10.6, 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, 9.11.11, 9.11.12, 9.11.13, 9.11.15, 9.11.16, 9.11.17, 9.11.18, 9.11.19, 9.11.23, 9.11.26, 9.11.28, 9.11.29, 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, 9.12.16, 9.12.17, 9.12.18, 9.12.19, 9.12.20, 9.12.21, 9.12.22, 9.12.23, 9.12.24, 9.12.26, 9.12.28, 9.12.30, 9.12.31, 9.12.33, 9.12.35, 9.12.37, 9.12.39, 11.2.1, 11.2.2, 11.2.5, 11.3.1, 11.3.2, 11.3.3, 11.3.4, 11.3.6, 11.3.7, 11.3.8, 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, 11.3.23, 11.3.25, 11.3.26, 11.3.27, 11.3.28, 11.3.29, 11.3.30, 11.3.35, 11.3.36, 11.3.37, 11.3.38, 11.3.39, 11.4.2, 11.4.3, 11.4.5, 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, 11.5.16, 11.5.17, 11.5.20, 11.5.21, 11.7.1, 11.7.2, 11.7.4, 11.7.6, 11.8.1, 11.8.2, 11.8.4, 11.8.5, 11.8.8, 11.8.9, 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, 11.9.13, 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, 11.11.3, 11.11.4, 11.11.6, 11.11.7, 11.11.8, 11.11.9, 11.11.10, 11.11.11, 11.11.13, 11.11.14, 11.11.15, 11.11.16, 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, 11.12.11, 11.12.12, 11.12.13, 11.12.14, 11.12.15, 11.12.17, 11.12.19, 11.12.20, 11.12.21, 12.2.5, 12.2.6, 12.2.13, 12.2.14, 12.3.11, 12.5.1, 12.5.2, 12.5.3, 12.5.4, 12.5.6, 12.8.1, 12.8.2, 12.8.8, 12.8.10, 12.8.11, 12.8.12, 12.8.14, 12.8.16, 12.8.19, 12.8.20, 12.8.23, 12.8.25, 12.9-10.2, 12.9-10.4, 12.9-10.5, 12.9-10.6, 12.9-10.9, 12.9-10.12, 12.9-10.14, 12.9-10.17, 12.9-10.19, 12.9-10.20, 12.11.2, 12.11.3, 12.11.5, 12.11.6, 12.11.9, 12.11.15, 12.11.23, 12.11.24, 12.11.25, 12.11.27, 12.12.2, 12.12.5, 12.12.6, 12.12.9, 12.12.11, 12.12.15, 12.12.20, 12.12.23, 12.12.26, 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, 13.12.1, 13.12.2, 13.12.3, 13.12.4, 13.12.5, 13.12.8, 13.12.9, 13.12.10

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, 9.11.21, 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.
595	12.2.1, 12.2.2, 12.2.3, 12.2.4, 12.2.5, 12.2.7, 12.2.8, 12.3.1, 12.3.2, 12.3.3, 12.3.4, 12.3.5, 12.3.7, 12.3.9, 12.3.10, 12.3.11, 12.3.15, 12.3.16, 12.3.17, 12.3.18, 12.3.19, 12.3.20, 12.3.21, 12.5.1, 12.5.3, 12.5.6, 12.5.7, 12.5.13, 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, 12.8.18, 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, 12.9-10.10, 12.9-10.11, 12.9-10.14, 12.9-10.15, 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, 12.9-10.27, 12.9-10.29, 12.11.1, 12.11.2, 12.11.3, 12.11.4, 12.11.5, 12.11.6, 12.11.9, 12.11.10, 12.11.11, 12.11.12, 12.11.13, 12.11.16, 12.11.17, 12.11.18, 12.11.19, 12.11.23, 12.11.24, 12.11.25, 12.11.26, 12.11.27, 12.11.28, 12.12.1, 12.12.2, 12.12.3, 12.12.4, 12.12.5, 12.12.6, 12.12.11, 12.12.13, 12.12.15, 12.12.16, 12.12.17, 12.12.18, 12.12.20, 12.12.26, 12.12.28
676	12.2.1, 12.2.2, 12.2.3, 12.2.4, 12.2.5, 12.2.7, 12.2.8, 12.3.1, 12.3.2, 12.3.3, 12.3.4, 12.3.5, 12.3.7, 12.3.9, 12.3.10, 12.3.11, 12.3.15, 12.3.16, 12.3.17, 12.3.18, 12.3.19, 12.3.20, 12.3.21, 12.5.1, 12.5.3, 12.5.6, 12.5.7, 12.5.13, 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, 12.8.18, 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, 12.9-10.10, 12.9-10.11, 12.9-10.14, 12.9-10.15, 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, 12.9-10.27, 12.9-10.29, 12.11.1, 12.11.2, 12.11.3, 12.11.4, 12.11.5, 12.11.6, 12.11.9, 12.11.10, 12.11.11, 12.11.12, 12.11.13, 12.11.16, 12.11.17, 12.11.18, 12.11.19, 12.11.23, 12.11.24, 12.11.25, 12.11.26, 12.11.27, 12.11.28, 12.12.1, 12.12.2, 12.12.3, 12.12.4, 12.12.5, 12.12.6, 12.12.11, 12.12.13, 12.12.15, 12.12.16, 12.12.17, 12.12.18, 12.12.20, 12.12.26, 12.12.28

Label	Regional Ecosystem (mandatory unless otherwise specified)
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
7608	12.2.3, 12.3.1, 12.3.20, 12.3.11, 12.9-10.16, 12.11.5, 12.11.10

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.

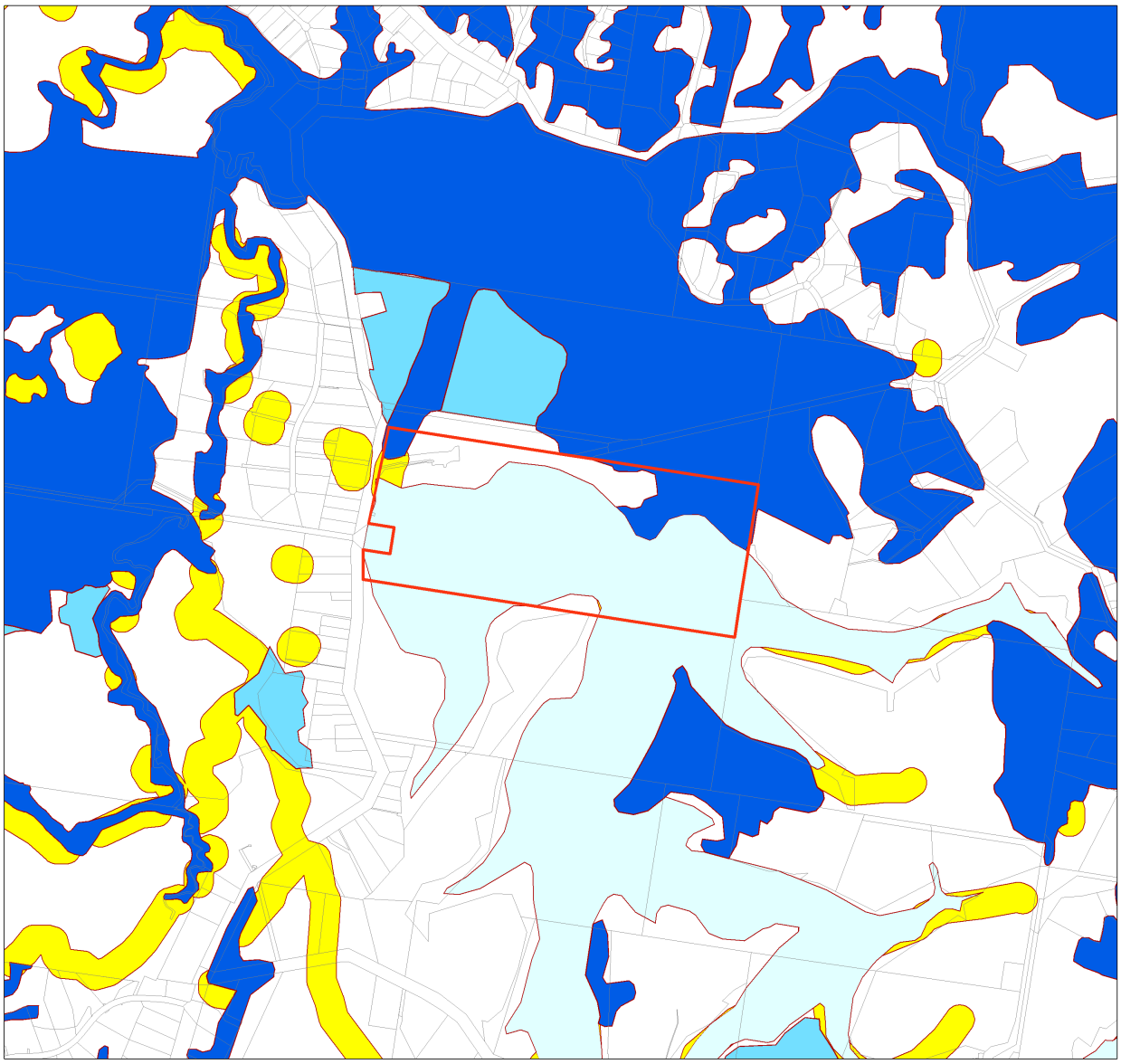
Coastal/non coastal map

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

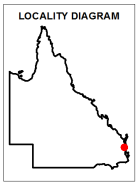


Regulated Vegetation Management Map

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

0 200 400 600 800 1,000 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.

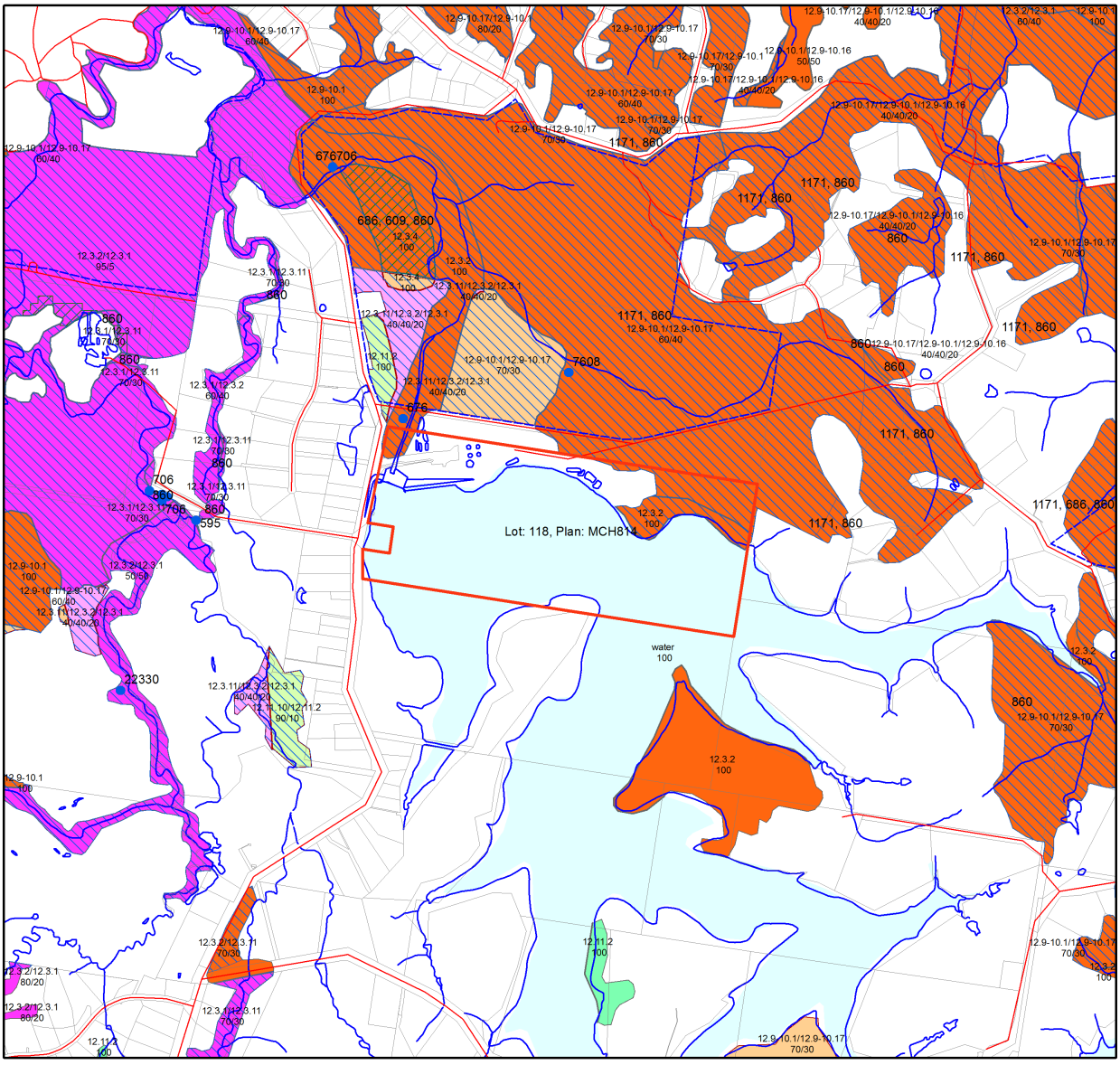
Additional information required for the assessment of vegetation values is provided in the accompanying "Vegetation Management Supporting map". For further information go to the web site: www.dnrme.qld.gov.au or contact the Department of Natural Resources, Mines and Energy.

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



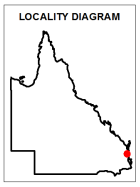
Vegetation Management Supporting Map

Legend

- Lot and Plan
- Category A or B area containing endangered regional ecosystems
- Category A or B area containing of concern regional ecosystems
- Category A or B area that is a least concern regional ecosystem
- Category A or B area under Section 20AH
  These areas are edged in yellow and filled with the remnant RE Status
- Category C area containing endangered regional ecosystems
- Category C area containing of concern regional ecosystems
- Category C area that is a least concern regional ecosystem
- Category C area under Section 20AI
  These areas are edged in purple and filled with the remnant RE Status
- Non Remnant
- Water
- Wetland on the vegetation management wetlands map
- Essential habitat on the essential habitat map
- Essential habitat species record
- Watercourses and drainage features on the vegetation management watercourse and drainage features map
  (Stream order shown as black number against stream where available)
- Roads
- National Parks, State Forest and other reserves
- Cadastral line
  Property boundaries shown are provided as a locational aid only

Queensland Government

LOCALITY DIAGRAM



N

0 140 280 420 560 700 m

This product is projected into:
GDA 1994 MGA Zone 56

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

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

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

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

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

5.3 Coastal/non coastal map

Coastal/Non Coastal Map

Legend

- Lot and Plan
- Coastal
- Non Coastal
- Cadastral line
  Property boundaries shown are provided as a locational aid only

LOCALITY DIAGRAM

N

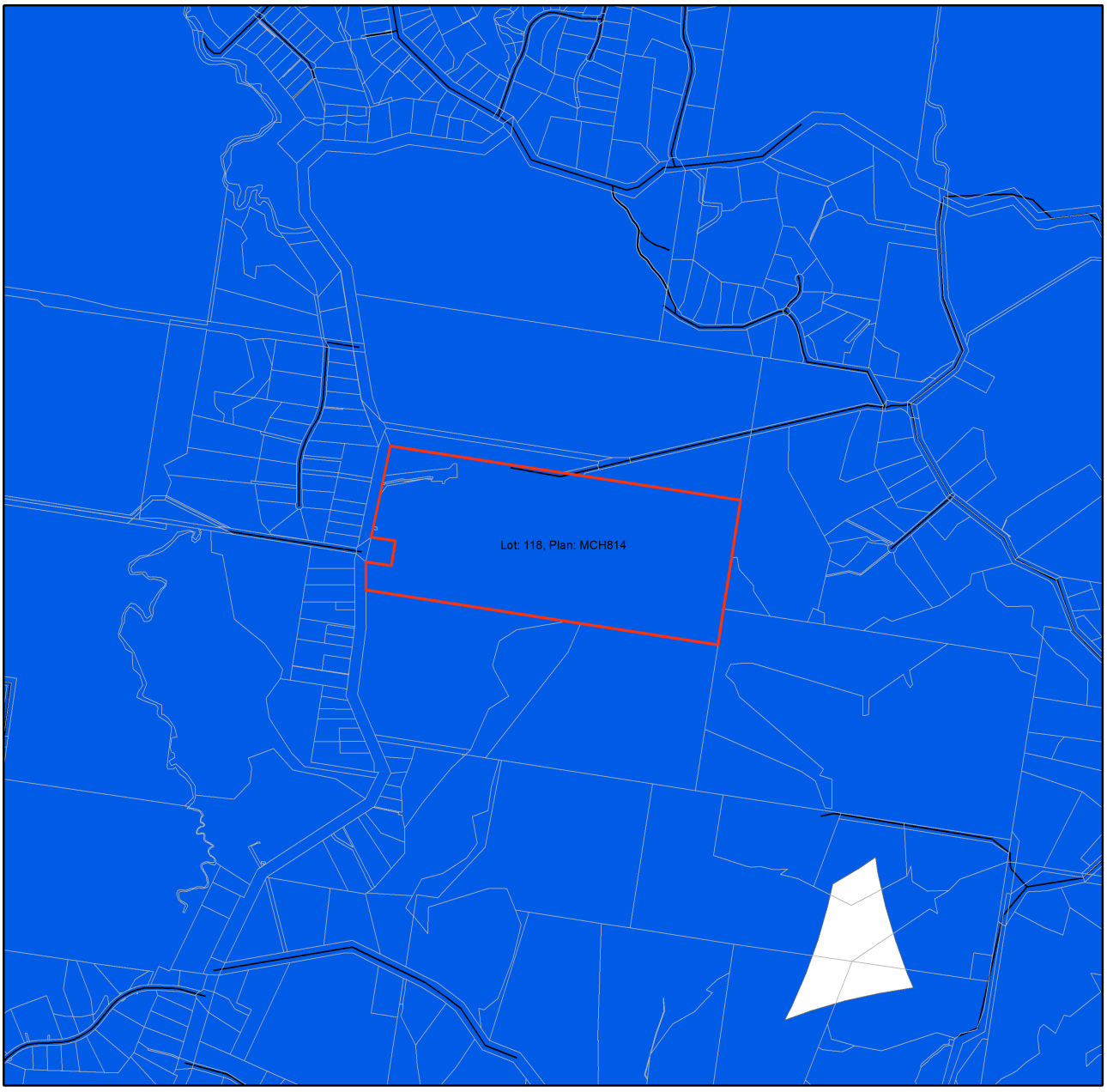
0 200 400 600 800 1,000 m

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.

Queensland Government

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

0 140 280 420 560 700 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*	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 B Likelihood of Occurrence Assessments

Appendix B.1 Threatened Ecological Community Likelihood of Occurrence

COMMUNITY NAME	EPBC ACT STATUS	CORRELATING RES	COMMUNITY DESCRIPTION	LIKELIHOOD OF OCCURRENCE
Lowland rainforest of subtropical Australia	Critically Endangered	RE 12.3.1 RE 12.3.13 RE 12.8.3 RE 12.8.4 RE 12.11.10 RE 12.12.1 RE 12.12.16	Moderately tall to tall closed forest with a low abundance of *Eucalyptus, Melaleuca* and *Casuarina.* The canopy may be dominated by palm forest, usually dominated by *Archontophoenix cunninghamiana* (bangalow palm) or *Livistona australis* (cabbage palm); and riparian areas dominated by *Syzygium floribundum* (weeping satinash/weeping lilly pilly). Canopy emergents (40-50m tall) include *Araucaria cunninghamii* (hoop pine), *Ficus spp.* (figs), *Lophostemon confertus* (brushbox). Canopy/subcanopy may contain hoop pine, figs, *Argyrodendron trifoliolatum/ Heritiera trifoliolata* (white booyong), *Castanospermum australe* (black bean), *Cryptocarya obovata* (white walnut, pepperberry tree), *Dendrocnide excelsa* (giant stinging tree), *Diploglottis australis* (native tamarind), *Dysoxylum fraserianum* (rosewood), *Dysoxylum mollissimum* (red bean), *Endiandra pubens* (hairy walnut), *Elattostachys nervosa* (green tamarind), *Flindersia schottiana* (bumpy ash, cudgerie, silver ash), *Gmelina leichhardtii* (white beech), *Neolitsea dealbata* (white bolly gum), *Neolitsea australiensis* (bolly gum), *Sloanea australis* (maiden's blush), *Sloanea woolsii* (yellow carabeen), *Toona ciliata* (red cedar), and epiphytes such as *Platycerium* spp. and *Asplenium australasicum* (bird's nest fern).	High – mapped 1.5 km downstream of the impact area on Six Mile Creek Other localised occurrences in the Study Area.
Subtropical and temperate coastal saltmarsh	Vulnerable	RE 12.1.2	Consists mainly of salt-tolerant vegetation (halophytes) including: grasses, herbs, sedges, rushes and shrubs. Succulent herbs, shrubs and grasses generally dominate and vegetation is generally of less than 0.5 m height (with the exception of some reeds and sedges). Species characteristic of this community may include: • *Austrostipa stipoides* (spear grass) • *Gahnia filum* (clumped sedge) • *Juncus kraussii* (sea rush) • *Samolus repens* (creeping brookweed, water pimpernel)	None – there are no areas of saltwater influence in the Study Area.

COMMUNITY NAME	EPBC ACT STATUS	CORRELATING RES	COMMUNITY DESCRIPTION	LIKELIHOOD OF OCCURRENCE
			• *Sarcocornia quinqueflora* (beaded glasswort/samphire) • *Sporobolus virginicus* (salt couch) • *Suaeda australis* (seabite) • *Tecticornia pergranulata* (blackseed samphire) • *Triglochin striata* (three-ribbed or stalked arrowgrass)	
Coastal swamp oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland ecological community	Endangered	RE 12.1.1 RE 12.3.20	This community occurs where there is a limited interaction with tidal communities, whether it be through groundwater salinity or tidal inundation. It varies from forest to woodland, depending on the location. The canopy is typically dominated by *Casuarina glauca* and often a number of other eucalypt species including *Eucalyptus tereticornis, E. grandis or E. robusta* and Melaleuca species including *Melaleuca quinquenervia* or *Melaueuca linariifolia* occur as emergents. If there is a mid layer present, it usually contains smaller shrubs such as *Acmena smithii, Alphitonia excelsa* or *Glochidion ferdinandi*. The groundcover comprises a range of grasses, ferns or herbs and may be freshwater or saline, depending on the location of the community. Climbing and epiphytic plants are common in this community.	None – there are no areas of saltwater influence in the Study Area.

Appendix B.2 Flora Species Likelihood of Occurrence

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
Acacia attenuata		V	V	Flat coastal lowland plains in seasonally waterlogged areas of wet heathland, open forest and woodland, particularly on sandy poorly drained soils or peat swamps which are infertile; tolerant of disturbance, may grow along roads.	Low. Minimal suitable habitat.
Acacia baueri subsp. baueri		-	V	Infertile and often seasonally waterlogged sands in coastal heath (wallum) habitat and adjacent plateaus and low open woodland dominated by wallum banksia (Banksia aemula). Avoids areas with heavy tree cover. May prefer early successional post-five vegetation.	None. No suitable habitat.
Allocasuarina rigida subsp. exsul	Mt Cooroora she-oak	-	V	Restricted to Mt. Cooroora near Pomona. Grows on rocky trachyte hillside.	None. No suitable habitat. Not within known, restricted species' range.
Allocasuarina thalassoscopica		E	E	Restricted to one location within the heathland community of Mt Coolum.	None. No suitable habitat. Not within known, restricted species range.
Archidendron lovelliae	Bacon wood	V	V	Occurs mostly on well-drained sandy loam soils, which are often alluvial in origin and contain clay, or deep podosols on stabilised sand dunes; the associated vegetation communities are wet sclerophyll forest or lowland subtropical rainforest.	Low. May occur on alluvium in moist forest around or below the existing dam (notophyll vine forest RE 12.3.1 and flooded gum-dominated tall open forest RE 12.3.2), though there are no existing records within 12km of the site.
Arthraxon hispidus	Hairy jointgrass	V	V	In soaks, seepages and edges of wetlands in forests and pasture. Dies down in winter. Threats include lantana invasion.	Moderate. May occur in seepages in pasture around the dam and in wet areas in forest.

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
Baloghia marmorata	Marbled balogia	V	V	Subtropical rainforest, wet sclerophyll forest dominated by Brush Box with a rainforest understorey on basalt at 150-550 m elevation	Low. The Study Area is below the typical elevation range and it is not on basalt.
Bosistoa transversa	Yellow satinheart	V	LC	Grows in wet sclerophyll forest, dry sclerophyll forest and rainforest up to 300m elevation.	Moderate. The Study Area is consistent with the general habitat description and most forested areas are potential habitat.
Cryptocarya foetida	Stinking cryptocarya	V	V	Occurs in littoral rainforest on old sand dunes and subtropical rainforests over slate and occasionally on basalt to an altitude of 150 m	Low. Preferred substrates are not present in the Study Area.
Cryptostylis hunteriana	Leafless tongue orchid	V	LC	Does not appear to have well defined habitat preferences and is known from a range of communities, including heathlands, heathy woodlands, sedgelands, Xanthorrheoa spp. plains, dry sclerophyll forests (shrub/grass sub-formation and shrubby sub-formation), forested wetlands, freshwater wetlands, grasslands, grassy woodlands, rainforests and wet sclerophyll forests (grassy sub-formation). Soils are generally moist and sandy, however, also grows on dry or peaty soils The larger populations typically occur in woodland dominated by scribbly gum (*Eucalyptus sclerophylla*), silvertop ash (*E. sieberi*), red bloodwood (*Corymbia gummifera*) and black she-oak (*Allocasuarina littoralis*); appears to prefer open areas in the understorey of this community and is often found in association with the large tongue orchid (*C. subulata*) and the tartan tongue orchid (*C. erecta*). Flowers August to February.	Moderate. Study Area consistent with the very general habitat description. The presence of sedimentary rocks in the Study Area suggest that sandy soils may be present in some areas.
Eucalyptus conglomerata	Swamp stringybark	E	E	Occurs mostly in the ecotone between wet heath (wallum) and tall open forest communities. The soils are infertile, deep	Low. Soil not sandy or peaty; there are no wet heath or wallum vegetation

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
				and sandy or peaty in texture and tend to be seasonally water-logged.	communities mapped in the Study Area.
Floydia praealta	Ball nut	V	V	Floristically-rich, tall, closed riverine to subtropical rainforest and coastal scrub. Typically grows on basalt.	Low. Riverine rainforest present, but not on preferred basalt substrate.
Gossia inophloia		-	NT	Shaded and semi-shaded conditions on well-drained soils in and on the margins of subtropical rainforest.	Moderate. Likely to occur in the Study Area, particularly RE 12.3.1 and RE 12.3.2.
Lepidium peregrinum	Wandering pepper-cress	E	LC	Riparian open forest dominated by *Eucalyptus camaldulensis* and *Casuarina cunninghamiana* with a variably dense shrubby understorey of *Hymenanthera dentata*, *Bursaria spinosa, Acacia fimbriata, A. floribunda, Callistemon viminalis* and *Leptospermum brachyandrum*.	None. No suitable habitat.
Macadamia integrifolia	Macadamia nut	V	V	Rainforest and rainforest edges on ridges, hill slopes, scree slopes and foot slopes, gullies, benches and terrace plains on well-drained, high nutrient soils.	Moderate. Vegetation mapped downstream (RE 12.3.1) is potential habitat for this species.
Macadamia ternifolia	Bopple nut	V	V	Lowland warm complex notophyll vine forest and Araucarian notophyll vine forest on high-fertility basic and intermediate volcanic soils and alluvia in higher rainfall areas; soils free-draining.	Low. Vegetation mapped downstream (RE 12.3.1) may be suitable habitat for this species, though the soil types are not very suitable.
Mallotus megadontus		-	V	Margins of rainforest near watercourses.	Moderate. Potential habitat in RE 12.3.1 downstream of the existing dam.
Nothoalsomitra suberosa		-	NT	Restricted to wet sclerophyll forest and sub-tropical rainforest in the D'Aguilar Range, Blackall Range and Conondale ranges north of Brisbane.	Low. Potential habitat present RE 12.3.1 and RE 12.3.2), but

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
					the Study Area is not within the known range of this species.
Pararistolochia praevenosa	Richmond birdwing vine	-	NT	Subtropical rainforests on the coast and lower ranges (<600 m), with plant communities on nutrient-rich volcanic, alluvial or, uncommonly, sandy soils. Larval food plant of the Richmond Birdwing Butterfly.	Moderate. Potential habitat in the Study Area, particularly downstream of the existing dam in RE 12.3.1.
Phaius australis	Lesser swamp orchid	E	E	Mostly occurs in mixed swamp forest (e.g. *Melaleuca quinqueneria, Lophostemon suaveolens, Eucalyptus robusta*) in association with rainforest elements and palms. May occur along ecotones with other habitat types (e.g. heath, open forest). Flowers September-November.	Moderate. Open forests containing Melaleuca quinquenervia Eucalyptus robusta and Lophostemon suaveolens are mapped in the Project Area (RE 12.3.4).
Pomadreris crassifolia		-	V	Grows scattered in heath and open forest on exposed rocky sites.	Low. Lack of suitable rocky habitat, though has previously been recorded within 5km of the site.
Prostanthera spathulata		V	V	Occurs in shrubland on rocky hillslopes and in tall open forest on gently inclined slopes, or flat terrain on the coastal plain (Halford 1998). Associated species include red mahogany (*Eucalyptus resinifera*), *E. racemosa*, pink bloodwood (*Corymbia intermedia*), turpentine (*Syncarpia glomulifera*), *Lophostemon* sp., tall saw-sedge (*Gahnia clarkei*) and black-mouth bush (*Melastoma affine*).	Moderate. Suitable floristic associations present below existing dam and adjacent to proposed works.
Ricinocarpos speciosus		-	V	Found in a range of habitats, such as creek banks, rocky slopes, ridge tops, and old floodplains.	Moderate. Potential habitat in the Study Area.
Samadera bidwillii	Quassia	V	V	Lowland rainforest or on rainforest margins occasionally open forest or woodland. Commonly found near temporary or permanent watercourses up to 510 m elevation. Soils	Moderate. Potential habitat present in the Study Area.

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
				include lithosols, skeletal soils, loam soils, sands, silts and sands with clay subsoils.	
Sophora fraseri	Brush sophora	V	V	North from Casino. Grows in moist habitats, often in hilly terrain at altitudes from 60–660 m on shallow soils along rainforest margins in eucalypt forests, vine forest or in large canopy gaps in closed forest communities.	Low. Limited suitable habitat present in the Study Area.
Symplocos harroldii	Hairy hazelwood	-	NT	Sub-tropical and dry rainforest, confined to the area between Beenleigh and Maryborough.	Moderate. Potential habitat in the Study Area, particularly downstream of the existing dam in RE 12.3.1.
Triunia robusta	Glossy spice bush	E	E	Notophyll vine forest, or mixed tall open forest developing a rainforest understorey in the absence of fire, usually within 25 m of streams, on south or south-east facing slopes or river terraces on well-drained soil.	Moderate. Notophyll vine forest (RE 12.3.1) and tall open forest dominated by flooded gum (RE 12.3.2) present in the Study Area.
Xanthostemon oppositifolius	Southern penda	V	V	Occurs predominantly in riparian communities on slightly acid clayey sands to sandy clays derived from sedimentary and metasedimentary rocks. Associated vegetation includes notophyll vine forest, simple notophyll mixed tall closed forest with *Araucaria cunninghamii* (hoop pine) emergents or in the rainforest understorey developing within tall open forest.	Moderate. Vegetation in the Study Area (RE 12.3.1 and RE 12.3.2) is suitable habitat for this species.

Appendix B.3 Fauna Species Likelihood of Occurrence

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
Anthochaera phrygia	Regent honeyeater	CE	E	Generally inhabits temperate woodlands and open forests of the inland slopes of south-east Australia. Regarded as an occasional visitor to Queensland, but there is some evidence that a small breeding population exists near Warwick. Infrequent in coastal area where winter flowering swamp mahogany, forest red gum and spotted gum/ironbark associations are important.	Moderate, occasional. Winter flowering swamp mahogany, forest red gum and grey ironbark present in the Study Area.
Botaurus poiciloptilus	Australasian bittern	E	LC	Inhabits temperate freshwater wetlands and occasionally estuarine reedbeds, with a preference for permanent waterbodies with tall dense vegetation. The species prefers wetlands with dense vegetation, including sedges, rushes and reeds. Freshwater is generally preferred, although dense saltmarsh vegetation in estuaries and flooded grasslands are also used by the species.	Moderate. May occur along the margins of the existing dam.
Calidris canutus	Red knot	E, M	E	Tidal mudflats, sandflats, beaches, saltmarsh, ploughed fields, flooded pasture	Low. Prefers inter-tidal habitats.
Calidris ferruginea	Curlew sandpiper	CE, M	E	Intertidal mudflats in sheltered coastal areas, non-tidal swamps, lakes and lagoons near the coast. Occasional occurrence at inland lakes and dams.	Moderate. May occasionally use the lake margins.
Calyptorhynchus lathami lathami	Glossy black-cockatoo	-	V	Occupies coastal woodlands and drier forest areas, open inland woodlands or timbered watercourses where Casuarina and *Allocasuarina* species are present. This species is dependent on large hollow-bearing eucalypts for nesting.	Moderate, depending on the availability of *Allocasuarina* spp. in the Study Area. RE 12.9-10.1/12.9-10.17 is the most likely to contain *Allocasuarina* spp.
Cyclopsitta diophthalma coxeni	Coxen's fig-parrot	E	E	Rainforest, particularly stands with figs; sometimes isolated trees.	Moderate. Depends on the availability of figs in the Study Area. A variety of fig species were identified throughout the Study Area, particularly around waterways e.g. sandpaper fig.

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
					Larger figs were observed in relatively low abundance.
Dasyornis brachypterus	Eastern bristlebird	E	E	Tall, dense, grassy ground-cover in open Eucalyptus forests or woodlands at high elevation; often at the ecotone, or interspersed, with mature subtropical rainforest. The ground-layer vegetation in these habitats is usually about 1.0–1.5 m tall and fairly dense, providing about 65–90% coverage. Typical ground cover includes tussock-grasses such as *Sorghum leiocladum*, and other grasses including *Imperata cylindrica, Poa labillardiera, P. sieberiana and Themeda triandra*, with a variety of scattered small shrubs, woody herbs, patches of ferns and vine tangles	None. Study Area is at low elevation. No suitable habitat.
Diomedea antipodensis	Antipodean albatross	V, M	SL	Marine aerial species that is highly mobile. Rests and sleeps on the ocean. Breeds in open, patchy vegetation including tussock grassland or shrubs on ridges.	None. No suitable habitat
Diomedea antipodensis gibsoni	Gibson's albatross	V	V	Marine aerial species that is highly mobile. Breeds on islands on coastal or inland ridges, slopes or plains.	None. No suitable habitat
Diomedea exulans	Wandering albatross	V, M	V	Migratory marine species. Island breeding sites located on coastal/inland ridges with open, patchy vegetation and grass tussocks.	None. No suitable habitat
Erythrotriorchis radiatus	Red goshawk	V	E	Occurs in coastal and sub-coastal areas in woodland and forests, including riverine forests. Favours intermediate density forests to aid hunting of birds. Nest in tall trees, often beside permanent water sources.	Moderate. Suitable habitat for this species occurs in the Study Area. However, it is a highly mobile species with a large territory and the importance of the Study Area is currently unknown.
Geophaps scripta scripta	Squatter pigeon (Southern)	V	V	Open-forests to sparse, open-woodlands and scrub with a patchy, tussock-grassy understory. Nests in shallow depressions in the ground, requiring free-draining soils.	None. No suitable habitat with an open grassy groundcover.

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
Lathamus discolor	Swift parrot	CE	E	Breeds exclusive in Tasmania during the summer, migrating to the mainland during winter. Being nectarivorous, winter flowering Eucalypts are important foraging resources on the mainland. Favoured feed trees include winter flowering species such as swamp mahogany (*Eucalyptus robusta*), spotted gum (*Corymbia aculate*), red bloodwood (*C. gummifera*), mugga ironbark (*E. sideroxylon*), and white box (*E. albens*).	Moderate, occasional. Winter flowering swamp mahogany, forest red gum and grey ironbark present in the Study Area.
Limosa lapponica baueri	Bar-tailed godwit (baueri)	V	V	Estuaries and lagoons with large intertidal sandflats or mudflats.	None. No suitable habitat.
Limosa lapponica menzbieri	Northern Siberian bar-tailed godwit	CE	E	Intertidal sandflats, mudflats, estuaries, inlets, coastal lagoons, near coastal saltmarsh and exposed beaches.	None. No suitable habitat
Macronectes giganteus	Southern giant-petrel	E, M	E	Migratory marine bird distributed from Antarctic to subtropical waters and nests on offshore and Antarctic islands.	None. No suitable habitat
Macronectes halli	Northern giant petrel	V, M	V	Circumploar pelagic distribution with breeding on Australian offshore islands. Nest in secluded, sheltered coastal habitat with dense vegetation.	None. No suitable habitat
Ninox strenua	Powerful owl	-	V	Inhabits a range of vegetation types, from woodland and open sclerophyll forest to tall open wet forest and rainforest. While territory size is influenced by prey availability, territories are generally large (400 - 4000 ha). Core populations require large tracts of forest or woodland habitat, but pairs may occur in fragmented landscapes. Powerful Owls nest in large tree hollows (at least 0.5m deep), in large eucalypts (diameter at breast height of 80-240 cm) that are at least 150 years old. The main prey items are medium-sized arboreal marsupials, particularly the greater glider, common ringtail possum and sugar glider. Sometimes takes roosting birds.	Low. Substantial areas of forest in the locality and potential roosting habitat along Six Mile Creek below the existing dam. However, hollow-bearing trees are uncommon, limiting the density of preferred prey (arboreal mammals) and the availability of nesting sites.

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
Numenius madagascariensis	Eastern curlew	CE, M	E	Estuaries, tidal mudflats, sand spits, saltmarsh, mangroves.	None. No suitable habitat
Pachyptila turtur subantarctica	Fairy prion (southern)	V	LC	Ocean, breeds on subantarctic islands.	None. No suitable habitat
Poephila cincta cincta	Southern black-throated finch	E	E	Grassy, open woodlands and forests, typically dominated by *Eucalyptus*, *Corymbia* and *Melaleuca*, and occasionally in tussock grasslands or other habitats (e.g. freshwater wetlands); often near water.	None. No suitable grassy forest habitat.
Rostratula australis	Australian painted snipe	E	V	Inhabits shallow inland wetlands, either freshwater or brackish water bodies. Nests on the ground amongst tall reed-like vegetation near water, and feeds near the water's edge and on mudflats.	Moderate. Likely to forage around the edges of the existing dam when muddy substrate is exposed. Unlikely to breed in the Study Area as no islands are present.
Thalassarche cauta cauta	Shy albatross	V, M	V	Oceans, breeds on islands.	None. No suitable habitat
Thalassarche cauta steadi	White-capped albatross	V, M	V	Subantarctic and subtropical oceans, sometimes near shoreline; breeds on islands.	None. No suitable habitat
Thalassarche eremita	Chatham albatross	E, M	SL	Subantarctic and subtropical oceans, sometimes near shoreline; breeds on islands.	None. No suitable habitat
Thalassarche impavida	Campbell albatross	V, M	SL	Subantarctic and subtropical oceans, sometimes near shoreline; breeds on islands.	None. No suitable habitat
Thalassarche melanophris	Black-browed albatross	V, M	SL	Circumpolar distribution and inhabits Antarctic, subantarctic and subtropical marine waters.	None. No suitable habitat
Thalassarche salvini	Salvin's albatross	V, M	SL	Subantarctic and subtropical oceans, sometimes near shoreline; breeds on rocky islets and stacks.	None. No suitable habitat

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
Turnix melanogaster	Black-breasted button-quail	V	V	Drier low closed forests, particularly semi-evergreen vine thicket, low microphyll vine forest, araucarian microphyll vine forest and araucarian notophyll vine forest; also in low, dense acacia thickets and, in littoral area, in vegetation behind sand dunes. Will use Lantana, particularly when it forms a mosaic with preferred habitat types.	Moderate. May occur in viney or Lantana infested areas within RE 12.3.1 (notophyll vine forest) and RE 12.3.2 (tall open forest dominated by flooded gum).
Epinephelus daemelii	Black rockcod	V	LC	Adult black rockcod are usually found in caves, gutters and beneath bomboras on rocky reefs. They are territorial and often occupy a particular cave for life. Small juveniles are often found in coastal rock pools, and larger juveniles around rocky shores in estuaries.	None. No suitable habitat
Maccullochella mariensis	Mary River cod	E	LC	Endemic to the Mary River, but introduced elsewhere. Larger river and creeks. Avoids shallow areas.	High. Known to occur in the Mary River, Lake Macdonald and downstream waterways.
Neoceratodus forsteri	Queensland lungfish	V	LC	The species' natural distribution is the Mary, Burnett and Brisbane River systems and (possibly) the Pine River system, but it has been translocated to many other locations. Translocated populations persist in the Coomera, Condamine, Albert and Logan Rivers. Occurs in permanent still or slow-flowing, shallow, vegetated pools with clear or turbid water in which to spawn and feed.	High. Known to occur in the Study Area.
Adelotus brevis	Tusked frog	-	V	Rainforest, wet Eucalypt forest; sometimes dry Eucalypt forest, paperbark forest or flooded grassland. Found near still or slow-moving water, including vertical plants such as reeds and rushes. Habitats include rivers, creeks, wetlands, ponds, dams. Males nest in leaf litter	High. Likely to occur around the existing dam and upstream and downstream where slower moving water is present.
Crinia tinnula	Wallum froglet	-	V	Usually associated with acidic swamp on coastal sand plains and occur in a range of habitats, including sedgelands, wet heathland, paperbark swamps and drainage lines. This species can persist in disturbed areas and breed in both	None. Lack of suitable habitat.

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
				permanent and ephemeral water bodies. Shelter under leaf litter, debris or in burrows.	
Litoria freycineti	Wallum rocketfrog	-	V	Ephemeral wetlands and drainage lines in sedgeland, paperbark swamps and wet heath where the groundwater is acidic, usually on coastal sand; ground-dwelling, rarely climbs. Breeds in shallow open ephemeral wetlands in spring and summer; breeding aggregations relatively small.	None. Lack of suitable habitat.
Litoria olongburensis	Wallum sedge frog	V	V	Ephemeral, semi-permanent and permanent wetlands and creeks within sedgeland, wet heath, and paperbark swamps with a well-developed understory of sedges and/or *Blechnum indicum* where the groundwater is acidic, usually on coastal sand; perches on emergent sedges and ferns (particularly *Baumea*, *Schoenus* and *Chorizandra* species), occasionally other vegetation; prefers to breed in ephemeral and semi-permanent perched swamps with thick emergent vegetation in spring, summer and autumn, though calling may also occur in winter; generally large breeding aggregations.	None. Lack of suitable habitat.
Litoria pearsoniana	Cascade treefrog	V	V	Dense rainforest and wet sclerophyll forest near fast flowing rocky streams 200-1000m elevation. Shelters under logs, rocks, rotting leaf litter and moist soil cavities adjacent to the water edge during the day. At night males call from rocks, low vegetation, and debris in or near streams.	Low. Potential habitat present below the existing dam, but elevation of the site is only about 100m. No fast-flowing rocky streams present.
Mixophyes fleayi	Fleay's frog	E	E	Occurs in streams within and adjacent to rainforest habitat. Key habitat is permanent and semi-permanent streams between 100 to 1000m altitude. This is particularly within Mt Tamborine, the McPherson, Main and Conondale Ranges, Mistake Mountains and Bunya Mountains.	Low. Potential habitat present below the existing dam and elevation of the site is approximately 100m. However, site is not within the known species locations.
Mixophyes iteratus	Giant barred frog	E	E	Occurs in damp rainforest, and both moist and dry eucalypt forest below 1000m. Inhabits deep leaf litter and breeds in shallow, flowing rocky streams. Adult frogs generally forage	High. Known to occur in Six Mile Creek downstream of the

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
				within 20m of streams, but are capable of dispersing hundreds of metres from streams.	existing dam. Observed during the field survey.
Argynnis hyperbius inconstans	Australian fritillary	CE	E	Open, swampy, coastal areas where the larval food plant, *Viola betonicifolia*, occurs; usually in association with *Lomandra longifolia* and grasses, especially bladey grass	None. No open, swampy habitat present. Larval food plant not recorded in Study Area.
Phyllodes imperialis smithersi	Pink underwing moth	CE	E	Undisturbed, subtropical rainforest below 600m. It occurs in association with a rare collapsed form of the vine *Carronia multisepalea*, which provides the food and habitat necessary for breeding. It does not associate with the more common upright form of *C. multisepalea*.	Low. May occur within RE 12.3.1 downstream of Six Mile Creek. However, larval food plant not recorded.
Chalinolobus dwyeri	Large-eared pied bat	V	V	Roosts in disused mine shafts, caves, overhangs and disused Fairy Martin nests for shelter and to raise young. Also potentially roost in tree hollows. Occurs in low to mid-elevation dry open forest and woodlands, preferably with extensive cliffs, caves or gullies. Pied Bat is largely restricted to the interface of sandstone escarpment (for roost habitat) and relatively fertile valleys (for foraging habitat).	Moderate. Sandstone cliffs for roosting within several kilometres of the Study Area. Study Area potential foraging habitat.
Dasyurus hallucatus	Northern quoll	E	LC	Occupies a diversity of habitats across its range, including rocky areas, eucalypt forest and woodlands, rainforests, sandy lowlands and beaches, shrubland, grasslands and desert. Generally requires rocky areas or tree hollows for denning.	None. The Study Area is well south of accepted range limit (approximately Rockhampton).
Dasyurus maculatus maculatus	Spotted-tail quoll (south-eastern mainland population)	E	V	Utilises a range of habitat types, including rainforest, open forest, woodland, coastal heath and inland riparian forest, from the sub-alpine zone to the coastline. Individual animals use hollow-bearing trees, fallen logs, small caves, rock crevices, boulder fields and rocky-cliff faces as den sites.	Moderate. Suitable rainforest and open forest is mapped as occurring in the Project Area and further downstream. Rocky cliffs within several kilometres of the Study Area, which may provide refuges from

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
					introduced predators and help to stabilise a local population.
Petauroides volans	Greater glider	V	V	Eucalypt forests and woodlands, preferring mature forest with numerous large tree hollows. Folivorous, usually selecting habitats with a diversity of Eucalypt species. Sensitive to habitat fragmentation, restricted to gliding locomotion and reluctant to disperse through non-native habitat.	Low. May occur within remnant Eucalypt forest in the Study Area. However, tree hollows appear to be limiting and the species was not found during spotlighting surveys.
Phascolarctos cinereus	Koala	V	V	Inhabits a range of eucalypt forest and woodland communities. Adequate floristic diversity, availability of feed trees (primarily *Eucalyptus tereticornis* and *E. viminalis*) and presence of mature trees very important. Preferred food tree species vary with locality and there are quite distinct regional preferences. They are able to persist in fragmented habitats, and even survive in isolated trees across a predominantly agricultural landscape.	Moderate. Preferred feed trees, such as Swamp Mahogany, Forest Red Gum and Tallowwood are present in the Study Area. Secondary food trees also present. However, surveys failed to locate the species.
Potorous tridactylus tridactylus	Long-nosed potoroo (South East mainland)	V	V	Coastal heaths, dry and wet eucalypt forests, rainforest margins; requires a dense understorey with occasional open areas; soil typically a sandy loams; digs for the underground fruit bodies of fungi	Low. Limited suitable habitat available and potential food sources on site.
Pteropus poliocephalus	Grey-headed flying-fox	V	LC	Occur in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps as well as urban gardens and cultivated fruit crops. Roosting camps are commonly found in gullies, close to water, in vegetation with a dense canopy. They travel up to 50 km to forage, on the nectar and pollen of native trees, in particular *Eucalyptus*, *Melaleuca* and *Banksia*, and fruits of rainforest trees and vines.	High. Intermittent occurrence pending fruit or nectar availability. A variety of suitable flowering and fruiting trees present in the Study Area (e.g. swamp mahogany, forest red gum, grey ironbark).
Xeromys myoides	Water mouse	V	V	Mangroves and the associated saltmarsh, sedgelands, clay pans, heathlands and freshwater wetlands. Most feeds within	None. No suitable habitat

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
				the intertidal zone at low tide. Builds nests as high tide refuges.	
Anilios silvia	Striped blind snake	-	NT	Coastal rainforest; a burrowing snake that feeds on termites; also shelters under rocks, logs and deep leaf litter	Moderate. May occur in RE 12.3.1 (and possibly RE 12.3.2) depending on the availability of suitable microhabitat.
Delma torquata	Adorned delma	V	V	Inhabits drier eucalypt woodlands and open forests on alluvium, fine-grained sedimentary rocks and sandstone. Important microhabitat features include rocks, logs, bark and other coarse woody debris, and mats of leaf litter.	Low. Potential macrohabitat present (e.g. RE 12.9-10.1/12.9-10.17. The availability of microhabitat features is not known, but lack of preferred rocky habitat. No known records in the locality.
Saiphos reticulatus	Three-toed snake-tooth skink	V	LC	Rainforest, occasionally moist eucalypt forest, on loamy or sandy soils; a burrowing skink that requires loose soil, leaf litter and rotting logs, and feeds on earthworms and beetle grubs.	Moderate. May occur in notophyll vine forest (RE 12.3.1) and flooded gum-dominated tall open forest (RE 12.3.2) in the Study Area pending the availability of suitable microhabitat.
Furina dunmalli	Dunmall's snake	V	V	Forests and woodlands on black alluvial cracking clay and clay loams dominated by brigalow (*Acacia harpophylla*), other wattles, native Cypress (*Callitris spp*.) or bull-oak (*Allocasuarina luehmannii*) or various spotted gum (*Corymbia citriodora*), ironbark (*Eucalyptus crebra* and *E. melanophloia*), white cypress pine (*Callitris glaucophylla*) and bulloak open forest and woodland associations on sandstone derived soils.	None. No suitable habitat
Elseya albagula	White-throated snapping turtle	CE	E	Found only in the Fitzroy, Burnett and Mary River catchments. Within each catchment populations are fragmented by artificial structures (e.g. dams, weirs) that reduce water quality. Prefers clear, flowing, well-oxygenated waters, which appears to be associated with their	Moderate. Six Mile Creek has not been identified as a Mary River tributary known to contain a significant population. Indeed, the MNES

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
				physiological adaption to extract oxygen from water via cloacal respiration. Sometimes occurs in non-flowing waters, but typically at much reduced densities. Tends not occur in deeper waters due to reduced oxygen levels.	search did not predict the species to occur within 10km of the Study Area and there are no locality records within this search area. The existing dam would not be suitable for this species due to the still, deep water.
Elusor macrurus	Mary River turtle	E	E	Endemic to the Mary River catchment. The species uses cloacal respiration, which restricts it to flowing, well-oxygenated sections of streams. Its habitat consists of riffles (particularly productive parts of a river that are shallow with fast-flowing, aerated water) and shallow stretches alternating with deeper, flowing pools. It generally does not occur in impoundments due to reduced oxygen levels. Adults are usually found in areas with underwater shelter, such as sparse to dense macrophyte cover, submerged logs and rock crevices. They bask on logs and rocks. Juveniles occur in rocky areas with sand or gravel on the river bed, based on limited data.	Moderate. Six Mile Creek has not been identified as a Mary River tributary known to contain a significant population of this species. Indeed, the MNES search did not predict the species to occur within 10km of the Study Area and there are no locality records of the species. Six Mile Creek below the dam is generally unsuitable, however, it is potential habitat for dispersal and migration. Surveys did not find any records in the Study Area, but the dam may be capable of supporting a non-breeding population.
Caretta caretta	Loggerhead turtle	E, M	E	Oceans, nests on beaches.	None. No suitable habitat
Chelonia mydas	Green turtle	V, M	V	Oceans, nests on beaches.	None. No suitable habitat
Dermochelys coriacea	Leatherback turtle	E, M	E	Oceans, nests on beaches.	None. No suitable habitat

SPECIES NAME	COMMON NAME	EPBC ACT STATUS	NC ACT STATUS	HABITAT REQUIREMENTS	LIKELIHOOD OF OCCURRENCE
Eretmochelys imbricata	Hawksbill turtle	V, M	E	Oceans and reefs, nests on beaches.	None. No suitable habitat
Lepidochelys olivacea	Olive ridley turtle	E, M	E	Oceans, particularly over the continental shelf, nests on sandy beaches.	None. No suitable habitat
Natator depressus	Flatback turtle	V, M	V	Turbid, shallow inshore waters and over the continental shelf, nests on sandy beaches.	None. No suitable habitat
Tenuibranchiurus glypticus	Swamp crayfish	-	E	Coastal, acidic sedge-heath and paperbark swamps, characterised by pools of tannin-stained water, and sandy soils covered in organic matter.	None. No suitable habitat
Pristis zijsron	Green sawfish	V, M	LC	Marine waters, rivers and estuaries with muddy bottoms, usually in shallow waters.	None. No suitable habitat

Appendix C RE Verification Data

GENERAL				VEGETATION STRUCTURE AND FLORISTICS						DISTURBANCE HISTORY (SEVERITY)												NOTES
Site	Date	Coordinates	Mapped RE	Stratum	Height (m)	Cover %	Dominant Species	Age Structure	% Dead Trees	Fire	Time Since Fire	Logging	Time since Logging	Clearing	Time Since clearing	Grazing	Time Since Grazing	Weeds	Time since Weed Establishment	Flooding	Time Since Flooding	
Site 2	14/02/18	P: 492778, 7083111	12.3.2	Overstorey	34	40	*Eucalyptus grandis, Syncarpia glomulifera & Eucalyptus resinifera*	Mature age	5%	Nil	N/A	Light	50+	Nil	0	Nil	N/A	Nil	0	Light	0	Tall emergent Eucalypts & syncarpia with rainforest understorey
				Understorey	10	25	*Synoum glandulosum & Litsea reticulata*															
				Groundcover	1.5	40	*Pteridium esculentu, Eupomatia laurina & Blechnum indicum*															
Collman Rd (east of Site 4)	14/02/18	P: 494160, 7082289	12.9-10.1/ 12.9-10.17	Overstorey	35	30	*Eucalyptus grandis, Syncarpia glomulifera & Corymbia intermedia*	Advanced regen	5%	Nil	N/A	Severe	30 years	Moderate	0	Nil	N/A	Light	0	Nil	0	Possible clearing for road widening. Tewantin NP close to boundary. Small creek runs for 50m along rd near NP side. Private properties on the other side. Large habitat trees with multiple hollows present. 100+ trees may be required for clearing
				Understorey	17	40	*Alphitonia excelsa, Acacia oshenesii & juvenile Syncarpia glomulifera*															
				Groundcover	1.5	40	*Gahnia aspera, Imperata cylindrica & Setaria sphacelata*															
Scout camp (south east of Site 4)	14/02/18	P: 493872, 7081988	12.3.2	Overstorey	25	30	*Eucalyptus grandis, Lophostemon confertus & Corymbia intermedia*	Advanced regen	5%	Nil	N/A	Nil	0	Moderate	0	Nil	N/A	Light	0	Nil	0	Advanced regen adjoining scout camp, good condition, low percentage of weed cover, slight rise leading to lakes edge
				Understorey	14	30%	*Synoum glandulosum*															
				Groundcover	1	10%	*Blechnum indicum, Eupomatia laurina & Lomandra longifolia*															
Swamp (Site 5)	14/02/18	P: 495451, 7081384	12.9-10.1 / 12.9-10.17	Overstorey	40	40	*Eucalyptus resinifera, Syncarpia glomulifera & Eucalyptus grandis*	Mature age	5	Nil	N/A	Moderate	30-50 years	Nil	0	Nil	N/A	Light	0	Nil	0	Mature Age stand dominated by large eucalypts and Syncarpia. Signs of historic logging present. Forest runs from Collman Rd to upper lake Macdonald extremities
				Understorey	10	25	*Leptospermum polygalifolium, juvenile eucalypts & Livistona australis*															

GENERAL				VEGETATION STRUCTURE AND FLORISTICS						DISTURBANCE HISTORY (SEVERITY)												NOTES
Site	Date	Coordinates	Mapped RE	Stratum	Height (m)	Cover %	Dominant Species	Age Structure	% Dead Trees	Fire	Time Since Fire	Logging	Time since Logging	Clearing	Time Since clearing	Grazing	Time Since Grazing	Weeds	Time since Weed Establishment	Flooding	Time Since Flooding	
				Groundcover	1.5	60	*Gahnia aspera, Lomandra longifolia & multiple grass species*															
Site 1	14/02/18	P: 493125, 7062356	12.3.2	Overstorey	30	25	*Eucalyptus grandis, Syncarpia glomulifera & Lophostemon confertus*	Mature age	5	Nil	N/A	Light	0	Nil	0	Nil	N/A	Nil	0	Nil	0	Wet Sclerophyll forest with rainforest mid and understorey
				Understorey	20	35	*Commersonia bartramai, Archontophoenix cunninghamiana & Neolitsea dealbata*															
				Understorey	2	30	*Archontophoenix cunninghamiana, Lantana camara & Rainforest sp.*															
				Groundcover	1	35	*Lomandra longifolia & Lantana camara*															
Site 4	13/02/18	P: 4934938, 7082196	Not mapped	Overstorey	35	40	*Eucalyptus grandis, Lophostemon confertus, Commersonia bartramai*	Advanced regen	5	Nil	N/A	Light	20yrs	Moderate	current	Nil	N/A	Moderate	0	Nil	0	Advanced regrowth, tall emergent *E. grandis*, rainforest understorey, native vines predominant. Large cleared area currently used for a waste disposal.
				Understorey	18	30	*Commersonia bartramai, Synoum glandulosum & Acacia oshenesii*															
				Understorey	2.5	20	*Lophostemon confertus, Eupomatia laurina & Lomandra longifolia*															
				Groundcover	0.5	5	*Dianella caerulea, Leersia hexandra & Juvenile Eupomatia laurina*															

Appendix D Flora Species Results

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Agavaceae	*Agave americana*	Century plant	Y	-	Introduced				✓							
Anacardiaceae	*Mangifera indica*	Common mango	Y	-	Introduced					✓						
Apiaceae	*Centella asiatica*	Native pennywort	LC	-	Native			✓								
Apocynaceae	*Alyxia ruscifolia*	Chainfruit	LC	-	Native	✓	✓									
Apocynaceae	*Hoya latifolia*	Dinner plate hoya	Y	-	Introduced	✓										
Apocynaceae	*Parsonsia straminea*	Monkey rope	LC	-	Native	✓	✓	✓	✓			✓		✓	✓	
Apocynaceae	*Plumeria alba*	Frangipani	Y	-	Introduced					✓						
Apocynaceae	*Tabernaemontana pandacaqui*	Windmill bush	LC	-	Native	✓										
Apocynaceae	*Trachelospermum jasminoides*	Star jasmine vine	Y	-	Introduced					✓						
Araecaceae	*Phoenix dactylifera*	Date palm	Y	-	Introduced											✓
Araliaceae	*Polyscias elegans*	Celery wood	LC	-	Native	✓		✓	✓	✓						✓
Araliaceae	*Schefflera actinophylla*	Umbrella tree	LC	-	Native			✓	✓	✓			✓		✓	✓
Araliaceae	*Schefflera octophylla*	Ivy tree	LC	-	Native	✓	✓									
Araucariaceae	*Araucaria cunninghamii*	Hoop pine	LC	-	Native		✓			✓						
Arecaeae	*Archontophoenix cunninghamiana*	Bangalow palm	LC	-	Native	✓	✓	✓	✓	✓		✓		✓		✓

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Arecaeae	*Calamus muelleri*	Wait a while vine	LC	-	Native			✓	✓		✓					
Arecaeae	*Dypsis lutescens*	Golden cane palm	LC	-	Native					✓						
Arecaeae	*Livistona australis*	Cabbage-tree palm	LC	-	Native	✓	✓	✓	✓	✓	✓	✓				
Arecaeae	*Syagrus romanzoffiana*	Cocos palm	Y	-	Introduced	✓				✓					✓	
Asparagaceae	*Asparagus aethiopicus*	Asparagus fern	Y	-	Introduced		✓									
Asparagaceae	*Asparagus setaceus*	Common asparagus fern	Y	-	Introduced											✓
Asparagaceae	*Dracaena marginata*	Dragon tree	Y	-	Introduced											✓
Asphodelaceae	*Dianella caerulea*	Blue flax-lily	LC	-	Native	✓	✓	✓		✓	✓	✓		✓	✓	✓
Asteliaceae	*Cordyline petiolaris*	Broad-leaved palm lily	LC	-	Native	✓	✓	✓	✓	✓	✓	✓	✓			✓
Asteraceae	*Ageratum houstonianum*	Blue billy goat weed	Y	-	Introduced		✓	✓	✓				✓	✓	✓	
Asteraceae	*Ambrosia artemisiifolia*	Annual rag weed	LC	-	Native					✓						✓
Asteraceae	*Bidens pilosa*	Cobblers pegs	Y	-	Introduced	✓	✓		✓	✓			✓	✓	✓	✓
Asteraceae	*Chyrsocephalum apiculatum*	Yellow buttons	LC	-	Native								✓			
Asteraceae	*Conyza bonariensis*	Fleabane	Y	-	Introduced										✓	✓
Asteraceae	*Spagneticola trilobata*	Singapore daisy	Y	-	Introduced				✓							
Asteraceae	*Tagetes erecta*	Mexican marigold	Y	-	Introduced				✓							

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Asteraceae	*Taraxacum officinale*	Dandelion	Y	-	Introduced		✓									
Bignoniaceae	*Jacaranda mimosifolia*	Jacaranda	LC	-	Native					✓						
Blechnaceae	*Blechnum cartilagineum*	Gristle fern	LC	-	Native	✓										
Blechnaceae	*Blechnum indicum*	Swamp water fern	LC	-	Native		✓	✓	✓	✓	✓					
Boraginaceae	*Ehretia acuminate*	Koda	LC	-	Native			✓								✓
Cannabaceae	*Celtis sinensis*	Chinese celtis	Y	-	Introduced										✓	
Casuarinaceae	*Allocasuarina littoralis*	She oak	LC	-	Native	✓		✓		✓	✓		✓			
Celastraceae	*Elaeodendron australe*	Red olive berry	LC	-	Native		✓									
Celastraceae	*Maytenus bilocularis*	Orange bark	LC	-	Native				✓							
Celastraceae	*Maytenus silvestris*	Narrow-leaved orange bark	LC	-	Native		✓									
Commelinaceae	*Commelina benghalensis*	Wandering jew	Y	-	Introduced	✓				✓			✓	✓		✓
Convolvulaceae	*Dichondra repens*	Kidney weed	LC	-	Native		✓		✓	✓					✓	✓
Cyatheaceae	*Cyathea cooperi*	Australian tree fern	LC	-	Native	✓	✓									
Cyperaceae	*Eleocharis parvula*	Dwarf spikerush	Y	-	Introduced										✓	
Cyperaceae	*Gahnia aspera*	Rough saw-edge	LC	-	Native		✓	✓	✓	✓	✓			✓	✓	
Davalliaceae	*Nephrolepis cordifolia*	Fishbone fern	Y	-	Introduced					✓						
Dennstaedtiaceae	*Pteridium aquilinum*	Eastern bracken fern	LC	-	Native			✓								

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Dennstaedtiaceae	*Pteridium esculentum*	Bracken fern	LC	-	Native				✓	✓	✓	✓	✓	✓	✓	
Dilleniaceae	*Hibbertia scandens*	Snake vine	LC	-	Native		✓				✓					
Dioscoreaceae	*Dioscorea transversa*	Native yam	LC	-	Native		✓	✓	✓						✓	
Discksoniaceae	*Calochlaena dubia*	False bracken fern	LC	-	Native	✓										
Droseraceae	*Drosera burmannii*	Tropical sundew	LC	-	Native						✓					
Ebenaceae	*Diospyros australis*	Grey plum	LC	-	Native				✓							
Ebenaceae	*Diospyros virginiana*	Persimmon tree	Y	-	Introduced								✓			
Elaeocarpaceae	*Elaeocarpus eumundi*	Eumundi quandong	LC	-	Native											✓
Elaeocarpaceae	*Elaeocarpus grandis*	Blue quandong	LC	-	Native			✓								
Elaeocarpaceae	*Elaeocarpus reticulatus*	Blueberry ash	LC	-	Native				✓	✓	✓					
Elaeocarpaceae	*Sloanea australis*	Maidens blush	LC	-	Native			✓								
Ericaceae	Trochocarpa laurina	Tree heath	LC	-	Native						✓					
Euphorbiaceae	*Aleurites moluccanus*	Candleberry	LC	-	Native					✓						
Euphorbiaceae	*Euphorbia pulcherrima*	Poinsettia	Y	-	Introduced											✓
Euphorbiaceae	*Homalanthus populifolius*	Bleeding heart tree	LC	-	Native	✓								✓		
Euphorbiaceae	*Macaranga tanarius*	Macaranga	LC	-	Native				✓							
Euphorbiaceae	*Mallotus mollissimus*		LC	-	Native											✓
Eupomatiaceae	*Eupomatia laurina*	Bolwarra	LC	-	Native		✓		✓	✓		✓				✓

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Fabaceae	*Acacia fimbriata*	Brisbane wattle	LC	-	Native								✓		✓	
Fabaceae	*Acacia irrorata*	Green wattle	LC	-	Native		✓									
Fabaceae	*Acacia longissima*	long-leaf wattle	LC	-	Native			✓								
Fabaceae	*Acacia maidenii*	Maiden wattle	LC	-	Native				✓					✓	✓	
Fabaceae	*Acacia melanoxylon*	Australian blackwood	LC	-	Native	✓			✓	✓				✓	✓	
Fabaceae	*Acacia orites*	Mountain wattle	LC	-	Native	✓										
Fabaceae	*Acacia oshanesii*		LC	-	Native	✓	✓	✓	✓							
Fabaceae	*Acacia podalyriifolia*	Queensland silver wattle	LC	-	Native	✓										
Fabaceae	*Caesalpinia decapetala*	Mysore thorn	Y	-	Introduced			✓								
Fabaceae	*Caesalpinia pulcherrima*	Peacock flower	Y	-	Introduced										✓	
Fabaceae	*Caesalpinia scortechinii*	Large prickle-vine	LC	-	Native			✓								
Fabaceae	*Callerya australis*	Blunt wisteria	LC	-	Native	✓										
Fabaceae	*Callerya megasperma*	Native wisteria	LC	-	Native				✓							
Fabaceae	*Desmodium uncinatum*	Silverleaf desmodium	Y	-	Introduced	✓		✓	✓				✓			✓
Fabaceae	*Erythrina variegata*	Indian coral tree	LC	-	Native				✓							✓
Fabaceae	*Hovea acutifolia*	Purple pea bush	LC	-	Native	✓										✓
Fabaceae	*Hovea lanceolata*		LC	-	Native		✓	✓	✓		✓					

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Fabaceae	*Indigofera spicata*	Creeping indigo	Y	-	Introduced				✓							✓
Fabaceae	*Macroptilium atropurpureum*	Purple bush bean	Y	-	Introduced		✓	✓	✓				✓		✓	✓
Fabaceae	*Neonotonia wightii*	Glycine	Y	-	Introduced		✓		✓							
Fabaceae	*Senna acclinis*	Rainforest cassia	LC	-	Native	✓										
Fabaceae	*Senna pendula*	Senna	Y	-	Introduced								✓	✓	✓	
Flagellariaceae	*Flagellaria indica*	Whip vine	LC	-	Native			✓	✓		✓	✓				✓
Goodeniaceae	*Goodenia hederacea Sm. subsp. hederacea*		LC	-	Native					✓						
Goodeniaceae	*Goodenia hederacea*	Forest goodenia	LC	-	Native						✓					
Lamiaceae	*Melittis melissophyllum*	Bastard balm	Y	-	Introduced		✓									
Lauraceae	*Cinnamomum camphora*	Camphor laurel	Y	-	Introduced	✓		✓	✓	✓			✓	✓	✓	✓
Lauraceae	*Endiandra discolor*	Rose walnut	LC	-	Native	✓										
Lauraceae	*Endiandra pubens*	Hairy walnut	LC	-	Native			✓								
Lauraceae	*Litsea reticulata*	Bollygum	LC	-	Native	✓	✓	✓	✓			✓				
Lauraceae	*Neolitsea dealbata*	White bollygum	LC	-	Native	✓							✓			✓
Lobeliaceae	*Pratia purpurascens*	White root	LC	-	Native		✓	✓		✓				✓		✓
Lomandraceae	*Lomandra hystrix*	Creek matrush	LC	-	Native	✓	✓			✓		✓				
Lomandraceae	*Lomandra multiflora*	Many-flowered mat-rush	LC	-	Native			✓								
Luzuriagaceae	*Eustrephus latifolius*	Wombat berry	LC	-	Native	✓	✓		✓	✓	✓		✓	✓	✓	✓

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Lycopodiaceae	*Lycopodium centrochinense*		Y	-	Introduced						✓					
Lygodiaceae	*Lygodium japonicum*	Climbing fern	LC	-	Native				✓		✓			✓		
Lygodiaceae	*Lygodium microphyllum*	Climbing snake fern	LC	-	Native											✓
Malvaceae	*Commersonia bartramia*	Brown kurrajong tree	LC	-	Native	✓		✓	✓	✓		✓	✓	✓	✓	✓
Malvaceae	*Hibiscus heterophyllus*	Native rosella	LC	-	Native	✓			✓	✓			✓	✓		
Malvaceae	*Hibiscus tiliaceus*	Cottonwood	LC	-	Native					✓						
Malvaceae	*Sida Cordifolia*	Flannel weed	Y	-	Introduced	✓										
Melastomataceae	*Melastoma affine*	Native lassiandra	LC	-	Native				✓		✓		✓			
Meliaceae	*Melia azedarach*	White cedar	LC	-	Native					✓						✓
Meliaceae	*Synoum glandulosum*	Scentless rosewood	LC	-	Native		✓	✓	✓	✓	✓	✓	✓	✓		✓
Meliaceae	*Toona ciliata*	Red cedar	LC	-	Native								✓			
Menispermaceae	*Legnephora moorei*	Round-leaf vine	LC	-	Native	✓										
Menispermaceae	*Sarcopetalum harveyanum*	pearl vine	LC	-	Native											✓
Menispermaceae	*Stephania japonica*	Snake vine	LC	-	Native	✓	✓	✓	✓	✓				✓	✓	✓
Mimosaceae	*Acacia disparrima*	Hickory wattle	LC	-	Native	✓	✓	✓	✓	✓	✓		✓		✓	✓
Monimiaceae	*Hedycarya angustifolia*	Native mulberry	LC	-	Native			✓								✓
Monimiaceae	*Palmeria scandens*	Anchor vine	LC	-	Native			✓								

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Monimiaceae	*Wilkiea huegeliana*	Common wilkea	LC	-	Native	✓	✓				✓	✓				
Moraceae	*Ficus coronata*	Sandpaper fig	LC	-	Native	✓	✓									✓
Moraceae	*Ficus elastica*	Rubber fig	Y	-	Introduced					✓						
Moraceae	*Ficus fraseri*	Sandpaper fig	LC	-	Native				✓			✓				
Moraceae	*Ficus macrophylla*	Moreton Bay fig	LC	-	Native											✓
Moraceae	*Ficus superba var. henneana*	Deciduous fig	LC	-	Native											✓
Moraceae	*Ficus watkinsiana*	Strangler fig	LC	-	Native				✓							
Myrtaceae	*Acmena smithii*	Lilly pilly	LC	-	Native	✓							✓	✓	✓	
Myrtaceae	*Austromyrtus dulcis*	Midgen berry	LC	-	Native	✓	✓							✓		
Myrtaceae	*Corymbia gummifera*	Red bloodwood	LC	-	Native						✓					
Myrtaceae	*Corymbia intermedia*	Pink bloodwood	LC	-	Native	✓	✓	✓	✓	✓	✓		✓			✓
Myrtaceae	*Eucalyptus grandis*	Flooded gum	LC	-	Native	✓	✓	✓	✓	✓	✓	✓				✓
Myrtaceae	*Eucalyptus major*	Grey gum	LC	-	Native									✓		
Myrtaceae	*Eucalyptus microcorys*	Tallowwood	LC	-	Native					✓						
Myrtaceae	*Eucalyptus resinifera*	Red mahogany	LC	-	Native						✓					✓
Myrtaceae	*Eucalyptus tereticornis*	Forest red gum	LC	-	Native								✓		✓	
Myrtaceae	*Leptospermum liversidgei*	Lemon-scented tea-tree	LC	-	Native									✓		
Myrtaceae	*Leptospermum petersonii*	Lemon-scented myrtle	LC	-	Native			✓								

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Myrtaceae	*Lophostemon confertus*	Brushbox	LC	-	Native	✓	✓	✓	✓	✓				✓		✓
Myrtaceae	*Lophostemon suaveolens*	Swamp box	LC	-	Native		✓		✓				✓	✓	✓	
Myrtaceae	*Melaleuca leucadendra*	Weeping paperbark	LC	-	Native				✓							
Myrtaceae	*Melaleuca quinquenervia*	Broad-leaved paperbark	LC	-	Native					✓	✓			✓	✓	
Myrtaceae	*Melaleuca viminalis*	Weeping bottle brush	LC	-	Native	✓			✓					✓		
Myrtaceae	*Rhodamnia argentea*	Silver myrtle	LC	-	Native			✓								
Myrtaceae	*Syzygium oleosum*	Blue lilly pilly	LC	-	Native	✓	✓	✓	✓	✓	✓					
Myrtaceae	*Syzygium smithii*		LC	-	Native	✓	✓	✓	✓	✓						✓
Myrtaceae	*Tristaniopsis laurina*	Water gum	LC	-	Native				✓			✓				
Myrtaceae	*Waterhousea floribunda*	Weeping lilly pilly	LC	-	Native	✓	✓					✓		✓		
Oleaceae	*Notelaea longifolia*	Large mock-olive	LC	-	Native						✓			✓		
Onograceae	*Ludwigia peploides*	Floating-primrose willow	LC	-	Native				✓					✓		
Orchidaceae	*Caladenia carnea*	Pink fingers	LC	-	Native		✓									
Orchidaceae	*Cryptostylis erecta*	Bonnet orchid	LC	-	Native		✓									
Orchidaceae	*Cymbidium suave*	Snake orchid	LC	-	Native				✓							
Oxalidaceae	*Oxalis perennans*	Native oxalis	LC	-	Native				✓						✓	

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Paracryphiaceae	*Quintinia verdonii*	Grey possumwood	LC	-	Native											
Passifloraceae	*Passiflora caerulea*	Blue passionflower	Y	-	Introduced					✓						
Passifloraceae	*Passiflora edulis*	Passionfruit	Y	-	Introduced								✓			✓
Passifloraceae	*Passiflora foetida*	Stinking passionflower	Y	-	Introduced	✓		✓				✓		✓		✓
Passifloraceae	*Passiflora subpeltata*	White passionflower	Y	-	Introduced								✓			
Philesiaceae	*Geitonoplesium cymosum*	Scrambling lily	LC	-	Native											✓
Philesiaceae	*Philydrum lanuginosum*	Frogsmouth	LC	-	Native				✓		✓					✓
Phyllanthaceae	*Breynia oblongifolia*	Coffee bush	LC	-	Native	✓		✓		✓	✓		✓			
Phyllanthaceae	*Glochidion ferdinandi*	Cheese tree	LC	-	Native	✓	✓	✓					✓		✓	✓
Phyllanthaceae	*Glochidion sumatranum*	Umbrella cheese tree	LC	-	Native	✓	✓	✓	✓	✓	✓		✓	✓		✓
Piperaceae	*Piper hederaceum*	Giant pepper vine	LC	-	Native											✓
Pinaceae	*Pinus elliottii*	Slash pine	Y	-	Introduced	✓		✓					✓	✓	✓	
Pittosporaceae	*Bursaria spinosa*	Blackthorn	LC	-	Native	✓	✓			✓		✓				
Pittosporaceae	*Pittosporum revolutum*	Rough-fruited pittosporum	LC	-	Native		✓							✓		
Pittosporaceae	*Pittosporum undulatum*	Sweet pittosporum	LC	-	Native										✓	
Plantaginaceae	*Digitalis purpurea*	Red fox gloves	Y	-	Introduced					✓						
Poaceae	*Bambusa vulgaris*	Common bamboo	Y	-	Introduced										✓	✓

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Poaceae	*Chloris gayana*	Rhodes grass	Y	-	Introduced								✓			
Poaceae	*Cynodon dactylon*	Couch	LC	-	Native				✓							
Poaceae	*Imperata cylindrica*	Cogon grass	LC	-	Native	✓			✓					✓		✓
Poaceae	*Melinis minutiflora*	Molasses grass	LC	-	Native										✓	
Poaceae	*Oplismenus hirtellus subsp.undulatifolius*	Basketgrass	LC	-	Native	✓										
Poaceae	*Oplismenus imbecillis*	Creeping beard grass	LC	-	Native				✓	✓				✓		✓
Poaceae	*Setaria sphacelata*	South African pigeon grass	Y	-	Introduced	✓		✓	✓		✓		✓	✓	✓	✓
Poaceae	*Themeda triandra*	Kangaroo grass	LC	-	Native								✓			
Poaceae	*Urochloa decumbens*	Signal grass	Y	-	Introduced	✓									✓	✓
Polygonaceae	*Persicaria strigosa*		LC	-	Native				✓					✓	✓	
Polypodiaceae	*Platycerium bifurcatum*	Elkhorn fern	LC	-	Native		✓	✓	✓		✓					
Primulaceae	*Ardisia tomentosa*	Coralberry	Y	-	Introduced								✓			
Primulaceae	*Myrsine variabilis*		LC	-	Native			✓								
Primulaceae	*Rapanea variabilis*	Variable muttonwood	LC	-	Native										✓	✓
Proteaceae	*Banksia integrifolia*	Coast banksia	LC	-	Native							✓		✓		
Proteaceae	*Grevillea banksii*	Red silky oak	LC	-	Native					✓						
Proteaceae	*Grevillea robusta*	Silky oak	LC	-	Native	✓										

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Pteridaceae	*Adiantum hispidulum*	Five-leaved maidenhair fern	LC	-	Native				✓			✓				
Restionaceae	*Restio tetraphyllus*	Tassel cord rush	LC	-	Native						✓					
Rhamnaceae	*Alphitonia excelsa*	Red ash	LC	-	Native	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
Rosaceae	*Rubus hillii*	Native raspberry	LC	-	Native	✓		✓	✓	✓				✓	✓	✓
Rubiaceae	*Canthium angustifolium*	Narrow-leaved canthium	Y	-	Introduced									✓		
Rubiaceae	*Gynochthodes jasminoides*	Sweet morinda	LC	-	Native	✓										
Rubiaceae	*Pomax umbellata*		LC	-	Native						✓					
Rutaceae	*Citrus limon*	Common lemon	Y	-	Introduced					✓						
Rutaceae	*Euodia Elleryana*	Corkwood	LC	-	Native		✓									
Rutaceae	*Flindersia schottiana*	Cudgerie	LC	-	Native					✓						
Rutaceae	*Flindersia brayleyana*	Queensland maple	LC	-	Native			✓						✓		
Rutaceae	*Melicope elleryana*	Pink-flowered doughwood	LC	-	Native				✓			✓	✓	✓		
Sapindaceae	*Alectryon subcinereus*	Native quince	LC	-	Native											✓
Sapindaceae	*Atalaya multiflora*	Broad-leaved whitewood	LC	-	Native			✓								
Sapindaceae	*Castanospora alphandii*	Brown tamarind	LC	-	Native											✓
Sapindaceae	*Cupaniopsis serrata*	Smooth tuckeroo	LC	-	Native	✓	✓					✓				✓

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Sapindaceae	*Diploglottis australis*	Native tamarind	LC	-	Native							✓				
Sapindaceae	*Guioa semiglauca*	Guioa	LC	-	Native										✓	
Sapindaceae	*Jagera pseudorhus*	Foambark	LC	-	Native					✓						
Sapindaceae	*Mischarytera lautereriana*	Corduroy tamarind	LC	-	Native	✓										
Sapindaceae	*Mischocarpus pyriformis*	Yellow pear-fruit	LC	-	Native			✓								✓
Sapotaceae	*Planchonella chartacea*	Thin-leaved coondoo	LC	-	Native			✓								
Smilacaceae	*Ripogonum elseyanum*	Hairy supplejack	LC	-	Native				✓							
Smilacaceae	*Smilax australis*	Smilax	LC	-	Native	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Solanaceae	*Cestrum nocturnum*	Night-blooming jasmine	Y	-	Introduced					✓						
Solanaceae	*Solanum mauritianum*	Wild tobacco	Y	-	Introduced	✓			✓	✓					✓	
Solanaceae	*Solanum nigrum*	Blackberry nightshade	Y	-	Introduced		✓									
Solanaceae	*Solanum torvum*	Turkey berry	Y	-	Introduced	✓		✓								✓
Symplocaceae	*Symplocos stawellii*	White hazelwood	LC	-	Native			✓								
Symplocaceae	*Symplocos thwaitesii*	buff hazelwood	LC	-	Native											✓
Typhaceae	*Typha latifolia*	Typha	Y	-	Introduced											✓

FAMILY	SCIENTIFIC NAME	COMMON NAME	NCA STATUS	EPBC STATUS	NATIVE OR INTRODUCED SPECIES	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	FAUNA SITE 7	SITE 8	FAUNA SITE 9	INSIDE TREATMENT PLANT
Ulmaceae	*Trema tomentosa var. aspera*	Poison peach	LC	-	Native	✓	✓									
Verbenaceae	*Lantana camara*	Lantana	Y	-	Introduced	✓	✓	✓	✓	✓	✓		✓		✓	✓
Verbenaceae	*Verbena bonariensis*	Purpletop vervain	Y	-	Introduced				✓							
Verbenaceae	*Verbena officinalis*	Blue vervain	Y	-	Introduced				✓							
Vitaceae	*Cissus hypoglauca*	Jungle grape	LC	-	Native	✓			✓	✓	✓	✓				✓
Vitaceae	*Clematicissus opaca*	Pepper vine	LC	-	Native			✓	✓		✓					✓
Xanthorrhoeaceae	*Lomandra longifolia*	Basket grass	LC	-	Native	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Xanthorrhoeaceae	*Xanthorrhoea johnsonii*	Johnsons grass tree	LC	-	Native					✓						
Zingiberaceae	*Alpinia caerulea*	Native ginger	LC	-	Native						✓					

Appendix E Fauna Species and Fauna Habitat Results

Appendix E.1 Fauna species results by Site

FAUNA	FAMILY	SCIENTIFIC NAME	COMMON NAME	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	SITE 8	SITE 9	SITE 10	OPPORTUNISTIC
Amphibian	Bufonidae	*Rhinella marina*	Cane toad	✓			✓	✓						✓
Amphibian	Hylidae	*Litoria gracilenta*	Graceful treefrog		✓									✓
Amphibian	Hylidae	*Litoria fallax*	Eastern sedgefrog	✓	✓		✓	✓		✓				✓
Amphibian	Myobatrachidae	*Adelotus brevis*	Tusked frog	✓			✓	✓						
Amphibian	Myobatrachidae	*Mixophyes iteratus*	Giant barred frog		✓									
Amphibian	Myobatrachidae	*Limnodynastes peronii*	Striped marshfrog				✓	✓						
Bird	Acanthizidae	*Acanthiza pusilla*	Brown thornbill		✓	✓	✓	✓						✓
Bird	Acanthizidae	*Sericornis frontalis*	White-browed scrubwren	✓		✓	✓	✓		✓			✓	✓
Bird	Acanthizidae	*Sericornis magnirostra*	Large-billed scrubwren					✓						✓
Bird	Accipiinidae	*Accipiter novaehollandiae*	Grey goshawk											✓
Bird	Accipitridae	*Haliastur sphenurus*	Whistling kite	✓										✓
Bird	Alcedinidae	*Todiramphus macleayii*	Forest kingfisher		✓			✓						✓
Bird	Alcedinidae	*Dacelo novaeguineae*	Laughing kookaburra				✓	✓			✓		✓	✓
Bird	Anatidae	*Anas superciliosa*	Pacific black duck				✓	✓		✓	✓	✓	✓	✓
Bird	Anatidae	*Cygnus atratus*	Black swan								✓	✓	✓	✓
Bird	Anatidae	*Aythya australis*	Hardhead								✓			✓
Bird	Anatidae	*Anas platyrhynchos domesticus*	Pekin duck										✓	✓
Bird	Anhingidae	*Anhinga novaehollandiae*	Australasian darter				✓	✓			✓	✓	✓	✓
Bird	Anseranatidae	*Anseranas semipalmata*	Magpie goose							✓	✓	✓	✓	✓
Bird	Ardeidae	*Ardea intermedia*	Intermediate egret									✓	✓	✓
Bird	Ardeidae	*Egretta garzetta*	Little egret				✓				✓	✓		✓
Bird	Ardeidae	*Egretta novaehollandiae*	White-faced heron				✓							
Bird	Ardeidae	*Ardea alba*	Eastern great egret								✓	✓	✓	✓
Bird	Ardeidae	*Egretta novaehollandiae*	White-necked heron									✓	✓	✓
Bird	Artamidae	*Cracticus nigrogularis*	Pied butcherbird			✓	✓	✓			✓			✓
Bird	Artamidae	*Strepara graculina*	Pied currawong	✓	✓	✓	✓			✓			✓	✓
Bird	Artamidae	*Cracticus tibicen*	Australian magpie					✓		✓	✓		✓	✓
Bird	Cacatuidae	*Cacatua galerita*	Sulphur-crested cockatoo	✓	✓	✓		✓		✓			✓	✓
Bird	Cacatuidae	*Eolophus roseicapilla*	Galah				✓							
Bird	Campephagidae	*Coracina tenuirostris*	Cicadabird		✓		✓	✓		✓	✓			✓
Bird	Campephagidae	*Coracina novaehollandiae*	Black-faced cuckoo-shrike			✓								
Bird	Campephagidae	*Lalage leucomela*	Varied triller					✓						✓
Bird	Charadriidae	*Vanellus miles*	Masked lapwing									✓	✓	✓
Bird	Cisticolidae	*Cisticola exilis*	Golden-headed cisticola									✓		✓
Bird	Columbidae	*Columba leucomela*	White-headed pigeon				✓			✓				✓
Bird	Columbidae	*Ocyphaps lophotes*	Crested pigeon											✓
Bird	Columbidae	*Geopelia humeralis*	Bar-shouldered dove	✓	✓	✓	✓	✓			✓			✓
Bird	Columbidae	*Macropygia phasianella*	Brown cuckoo-dove		✓	✓	✓	✓						✓
Bird	Corvidae	*Corvus orru*	Torresian crow		✓	✓		✓		✓				✓
Bird	Cuculidae	*Cacomantis flabelliformis*	Fan-tailed cuckoo											✓

FAUNA	FAMILY	SCIENTIFIC NAME	COMMON NAME	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	SITE 8	SITE 9	SITE 10	OPPORTUNISTIC
Bird	Cuculidae	*Eudynamys orientalis*	Eastern koel										✓	✓
Bird	Cuculidae	*Cacomantis variolosus*	Brush cuckoo	✓								✓		✓
Bird	Cuculidae	*Scythrops novaehollandiae*	Channel-billed cuckoo					✓						✓
Bird	Cuculidae	*Centropus phasianinus*	Pheasant coucal							✓				✓
Bird	Dicaeidae	*Dicaeum hirundinaceum*	Mistletoebird	✓		✓	✓						✓	✓
Bird	Dicruridae	*Dicrurus bracteatus*	Spangled drongo	✓		✓	✓	✓		✓	✓			✓
Bird	Estrildidae	*Neochmia temporalis*	Red-browed finch					✓		✓				✓
Bird	Hirundinidae	*Hirundo neoxena*	Welcome swallow				✓							✓
Bird	Hirundinidae	*Petrochelidon nigricans*	Tree martin				✓							
Bird	Jacanidae	*Irediparra gallinacea*	Comb-crested jacana				✓				✓		✓	✓
Bird	Laridae	*Hydroprogne caspia*	Caspian tern				✓			✓			✓	✓
Bird	Locustellidae	*Megalurus gramineus*	Little grassbird								✓			✓
Bird	Maluridae	*Malurus lamberti*	Variegated fairy-wren					✓						✓
Bird	Meliphagidae	*Acanthorhynchus tenuirostris*	Eastern spinebill			✓		✓						✓
Bird	Meliphagidae	*Caligavis chrysops*	Yellow-faced honeyeater		✓		1							✓
Bird	Meliphagidae	*Meliphaga lewinii*	Lewins honeyeater	✓	✓	✓	✓	✓		✓	✓			✓
Bird	Meliphagidae	*Manorina melanocephala*	Noisy miner		✓		✓	✓		✓	✓		✓	✓
Bird	Meliphagidae	*Philemon corniculatus*	Noisy friarbird	✓			✓	✓		✓				✓
Bird	Meliphagidae	*Entomyzon cyanotis*	Blue-faced honeyeater	✓			✓			✓	✓		✓	✓
Bird	Meliphagidae	*Lichmera indistincta*	Brown honeyeater				✓	✓						✓
Bird	Meliphagidae	*Melithreptus albogularis*	White-throated honeyeater					✓						✓
Bird	Meliphagidae	*Lichenostomus fuscus*	Fuscous honeyeater					✓						✓
Bird	Meropidae	*Merops ornatus*	Rainbow bee-eater					✓						✓
Bird	Monarchidae	*Grallina cyanoleuca*	Magpie-lark			✓		✓		✓	✓			✓
Bird	Monarchidae	*Myiagra cyanoleuca*	Satin flycatcher		✓	✓								✓
Bird	Monarchidae	*Symposiachrus trivirgatus*	Spectacled monarch	✓		✓								✓
Bird	Oriolidae	*Specotheres vieilloti*	Australasian figbird	✓	✓		✓	✓		✓	✓			✓
Bird	Pachycephalidae	*Pachycephala pectoralis*	Golden whistler	✓	✓	✓	✓	✓		✓	✓			✓
Bird	Pachycephalidae	*Colluricincla harmonica*	Grey shrike-thrush	✓		✓	✓			✓	✓			✓
Bird	Pardalotidae	*Pardalotus striatus*	Striated pardalote											✓
Bird	Pelecanidae	*Pelecanus conspicillatus*	Australian pelican				✓				✓		✓	✓
Bird	Petroicidae	*Eopsaltria australis*	Eastern Yellow Robin	✓	✓	✓	✓	✓			✓			✓
Bird	Petroicidae	*Tregellasia capito*	Pale-yellow robin			✓								✓
Bird	Phalacrocoracidae	*Phalacrocorax varius*	Pied Cormorant				✓				✓		✓	✓
Bird	Phalacrocoracidae	*Phalacrocorax sulcirostris*	Little black cormorant				✓				✓	✓	✓	✓
Bird	Podargidae	*Podargus strigoides*	Tawny frogmouth				✓	✓						
Bird	Podicipedidae	*Tachybaptus novaehollandiae*	Australasian grebe							✓	✓	✓	✓	✓
Bird	Psittaculidae	*Trichoglossus haematodus*	Rainbow lorikeet	✓	✓	✓					✓			✓
Bird	Psittaculidae	*Trichoglossus chlorolepidotus*	Scaly-breasted lorikeet				✓	✓		✓	✓		✓	✓
Bird	Psophodidae	*Psophodes olivaceus*	Eastern whipbird		✓	✓	✓	✓		✓	✓			✓
Bird	Rallidae	*Fulica atra*	Eurasian coot				✓				✓	✓	✓	✓

FAUNA	FAMILY	SCIENTIFIC NAME	COMMON NAME	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	SITE 8	SITE 9	SITE 10	OPPORTUNISTIC
Bird	Rallidae	*Porphyrio porphyrio*	Purple swamphen				✓	✓			✓		✓	✓
Bird	Rallidae	*Gallinula tenebrosa*	Dusky moorhen									✓		
Bird	Rhipiduridae	*Rhipidura rufifrons*	Rufous fantail			✓		✓						✓
Bird	Rhipiduridae	*Rhipidura albiscapa*	Grey fantail			✓		✓		✓				✓
Bird	Rhipiduridae	*Rhipidura leucophrys*	Willie wagtail	✓			✓			✓	✓			✓
Bird	Threskiornithidae	*Threskiornis spinicollis*	Straw-necked ibis								✓			✓
Bird	Threskiornithidae	*Platalea regia*	Royal spoonbill								✓			✓
Bird	Threskiornithidae	*Threskiornis moluccus*	White ibis								✓			✓
Invertebrate	Papilionidae	*Ornithoptera richmondia*	Richmond birdwing butterfly					✓						✓
Reptile	Agamidae	*Intellagama lesueurii*	Eastern water dragon											✓
Reptile	Gekkonidae	*Hemidactylus frenatus*	Asian house gecko								✓			✓
Reptile	Scincidae	*Eulamprus martini*	Dark bar-sided skink	✓										
Reptile	Scincidae	*Eulamprus quoyii*	Eastern water skink	✓										
Reptile	Scincidae	*Cyclodomorphus gerrardii*	Pink-tongued lizard	✓										
Reptile	Scincidae	*Lampropholis sp.*		✓			✓							
Mammal	Ornithorhynchidae	*Ornithoptera anatinus**	Platypus		✓									
Mammal	Vespertilionidae	*Myotis adversus*/*Nyctophilus* sp.	Fishing bat/long-eared bat species	✓			✓	✓						
Mammal	Vespertilionidae	*Scotorepens greyii*	Little broad-nosed bat					✓						
Mammal	Vespertilionidae	*Miniopterus australis*	Little bent-wing bat	✓		✓								
Mammal	Vespertilionidae	*Miniopterus schreibersii oceanensis*	Eastern bent-wing bat					✓						
Mammal	Vespertilionidae	*Chalinolobus nigrogriseus*	Hoary wattled bat					✓						
Mammal	Molossidae	*Mormopterus norfolkensis*	East-coast free-tailed bat			✓	✓							
Mammal	Molossidae	*Mormopterus ridei*	Eastern free-tailed bat				✓							
Mammal	Molossidae	*Tadarida australis*	White-striped free-tailed Bat				✓							
Mammal	Pteropodidae	*Nyctimene robinsoni*	Eastern tube-nosed bat	✓										

Appendix E.2 Fauna habitat assessment

SITE	DATE	DISTURBANCE TYPE	LEVEL OF DISTURBANCE	FAUNA FEATURES								OVERSTOREY			MIDSTOREY			UNDERSTOREY			GROUNDCOVER			LEAF LITTER		BARE EARTH (%)	LIVE TREES	DEAD TREES	FALLEN LOGS (PER 25M RADIUS)
				Mistletoe	Epiphytes	Fleshy Fruit (excl fig)	Acacia	Banksia	Allocasuarina	Fig	Melaleuca	Dom Species	H (m)	FPC (%)	Dom Species	H (m)	FPC (%)	Dom Species	H (m)	FPC (%)	Dom Species	H (m)	FPC (%)	% Cover	Depth (cm)		Hollows (per 25m x 25m)	Hollows (per 25m x 25m)	
1	14/02/18	Nil	Low	0	0	0	0	0	0	0		*Syncarpia glomulifera, Corymbia intermedia, Araucaria cunninghamii, Eucalyptus grandis and Lophostemon suaveolens*	25	25	Various rainforest sp., *Syzygium, floribunda, A. disparrima, Tristaniopsis laurina.*	12	3-8	Various rainforest sp., *Syzygium, floribunda, A. disparrima, Tristaniopsis laurina, Lantana camara*	3-8	50	Lomandra species, native grasses	0	40	60	2	8	0	1	1
2	14/02/18	Nil	Low	0	0	0	0	0	0	0		*Lophostemon suaveolens, Eucalyptus resinifera, Corymbia intermedia, Eucalyptus grandis*	35	50	Various rainforest species	15-20	85	Various rainforest species	2-3	30	*Alpinia caerulea, Flagellaria indica*	0	15	50	5	0	0	0	1
3	16/02/18	Nil	Low	0	0	0	0	0	0	0	0	*Eucalyptus grandis, Lophostemon confertus, Corymbia intermedia, Syncarpia glomulifera*	35	50	Various rainforest species	15	90	Various rainforest species	1-3	50	Ferns, grass, Lomandra species	0	15	98	5	0	0	0	1
4	14/02/18	Nil	Low	0	0	0	0	0	0	0		*Eucalyptus grandis, Lophostemon suaveolens, Corymbia intermedia, Eucalyptus microcorys*	25	25	Various rainforest species	15	70	Various rainforest species	5	50	Ferns	0	20	90	5	20	0	0	1
5	14/02/18	Nil	Low	0	0	0	0	0	0	0		*Eucalyptus resinifera, Swamp mahogany, Syncarpia glomulifera, Eucalyptus grandis, Corymbia intermedia*	30	50	Various rainforest species, *Endiandra sieberi, Leptospermum sp.*	12	5	*Livistona australis*	4-5	35	*Gahnia aspera*	0.7	55	90	5		2	1	3

SITE	DATE	DISTURBANCE TYPE	LEVEL OF DISTURBANCE	FAUNA FEATURES								OVERSTOREY			MIDSTOREY			UNDERSTOREY			GROUNDCOVER			LEAF LITTER		BARE EARTH (%)	LIVE TREES	DEAD TREES	FALLEN LOGS (PER 25M RADIUS)
				Mistletoe	Epiphytes	Fleshy Fruit (excl fig)	Acacia	Banksia	Allocasuarina	Fig	Melaleuca	Dom Species	H (m)	FPC (%)	Dom Species	H (m)	FPC (%)	Dom Species	H (m)	FPC (%)	Dom Species	H (m)	FPC (%)	% Cover	Depth (cm)		Hollows (per 25m x 25m)	Hollows (per 25m x 25m)	
7	16/02/18	Nil	Low	0	0	0	0	0	0	0		*Acacia disparrima, Commersonia bartramia, Glochidion ferdinandi, Corymbia intermedia, Eucalyptus tereticornis, Syagrus romanzoffiana, Melicope elleryana, lophostemon suaveolens and Archontophoenix cunninghamiana*	20	25	*Acacia disparrima, Archontophoenix cunninghamiana*	14	75	*Nil*	N/A	0	*Pteridium esculentum, Lantana camara, Hygrophila, persicaria, Nymphoides, Setaria sphacelata*	2	35	0	0	Open water- 65%	0	0	0
8	14/02/18	Nil	Low	0	0	0	0	0	0	0		*Nil*	0	0	*Nil*	0	0	*Nil*	N/A	0	*Nymphoides sp., Spice rush, Setaria sphacelata*	0.2-0.5	39	0	0	Open Water - 61%	0	0	0
9	14/02/18	Nil	Low	0	0	0	0	0	0	0		*Nil*	0	0	*Nil*	0	0	*Nil*	N/A	0	*Persicaria hydropiper, Eleocharis sp., Nymphoides sp., Setaria sphacelata*	0.2-1.5	54%	0	0	Open water - 56%	0	0	0
10	14/02/18	Nil	Low	0	0	0	0	0	0	0	0	*Nil*	0	0	*Nil*	0	0	*Nil*	N/A	0	*Nymphoides sp., Eleocharis sp., Persicaria hydropiper, Lepironia articulata, Melinis minutiflora, Setaria sphacelata*	1.5	20%	0	0	Open water - 80%	0	0	0

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