

Land in Birkdale, Capalaba, Queensland Environmental Investigation

For: Australian Communications and Media Authority
Final

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EXECUTIVE SUMMARY

This Environmental Report (ER) documents the status of the ACMA land at 362-388 Old Cleveland Road East in Birkdale, Brisbane (the site) following an environmental investigation undertaken in March 2018. The purpose of the ER is to identify any constraints and opportunities at the site pertaining to Matters of National Environmental Significance (MNES) protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The ER presents potential environmental, heritage and contamination risks that may be relevant considerations to the future use of the site.

The ER has been complied primarily based on a desktop review of existing information, including publicly available databases and previous studies pertaining to the site. A one-day field survey was undertaken to verify the desktop information and understand the potential presence of MNES and other environmental matters at the site.

In terms of MINES, one listed threatened ecological community may occur in a small area near Tingalpa Creek (Subtropical and Temperate Coastal Saltmarsh), one listed threatened species (koala) is known to occur at the site. The site also has the potential to support other listed threatened species and may be used by migratory species. Tingalpa Creek, which runs adjacent to the site, drains into Moreton Bay Ramsar Site, a wetland of international importance 5 km downstream of the site. No other MNES are of relevance to the site.

The historic use of the site presents some potential contamination risks. These are associated with: a former incinerator, a former landfill, potential acid sulfate soils, and the presence of sub-surface 3-phase power lines which may contain lead. These contamination risks could potentially present risks to MNES depending on the sites future use, and may require consideration under Queensland provisions for contaminated land.

Desk based searches by Jacobs (2016) identified no registered Indigenous heritage sites situated on or within 50 metres of the site (Jacobs 2016). ERM understands that ACMA is in consultation with traditional owners and carrying out site based studies to identify and record any Indigenous cultural heritage within the site.

ABBREVIATIONS AND DEFINITIONS

ACMA	Australian Communications and Media Authority	
ACM	Asbestos Containing Material	
AEC	Area of Environmental Concern	
ALA	Atlas of Living Australia	
AST	Above Ground Storage Tank	
CHL	Commonwealth Heritage List	
DoEE	Department of the Environment	
ER	Environmental Report	
MNES	Matters of National Environmental Significance	
NHL	National Heritage List	
QHR	Queensland Heritage Register	
RE	Regional Ecosystem	
RNE	Register of National Estate	
TEC	Threatened Ecological Community	
	0	
WHL	World Heritage List	

INTRODUCTION

The Australian Communications and Media Authority (ACMA) is considering the future use of ACMA property located at 362-388 Old Cleveland Road East, Birkdale, Queensland (the site). Environmental Resources Management Pty Ltd (ERM) were commissioned by ACMA to undertake an environmental investigation to identify potential constraints and opportunities at the site in relation to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The focus of the environmental investigation considers ecology, heritage and contamination aspects that may potentially affect future use of the site. The findings of the investigation are summarised in this Environmental Report (ER).

BACKGROUND

The ACMA is a Commonwealth statutory authority responsible for managing media and communication works. With respect to communications, part of the ACMA's function is to regulate use of the radio-frequency spectrum and minimise interference with radio communications. This includes the high frequency (HF) spectrum, which is used for long-range radio communications by services such as aviation, emergency services and Defence.

In November 2014, the ACMA announced an infrastructure sharing agreement with Defence¹. This agreement enabled the ACMA to use the Defence High Frequency Communications System (DHFCS) to identify sources of interference in the HF band. As a result of this improved capability, the ACMA no longer requires its existing HF monitoring facility at Birkdale.

While the future use of the land is not known at the time of preparing this ER, Commonwealth and ACMA Policy requires an understanding of any environment, heritage and contamination risks at the site, specifically as they relate to the EPBC Act, to consider future use options.

SITE LOCATION

The site is restricted from public access and located on freehold land within the Redland City Council suburb of Birkdale (*Figure 1*). The site area covers 61.78 ha. The coordinates bounding the entire site are provided in *Table* 1 below.

1.2

1

¹ ACMA Defence DMO HFDF MOU 2014 <u>https://www.acma.gov.au/-/media/Spectrum-Monitoring-and-Analysis/Publication/PDF/ACMA-Defence-DMO-HFDF-MOU-2014-11-pdf.pdf</u>

The site comprises three land parcels, all owned by ACMA, the details of which are presented in *Table 2*.

Table 1

Site boundary coordinates (GDA 94)

Lati	tude and	d longitud	le
-27.5	514390°,	153.203911	l°
-27.5	507704°,	153.207045	5°
-27.5	505933°,	153.195436	5°
-27.5	507719°,	153.193536	5°
-27.5	512563°,	153.201825	5°
-27.5	514071°,	153.201510)°

Table 2

Lots and Plan Numbers and Area of each lot

Lot No	Plan No	Area
1	RP 14143	38.85
2	RP 14144	7.284
2	SP146445	15.6462

The site is accessed from Old Cleveland Road East, which runs adjacent to its entire western boundary. This is a four lane, two-way thoroughfare that connects Birkdale with the Pacific Motorway (M1), Gateway Motorway (M2) and central Brisbane to the west. Uhlman Road Reserve (unformed) forms the northern boundary. Howeston Golf Course is located to the north-west. Tingalpa Creek and its flood plain adjoins the south-western boundary of the site. The southern boundary, which is approximately 200 m long, abuts a residential cul-de-sac called Jones Road.

Land to the immediate north of the site is owned by Airservices Australia and includes a radio communication facility within cleared grassland, surrounded by woodland. This woodland habitat is contiguous with that found within the site. Residential development surrounds the site to the north (beyond the Airservices Australia land), west and south. To the east of the site, beyond Tingalpa Creek, further tracts of floodplain and remnant woodland habitat are found.

1.3 PURPOSE OF THE ER

The purpose of this ER is to identify:

- Hazards and associated environmental risks at the site;
- Potential constraints under the EPBC Act;
- A summary of relevant State legislation and obligations; and
- Recommendations to manage environmental aspects at the site.

As mentioned above, the scope of the ER does not include a risk assessment of potential future use impact because there is presently no proposal or action relevant to the site. The ER therefore provides baseline information on the existing environment and identifies the potential constraints and opportunities this may have for future use of the site for ACMA's consideration.

1.4 STRUCTURE OF THE ER

Following this introduction, the ER is structured as follows:

- Chapter 2 outlines the methodology undertaken for the ecological, contamination and heritage components;
- Chapter 3 describes the relevant and applicable Commonwealth and State legislative framework;
- Chapter 4 describes the environmental values identified at the site; and
- Chapter 5 presents recommendations for environmental management; and
- Chapter 6 presents the conclusions.

A number of annexes supporting the main body of the ER are also included:

- Annex A Ecological Desktop Search Reports;
- Annex B ERM Likelihood of Occurrence Assessment for threatened species at the site; and
- Annex C ERM Contamination Desktop Search Reports.

2 METHODOLOGY

This ER has been guided by the approach outlined in the Department of Defence Guidance on the Preparation of an Environmental Report (Version 2.0 November 2017), noting that a proposed action is currently not known, and therefore not being assessed. The preparation of this ER has involved the following tasks:

- Review of existing environment and heritage documentation for the site provided by ACMA and relevant statutory databases;
- Review of applicable Commonwealth and State legislative and planning controls;
- Site scoping visit by ERM project team;
- Analysis of potential environmental, contamination and heritage constraints and opportunities based on the desktop and field studies; and
- Documentation of the above within this ER.

2.1 STUDY TEAM

The ERM study team comprised the five staff presented in *Table 3* below. The team includes specialist consultants in ecology, contaminated land, heritage and environmental science.

Team Member	Qualifications and Experience
Dr David Dique	David is the Impact Assessment and Planning Partner in ERM's Brisbane office. David ha over 20 years of experience in biodiversity and heritage projects, including for Defence David has a Bachelor of Natural Resource (Hons.), a PhD in ecology and is a Certified Environmental Practitioner.
Pete Jones	Pete is a Principal Environmental Scientist a ERM with 15 years of experience within industry and consulting. Pete has a Bachelo of Science (Hons.), a Master of Science and i a Certified Project Manager.
Brian Fainton	Brian is a Principal Consultant with 15 years experience in consulting and industry specialising in contaminated site investigations and assessment. Brian has Bachelor of Science (Hons.) and a Master o Science, and is a 'Suitably Qualified Person (as per the provisions of the Environmenta Protection Act, 1994) in Queensland.

Table 3 ERM Study Team

Team Member	Qualifications and Experience
Robin Twaddle	Robin has four years' experience in cultural heritage in research and consulting spheres. He has fieldwork experience both in Australia and internationally, including excavation, survey, stakeholder consultation, site recording, interpretation, cultural heritage assessments, and logistical organization. Robin has a Bachelor of Arts (Hons.) in archaeology and a PhD in Aboriginal Archaeology.
Frances Alexander	Frances has over four years' experience in ecology and one year in ecological consulting working on a range of environmental impact assessment and management projects. Frances has a Bachelor of Science (Hons.) in zoology, a Master of Environment and a PhD in the ecology field.

2.2 TECHNICAL STUDIES

Environmental baseline information was collected through a combination of desktop studies and a one-day site visit. A number of databases and online information sources were reviewed to inform specific components of the ER as well as to gain an understanding of the broader environmental context of the site. Specific details of the ecological, contamination and heritage methodologies are presented in the following sub-sections. General environmental information was gathered through a review of the Queensland Globe and Redlands City Council Planning Red e-mapping.

2.2.1 Ecology

The scope of the ecology assessment was undertaken as follows:

- Review and analysis of available and relevant reports for the site provided by ACMA;
- Desktop searches for ecological records within 2 km of the site from the:
 - EPBC Act Protect Matters Search Tool (PMST);
 - Commonwealth Department of Environment and Energy (DoEE) Ecological Communities of National Environmental Significance Database;
 - DoEE National Flying-fox Monitoring Viewer;

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- Qld Department of Environment and Science (DES) Wildlife Online (WO);
- DES Matters of State Environmental Significance (MSES) version 4.1 mapping;
- DES Wetland Management Areas published 21 November 2011;
- DES Protected Plants Endangered, Vulnerable, Near Threatened (EVNT) Flora Survey Trigger Map version 5;
- QLD Department of Natural Resources, Mines and Energy (DNRME) Regional Ecosystem version 8.0 mapping;
- DNRME Regrowth vegetation version 2.1 mapping;
- DNRME Property Maps of Assessable Vegetation;
- DNRME Essential Habitat Mapping version 4.45 mapping;
- DNRME Vegetation Management Wetlands Map version 2.45;
- Atlas of Living Australia (ALA) (N.B. 5 km search radius);
- Australian Virtual Herbarium (AVH) database;
- Redland City Council Planning Red-e map; and
- Satellite and Aerial Photography (QLD Globe).
- A one-day site visit on 23 March 2018 to:
 - Confirm the extent of vegetation communities identified within desktop mapping;
 - Appraise the habitats at the site for their potential to support listed flora and fauna; and
 - Record all incidental sightings or evidence of notable species, including weeds and pests.
- An evaluation of the likelihood for threatened species to occur on the site was carried out using the criteria provided in *Table 4*. This compared existing records, mapped distribution and habitat preferences for each species to assess the likelihood of occurrence on the site.

Table 4

2.2.2

Likelihood of Occurrence criteria

Criteria	Suitable habitat exists ¹	Habitat does not exist ²
Records within site area (based on recent database records)	Known	Known
Records in the locality	Potential	Unlikely
No records in locality but site is within species distribution	Potential	Unlikely
No records in locality and not within species distribution.	Unlikely	Unlikely

1. Suitable habitat is based on species profile information and desktop vegetation and other landscape feature mapping.

2. Based on sources reviewed and one-day site visit.

 Locality refers to a 2 km buffer of the site for Wildlife Online searches and a 5 km buffer of the site for Atlas of Living Australia searches

Contamination

The scope of the contamination component of the study included the following:

- Review and analysis of available and relevant reports for the site provided by ACMA;
- Targeted searches of the following databases/information sources;
 - QLD Environmental Management Register and Contaminated Land Register;
 - Current and historic title searches;
 - Geological, soils and topographic mapping;
 - Registered groundwater bores; current land use zoning;
 - Dial-Before-You-Dig searches;
- A telephone interview with ACMA's Site Manager Greg Sherwood to establish historical use of the site for chemical storage, waste disposal, spills, and potential UXOs;
- A one-day site survey on 23 March 2018 to:
 - Establish and record site setting, potential receptors and ground-truth specific Areas of Environmental Concern (AEC);
 - Record GPS coordinates for each potential AEC and complete photographic log per site; and
 - Note any constraints (access, services, and uses) that may impact design of future Detailed Site Investigations (DSI), where appropriate.

2.2.3 Heritage

The heritage assessment considered natural, built and aboriginal heritage. This comprised the following tasks:

- review of Jacob's Heritage Assessment (2016) for the site as provided by ACMA. This included site surveys for natural and built heritage and a desktop study for Indigenous cultural heritage values;
- targeted searches of the following databases/information sources:
 - World Heritage List (WHL);
 - Commonwealth Heritage List (CHL);
 - Register of National Estate (RNE);
 - National Heritage List (NHL);
 - Queensland Heritage Register (QHR);
 - Redland City Council Planning Scheme Heritage Place and Character Precinct Overlay; and
- A one-day site visit to broadly confirm the extent and condition of the heritage features at the site, specifically focussing on built heritage.

2.3 LIMITATIONS OF THE ER

This ER has been prepared to identify existing environmental and heritage values of the site and opportunities and constraints for future use. The information presented is based on searches of relevant desktop sources, previous reports prepared for the site (as provided by ACMA) and a one-day site visit. No detailed inspections, sampling or targeted surveys were carried out on-site or across seasons.

ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LTD

LEGISLATIVE FRAMEWORK

ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999 (C'WTH)

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is the Australian Government's central piece of environmental legislation. It provides the legal framework to protect and manage Matters of National Environmental Significance (MNES). MNES listed under the EPBC Act are:

- World Heritage Properties;
- National Heritage Places;
- Wetlands of international importance (Ramsar wetlands);
- Listed threatened species and ecological communities;
- Migratory species;
- Commonwealth marine areas;
- The Great Barrier Reef Marine Park
- Nuclear actions; and
- A water resource, in relation to coal seam gas development or large coal mining development.

Part 3, Division 1 of the EPBC Act requires actions that have, will have or are likely to have a significant impact on a matters of National Environmental Significance (NES) to seek approval from the Australian Government Minister.

In addition to Part 3, two further sections of the EPBC Act are of particular relevance to the present ER:

- Section 26 which precludes actions on Commonwealth land that have, or likely to have a significant impact on the environment; and
- Section 28 which precludes Commonwealth agencies (including ACMA) from undertaking actions without prior approval where those actions have the potential to have a significance impact on the environment.

3.1

3

Under sections 26 and 28, the definition of 'the environment' is broader than MNES and includes:

- Ecosystems and their constituent parts, including people and communities; and
- Natural and physical resources; and
- The qualities and characteristics of locations, places and areas; and
- Heritage values of places; and
- The social, economic and cultural aspects of a thing mentioned in paragraph (a), (b) or (c).

3.2 STATE LEGISLATION

As a Commonwealth agency, ACMA is not subject to State and local government legislation and regulations. However, this information can assist in considering environment and heritage issues and identifying an appropriate course of management, ensuring EPBC Act compliance. Further discussion of relevant and applicable State legislation is provided in below.

3.2.1 Environmental Protection Act 1994 (Qld)

The EP Act provides the key legislative framework for environmental management and protection in Queensland. The objective of the EP Act is to: 'Protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains ecological processes on which life depends' (s 3). Under the EP Act, all persons must comply with the general environmental duty not to undertake an: 'Activity that causes, or is likely to cause, environmental harm unless... all reasonable and practicable measures to prevent or minimise the harm are taken' (s 319).

3.2.2 Environmental Offsets Act 2014 (Qld)

The Environmental Offsets Act 2014 (EO Act), Environmental Offsets Regulation 2014 and the Queensland Government Environmental Offsets Policy provide a streamlined framework for environmental offset requirements. Offsets are required where there is an unavoidable impact on State significant environmental values. In addition, an environmental offset can only be required if impacts from a prescribed activity constitute a significant residual impact. To avoid duplication with offsets required under the EPBC Act, the policy provides that the administering agency must consider other relevant offset conditions for the same or substantially the same prescribed impact.

3.2.3 Nature Conservation Act 1992 (Qld)

The objective of the Nature Conservation Act 1992 (NC Act) is the conservation of nature (plants and animals) within Queensland. Specifically, the NC Act seeks to gather relevant information, identify critical habitat areas, manage protected areas, protect wildlife and promote ecologically sustainable development. The NC Act has 10 subordinate regulatory instruments in the form of regulations, conservation plans and notices. Of relevance to the Project is the Nature Conservation (Wildlife) Regulation 2006 which categorises flora and fauna species as extinct in the wild, endangered, vulnerable, near threatened or of least concern. Also listed is international wildlife and prohibited wildlife.

3.2.4 Vegetation Management Act 1999 (Qld)

The Vegetation Management Act 1999 (VM Act) regulates the conservation and management of vegetation communities and provides protection for regional ecosystems (RE) classified as 'endangered', 'of concern' or 'least concern' under the VM Act. The clearing of native vegetation for the Project will need to meet the provisions of the VM Act under Schedule 24 Part 1, Item 1 (6) of the SP Regulation.

3.2.5 Biosecurity Act 2014

The objectives of the Biosecurity Act 2014 (Biosecurity Act) are to provide biosecurity measures against pests, disease and contaminants. The Biosecurity Act has replaced the many separate pieces of legislation that were used to manage biosecurity, including the superseded Land Protection (Pest and Stock Route Management) Act 2002. The Biosecurity Act is used to manage risks associated with emerging, endemic and exotic pests and diseases that can impact on industry, the built environment, animals, biodiversity, the natural environment, tourism and infrastructure services. Pest species will be managed under the Act.

3.2.6 Aboriginal Cultural Heritage Act 2003 (Qld)

The ACHA aims to recognise, protect and conserve places of Aboriginal cultural heritage significance. Under the ACHA, the DATSIP maintain a register and database of more than 18,000 known significant places within Queensland, which may be accessed prior to developing a site. There is no permitting or licensing system in place under the ACHA, however, developers

in Queensland have a duty of care to ensure that Aboriginal heritage is identified and protected through complying with the Duty of Care Guidelines.

Aboriginal cultural heritage is defined as anything that is; a significant Aboriginal area in Queensland; or a significant Aboriginal object; or, evidence, of archaeological or historic significance, of Aboriginal occupation of an area of Queensland (Section 8).

The concept of 'significance' is defined as anything that is of particular significance to Aboriginal people because of either or both of the following: (a) Aboriginal tradition; or (b) the history, including contemporary history, of any Aboriginal Party for the area (Sections 9 and 10).

3.2.7 Queensland Heritage Act 1992 (Qld)

The primary piece of historic places cultural heritage legislation in Queensland is the QHA, administered by the Department of Environment and Science (DES). It makes provision for the conservation of Queensland's cultural heritage by protecting all places and areas listed on the QHR. The QHR is a list of all places that are important for their rarity or representativeness or for their aesthetic, architectural, archaeological, social and historical contributions to the development of Queensland.

3.3 CONSULTATION

As part of the project, Environmental Resources Management Australia Pty Ltd (ERM) obtained information from ACMA through a telephone conversation with ACMA personnel (Greg Sherwood) to provide historical context of the site. No public consultation was undertaken in preparation of this ER.

DESCRIPTION OF ENVIRONMENTAL VALUES

4.1 GENERAL SITE DESCRIPTION

The site is approximately 62 ha in size and has a relatively flat topography. The land broadly slopes from the north to south, draining towards a tidal section of Tingalpa Creek and its associated flood plain.

Historically the site was settled in the late 1800s for pasture and agriculture. During WW2 part of the site was developed to provide radio communication infrastructure, which has been in continual use until recently.

The majority of the site comprises woodland habitat with cleared areas occurring in the centre of the site where communication operations occurred. The woodland areas comprise remnant and regrowth vegetation. The types of woodland vegetation varies across the site reflecting local changes in soils and drainage. A bushfire at the site in December 2017 has removed much of the scrub and ground layer of woodland in the centre of the site. A small area of saltmarsh is found in the south of the site adjacent to Tingalpa Creek.

The cleared areas comprise open rank grassland which is regularly maintained (mowing was occurring at during the site visit). The communications infrastructure remaining on site comprises:

- The main building (accessed by a sealed road from the site access point on Old Cleveland Road East);
- Guard house (derelict and vandalised); and
- Footings of a large antenna array (accessed by an unsealed track from the sealed road).

The photographs below present examples of the above features recorded at the site during the ERM scoping visit.

4

Photograph 4.A Example of mature woodland at the site



Photograph 4.B Comparison of bushfire affected area with un-affected area. Note removal of understorey vegetation due to bushfire.



Photograph 4.C Main Building



Photograph 4.D Open Grassland habitat at Antenna Array in centre of site (Antenna recently dismantled and removed)



4.2 MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

4.2.1 MNES Overview

Table 5 below identifies the MNES of relevance to the site. The results are based on ERM's desktop studies and one-day site visit as well as ERM's likelihood of occurrence assessment for threatened species.

Three MINES have been identified as being relevant to the site. These are: Moreton Bay Ramsar Site, Listed Threated Species and Ecological Communities and Migratory species. Further discussion on these MINES is provided in the following sub-sections.

Table 5 MNES at the Site

MNES	Present	Comment
World Heritage Properties	No	The site is not located within a World Heritage Property.
National Heritage Places	No	ERM notes that the site was publically nominated for listing on the Commonwealth Heritage Register as Birkdale Monitoring Station (Place ID 106320). However, this nomination is understood to have lapsed. Jacob's (2016) Heritage Assessment did not consider the site as being of National Heritage Significance.
Wetlands of international importance (Ramsar wetlands)	Yes	Tingalpa Creek which abuts the site flows into part of Moreton Bay Ramsar Site 5 km downstream of the site.
Listed threatened species and ecological communities	Yes	One listed threatened species is confirmed at the site and 12 other species have the potential to occur.
communes		One Threatened Ecological Community is likely to be present - Subtropical and Temperate Coastal Saltmarsh.
Migratory species	Yes	The site has some potential to be used by migratory bird species.
Commonwealth marine areas	No	The site is not located within a Commonwealth Marine Area.
The Great Barrier Reef Marine Park	No	The site is not located within the Great Barrier Reef Marine Park.
Nuclear actions	No	No nuclear actions are occurring on site.
A water resources in relation to CSG and large coal mining development	No	Not applicable.

4.2.2 Wetlands of International Importance - Moreton Bay Ramsar Site

Moreton Bay Ramsar Site is located 5 km downstream of the site along Tingalpa Creek. The section of the Tingalpa Creek adjacent to the site is tidal and exchanges estuarine water with Waterloo Bay, part of the larger Morton Bay Ramsar Site.

Moreton Bay Ramsar Site is designated for:

- significant breeding and feeding populations of green turtle (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricata*), loggerhead turtle (*Caretta caretta*) and dugong (*Dugong dugon*);
- Its function as a major coastal ecosystem receiving flows from all rivers and creeks east of the Great Dividing Range from the McPherson Range in the south to the north of the D'Aguilar Range;
- Marine invertebrate and mangrove species diversity;
- Supporting 50,000 migratory shorebirds, including 1% of the flyway population of Eastern curlew (*Numenius madagascariensis*) and grey-tailed tattler (*Tringa brevipes*).

The site does not contribute to any of the key features for which the Moreton Bay Ramsar site was designated. Of note, however, is Tingalpa Creek which receives surface drainage from the site and carries flows into this Ramsar Site.

4.2.3 Listed Threatened Species and Ecological Communities

Threatened Species

Based on the results of the desktop searches (Annex A) and subsequent assessment of likelihood of occurrence for threatened species (Annex B), and as summarised in *Table 6*:

- One listed mammal species is known to occur at the site;
- Two listed flora species have the potential to occur;
- Four listed mammal species have the potential to occur; and
- Six listed bird species have the potential to occur.

Scientific Name	Species Name	EPBC Act Status	Likelihood of Occurrence	
Plants	a with the fait and	aur en allan soon		
Phaius australis	Lesser swamp- orchid	Endangered	Potential	
Samadera bidwillii	Quassia	Vulnerable	Potential	
Mammals				
Phascolarctos cinereus	Koala	Vulnerable	Known	
Petauroides volans	Greater glider	Vulnerable	Potential	
Potorous tridactylus tridactylus	Long-nosed potoroo	Vulnerable	Potential	
Pteropus poliocephalus	Grey-headed flying- fox	Vulnerable	Potential	
Xeromys myoides	Water mouse	Vulnerable	Potential	
Birds				
Anthochaera phrygia	Regent honeyeater	Critically endangered	Potential	
Botaurus poiciloptilus	Australasian bittern	Endangered	Potential	
Calidris ferruginea	Curlew sandpiper	Critically endangered	Potential	
Limosa lapponica baueri	Western Alaskan bar-tailed godwit	Vulnerable	Potential	
Limosa lapponica menzbieri	Northern Siberian bar-tailed godwit	Critically endangered	Potential	
Numenius madagascariensis	Western curlew	Critically endangered	Potential	

A single koala was recorded during the site visit. The koala was spotted within vegetation at the west of the site, close to the site boundary within an area of woodland vegetation (*Figure 2*). The Redland City Council e-mapping tool identified a large proportion of vegetation within the site as being remnant or regrowth koala habitat (*Figure 2*). The western portion of the regrowth koala habitat had been affected by the bushfire and was devoid of ground vegetation. The area which had not been burnt appeared to be in relatively good condition.

No other listed species were observed during the site visit, but targeted surveys were not specifically carried out.

Threatened Ecological Communities

Subtropical and Temperate Coastal Saltmarsh TEC was confirmed as potentially being present within approximately 0.7 ha in the west of the site. This area corresponds with Queensland Government Regional Ecosystem 12.1.2 (mangrove shurbland to low closed forest on marine clay plains and estuaries) mapped in the same area (*Figure 3*).

This community is located on a meander within Tingalpa Creek. Saltmash communities rely on inundation by tidal flows. A number of vehicle tracks were visible through the area but overall the community was considered to be in relatively good condition. No other TECs are likely to occur at the site.

4.2.4 Listed Migratory Species

The PSMT identified the potential for 18 listed migratory species to occur at the site. The list includes nine wetland species and nine woodland species. Eastern curlew is also listed as a threatened species and is considered to have potential to occur.

- Bar-tailed godwit (Limosa lapponica)
- Black-faced monarch (Monarcha melanopsis)
- Common greenshank (Tringa nebularia)
- Common sandpiper (Actitis hypoleucos)
- Curlew sandpiper (*Calidris ferruginea*)
- Eastern curlew
- Fork-tailed swift (Apus pacificus)
- Latham's snipe (Gallinago hardwickii)
- Oriental cuckoo (Cuculus optatus)
- Red knot (*Calidris canutus*)
- Rufous fantail (*Rhipidura rufifrons*)
- Satin flycatcher (Myiagra cyanoleuca)
- Sharp-tailed sandpiper (Calidris acuminata)
- Spectacled monarch (Monarcha trivirgatus)
- White-throated needletail (*Hirundapus caudacutus*)

The site visit recorded no migratory species incidentally using the site. The woodland and saltmarsh habitats at site have some potential to be used by these migratory species. However, the overall area of suitable habitat available means large congregations of migratory species are unlikely to occur. If these species were to occur at the site then it would be expected that this use would be

occasional and limited to low numbers of individuals. Moreton Bay Ramsar 5 km downstream of the site along Tingalpa Creek is likely to frequently support many of these migratory species and with higher abundance.

4.3 BROADER ENVIRONMENTAL CONSIDERATIONS

This section presents information on the broader environment within the site. These aspects are not listed as MNES but provide information on broader environmental aspects, which could affect MNES values at the site.

4.3.1 Contamination

Following the desktop review, site visit and interview with the ACMA Site Manager, the following presents a summary of contamination issues at the site.

Current and Historical Titles for the site have been obtained and reviewed as far back as 1864 (*Annex C*). A number of lot reconfigurations have occurred over this time. The site has been the property of the Australian Communications Authority since 1998. Prior to this, a small number of landholders had interest in the lots, which corresponds with the known agricultural and Defence uses of the land. The historical ownership does not suggest any additional potentially contaminating uses beyond those previously identified at the site by previous studies (Cardno, 2000). These include the following (refer *Figure 4* for locations):

- An old livestock dip adjacent to Old Cleveland Road;
- The site of a dismantled above ground storage (diesel) tank (AST); and
- The insecticide treated foundations and surrounds of the control (main) building
- An old landfill area, located approximately 40m from the western corner of the Main Building; and
- An old incinerator.

As the site is registered as being Commonwealth Land, none of the lots are listed on the EMR or CLR (which is a register of contamination on State-owned land only).

The last known use of the livestock dip was circa 1953 (Cardno MBK, 2000). Cardno MBK undertook a remediation program between 2001 and 2004 to remove soils impacted with arsenic from the livestock dip location. A final validation letter report (Cardno MBK, 2004) was submitted to the Administering Authority on 7th January 2004 to determine a ruling on whether the remaining levels of impact (a single elevated arsenic reading of 180 mg/kg) was identified) were acceptable. No response from the Administering

Authority has been sighted in the material provided for review by ERM. During the ERM site, visit access to former livestock dip area was restricted by dense vegetation (tall grasses) which prevented a more thorough investigation. However, it is assumed that it has been remediated based on documentary evidence.

The AST was removed from site in 1994. A soil sample taken beneath the known location of the former AST identified only residual levels of hydrocarbons below the adopted assessment criteria. The footings of the former AST were identified by ERM adjacent to the Generator Shed during the site visit. The presence of potential asbestos contaminated material (ACM) was identified in building materials relating to the Generator Shed, however, no ACM was identified on surface soils nearby.

Termite treatment was reported to have been carried out on the Main Building in 1995 via directional drilling under the building slab. No evidence of stressed vegetation was observed in these areas during the site visit. It is concluded that any residual chemical treatment would exist under the slab only and should require no further treatment.

The old landfill area was identified during the ERM site visit. It was thought that this area was used to bury old metal radio chassis and radio cabinet racks, and expected to contain metal only. There was no evidence of raised ground/fill material, and no evidence of stressed vegetation.

The old incinerator area was reportedly used to burn papers and some microfiche, and was not regarded as being potentially contaminated by Cardno (2000). This situation is unlikely to have changed.

The Main Building is subject to hazardous materials, such as asbestos in floor tiles and wall linings (refer to Enviro Protect Pty Ltd certificate of analysis, 2012). A large raised concrete structure was present at the time of the site survey on the north-west side of the Main Building, thought to be either an interceptor/grease trap or sewage pit. In addition, a raised area of grass/fill material was identified on the central southern fence boundary. This was thought to be either fill material or a sewage pit.

The HFDF Antennae Array have been removed from site. Only a central building, thought to be constructed of concrete, remains, along with several concrete footings for the aerial anchors. This area was levelled, however, it appears to have been cut and filled in-situ. It is not anticipated that (potentially uncontrolled) fill has been bought to site for this purpose.

Based on ERM's discussion with ACMA's Site Manager, it is understood that a large, 3-phase power cable runs through the property to the Main Building, although its exact location is unknown. The cable was installed in the 1930's and may comprise hazardous materials such as lead.

No other disturbed or potentially contaminated areas were identified on-site. There has been no other known bulk storage of Dangerous Goods (fuels, chemicals, etc.) on site based and no reported leaks, spills or other environmentally relevant incidents on site, based on discussions with the Site Manager.

Acid Sulfate Soils

The tidal areas of Tingalpa Creek are mapped as potential acid sulfate soils with the remainder of the site also having some potential for these soils (*Figure 5*). Acid sulfate soils are common in low lying tidal environments and have the potential to cause pollution when excavated and exposed to air. On exposure to air these soils oxidise and produce sulphuric acid and mobilise heavy metals into water. This pollution can cause environmental harm by killing plants, fish and other aquatic animals in and around affected creeks. Given the connectivity of Tingalpa Creek to Moreton Bay Ramsar Site, the effects of any disturbance of acid sulfate soils on the site could extend downstream to the Ramsar site if not appropriately managed.

Summary

In summary, potential current AEC's are limited to the following four aspects:

- Potential for metals or other residual contaminants in ash that may be related to the former incinerator area;
- Potential for metals or other residual contaminants that may be related to the former landfill area;
- The presence of the sub-surface 3-phase power lines which may contain hazardous construction materials such as lead; and
- Potential for acid sulfate soils, particularly to the southern end of the site adjacent to Tingalpa Creek.

4.3.2 Water Resources

Hydrology

The site is located in the lower Tingalpa and Coolnwynpin catchment, which is approximately 34 km² in size. Tingalpa Creek is identified as a significant regional wildlife corridor in the Biodiversity Planning Assessment for the South East Queensland Bioregion. It flows into Waterloo Bay which forms part of the Moreton Bay Ramsar Site. No water quality data is available from the Redlands Waterway Recovery Report (2017) for Lower Tingalpa Creek. However, water quality monitoring upstream on Coolnwynpin Creek approximately 2 km south of the site, indicates that this creek is in moderate condition. Redland City Council flood mapping identifies areas of the northeast and northwest of the site as 'flood prone areas' (*Figure 6*). The southwest boundary of the site is mapped as a 'storm tide area', while a small area extending approximately 250 m into Lot 2/SP146445 and Lot 2/RP14144 are mapped as 'flood prone'.

Running water was observed to be crossing the site flowing towards Tingalpa Creek along man-made swales existing within developed areas. Woodland areas adjacent to Tingalpa Creek were relatively waterlogged, with drainage impeded by the clay soils.

Changes to the site's hydrology could potentially affect MNES by adversely affecting the condition of habitats dependent on the existing site hydrology. In particular, this includes the saltmarsh habitat in the west of the site.

Hydrogeology

There are no known registered groundwater bores on-site. A Department of Natural Resources and Mines bore search for nearby registered groundwater bores indicated there are seven groundwater bores within 1.0 km of the site. The bore search results suggest that all the bores are used for water supply. It is unknown if the bores are used for industrial or domestic water supply, however some bore flow rates are quite low indicating that they would not be suitable for an industrial supply. Most of the bores report quality suitable for potable use.

A summary of the existing groundwater bore results is provided in Table 7.

Table 7

Summary of Existing Registered Groundwater Bores

Bore Registered Number (RN)	Approx. location	Total depth (m)	Standing water level (SWL) (m)	pН	Conductivity (uS/cm)	Yield (L/s)	Quality
RN 79640	290m South east	27.0	-	5.5	200	-	Potable
RN 145683	460m South east	51.0	-21.0	-	-	0.13	150 ppm salt
RN 133707	350m East	36.0	-	-	130	1.52	Potable
RN 145270	550m North	20.60	-14.0	-	-	0.30	ID
RN 138886	800m North	24.0	-5.0	9	-	0.60	600 ppm
RN 138666	960m North	42.0	-15.0	-	-	1.80	Potable
RN 152005	880m South west	27.0	-9.0		-	0.25	400 ppm
ID – Indeterminable No data available							

No groundwater dependent ecosystems were recorded at the site. Changes to the existing hydrogeology is unlikely to affect MNES. Tingalpa Creek is likely to receive groundwater from the local area and any pollution of groundwater at the site could be transported to Moreton Bay Ramsar via Tingalpa Creek.

4.3.3 Bushfire

A bushfire occurred at the site on 30th January 2018 (QFES 2018). A Fire Investigation Report by the Queensland Fire and Emergency Services states that the fire involved an area of 44 ha. Based on information provided in the report, the fire originated in Lot 2/SP146445, and travelled in a northwesterly direction through Lots 2/RP14144 and 1/RP14143. The report states that areas of lightly timbered bush to the west and east displayed charring of bark, ash splatter and leaf freeze. The open grassed areas displayed grass sweep and leaf freeze on low-level shrubs.

Evidence of the bushfire was observed during the site visit. The fire appeared to have removed the ground layers within the woodland areas of the site, mainly to the north of the main building. Conversely, areas, which had not been affected by the bushfire, supported relatively dense understory vegetation and was noted to be in much better condition. This included the woodland areas at the north, centre and south of the site. The effects of the bushfire are likely to be temporary, however, and regeneration of understorey vegetation is expected to occur over the short to medium term. The site is mapped by Redlands Council as being of high and medium bush fire risk (*Figure 6*).

Bushfire is likely to present a risk to the maintenance of MNES at the site, in particular koalas and other threatened species. Bushfire affects the suitability of the site for these species, albeit temporarily.

4.3.4 Vegetation

The site supports regional ecosystems (REs) classified as endangered, of concern and not of concern (*Figure 3*). REs present on the site and descriptions of the associated native species are available in *Table 8*. The site visit confirmed that the extent and types of REs mapped at the site were broadly correct.

RE	VM Act Status	RE description
12.5.3	Endangered	<i>Eucalyptus racemosa</i> subsp. <i>racemosa</i> woodland on remnant Tertiary surfaces
12.3.11/12.3.6	Of concern	12.3.11
		Eucalyptus tereticornis +/- Eucalyptus siderophloia, Corymbia intermedia open forest on alluvial plains usually near coast
	Least concern	12.3.6
		Melaleuca quinquenervia +/- Eucalyptus tereticornis, Lophostemon suaveolens, Corymbia intermedia open forest on coastal alluvial plains
12.1.2	Least concern	Saltpan vegetation including grassland, herbland and sedgeland on marine clay plains
12.1.1	Of concern	Casuarina glauca open forest to low open woodland. Occurs on margins of Quaternary estuarine deposits.
12.1.3	Least concern	Mangrove shrubland to low closed forest on marine clay plains and estuaries
Source: DNRM R	egional Ecosystem n	apping

VM Act = Vegetation Management Act

The woodland at the site forms part of an ecological corridor and buffer zone either side of Tingalpa Creek. With no public access to the site and in combination with Howeston Golf Course to the west, the site provides a relatively undisturbed area of natural habitat in an otherwise developed location. This situation is likely to enhance the natural areas of the site to biodiversity. MNES, including koalas, are likely to use the woodland habitats surrounding the site as habitat or corridors.

4.3.5 Other Flora And Fauna Values

Native fauna species identified in Wildlife Online and Atlas of Living Australia searches are included in *Annex A*. Species that are not listed under the EPBC Act, but are listed under the Queensland *Nature Conservation Act 1992* include:

- Eastern osprey (Pandion cristatus) special least concern
- Powerful owl (Ninox strenua) vulnerable
- White-tailed tropicbird (Phaethon lepturus) special least concern

The radio masts at the site provide potential nesting sites for osprey but no evidence of nesting was observed. The woodland habitats at the site are likely to be too small to support powerful owls, which require larger tracts of forest for breeding and feeding. White-tailed tropicbird is a pelagic species and none of the habitats at the site are used by this species. Its record is likely to be of a vagrant bird.

The following 15 species of invasive species have been identified within the site's locality, including Weeds of National Significance.

- Asparagus Fern (Protasparagus densiflorus)
- Bitou Bush (Chrysanthemoides monilifera subsp. rotundata)
- Blackberry (Rubus fruticosus aggregate)
- Cat's Claw Vine (Dolichandra unguis-cati)
- Delta Arrowhead (Sagittaria platyphylla)
- Fireweed (Senecio madagascariensis)
- Hymenachne (Hymenachne amplexicaulis)
- Lantana (Lantana camara)
- Mesquite (Prosopis spp.)
- Parthenium Weed (Parthenium hysterophorus)
- Prickly Pears (Opuntia spp.)
- Rubber Vine (Cryptostegia grandiflora)
- Salvinia (Salvinia molesta)
- Water Hyacinth (Eichhornia crassipes)
- Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow (Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii)

A number of invasive fauna species were identified as occurring within the site locality and include:

- Cane Toad (Rhinella marina)
- Cat (Felis catus)
- Pig (Sus scrofa)
- Red Fox (Vulpes vulpes)
- European Rabbit (Oryctolagus cuniculus)

Weed and pest populations at the site appeared to be low.

4.3.6 Built Heritage

The United States Army constructed the ACMA receiving station in 1943 during WW2. The site is unique as the only radio receiving station dating from the mid-20th century in Australia that is directly related to the US Army. Consequently, the site has been identified as being of State level significance to heritage Jacobs (2016). In particular, Jacobs (2016) considered the Main Building to be of greatest heritage value (refer *Figure 7* for locations).

Willard's Farm abuts the southeastern corner of the site and is listed as a local heritage site within the Redlands Council Area (*Figure 7*). Willard's Farm was established in 1860 as an original homestead associated with the first farm at the site. Chain-link and barbed wire fencing fence off the property and the homestead is set back from the site, accessed from Old Cleveland Road East.

4.3.7 Aboriginal Cultural Heritage

There are no registered Indigenous heritage sites situated on or within 50 metres of the site (Jacobs 2016). However, the location of the ridgeline overlooking the Tingalpa Creek was identified as a suitable location for potential Indigenous campsites. ERM understands that ACMA is in consultation with traditional owners and carrying out site based studies to identify and record any Indigenous cultural heritage within the site. Any recommendations arising from this consultation should be considered, as appropriate, to protect Indigenous cultural heritage values if present.

CONCLUSIONS AND RECOMMENDATIONS

ERM has completed an environmental investigation of the ACMA property located at 362-388 Old Cleveland Road East, Birkdale (the site). The investigation aimed to identify the potential for MNES listed under the EPBC Act, as well as other notable features relating to the environment (heritage and contamination) to occur within the site.

While the site is not located within any site designated under the EPBC Act, The site is located 5km upstream of Moreton Bay Ramsar Site, connected by Tingalpa Creek. Future use of the site has some potential to affect this Ramsar Site indirectly should water quality within Tingalpa Creek be impacted.

The survey confirmed the presence of one threatened listed species (koala) as well as the potential presence of other listed threatened and migratory species. The woodland and riparian areas are considered to be of greatest biodiversity value to support listed species. In addition, there is potential for Subtropical and Temperate Coastal Saltmarsh TEC to be present in a small area in the vicinity of Tingalpa Creek.

Under the EPBC Act, any actions that have, or are likely to have, a significant impact on an MNES require approval from DoEE. Thus, any proposal for future use of the site needs to assess whether the 'action' will lead to a significant impact on MNES and, subsequently, refer the action to DoEE for assessment and approval as appropriate to the scale, nature and impact of the action.

The site does not support heritage values of significance under the EPBC Act. Any future use of the site affecting its built heritage will not require assessment and approval under the EPBC Act.

Contamination risks at the site are limited to three historic contaminating activities on the site and areas mapped as potential acid sulfate soils. These risks could potentially indirectly impact on MNES through the release of pollutants into the environment upon disturbance.

The following should be considered as part of any deliberations for the future use of the site:

- Given the site is Commonwealth Land, any proposed action (including development, leasing or divestment) where there is potential for a significant impact to MNES will require a Referral to be prepared and submitted to DoEE. The assessment should rely on the following relevant guidance to determine whether an action is likely to significantly impact on MNES:
 - Significant Impact Guidelines 1.1 Matters of Environmental Significance;
 - Significant Impact Guidelines 1.2 Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies;

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- Opportunities for the site to be used as a receiving site for environmental offsets, in accordance with Commonwealth or Queensland offset regulations, due to its current value to koalas, other MNES and MSES that could be potentially present;
- The site is suitable for its current use, however potential contamination risks may need to be further assessed relevant to the proposed future use of the site (which is currently unknown) and managed in accordance with relevant Queensland provisions for contaminated land; and
- There may be opportunities and constraints associated with local government planning schemes and requirements (with Redland City Council) and Indigenous cultural heritage requirements that have not been a part of this investigation.

REFERENCES

Cardno MBK (2000). Australian Communications Authority Contamination Survey Site Investigation Report Capalaba Monitoring Station

Cardno MBK (2001). Australian Communications Authority Site Assessment at 354 Old Cleveland Road, Birkdale Reply To Notice To Supply Further Information.

Cardno MBK (2004). Australian Communications Authority Soil Remediation at Radio Monitoring Station, Capalaba Status Report - Dip Site Remediation.

Commonwealth of Australia (2015). *Wildlife Conservation Plan for Migratory Shorebirds*. Canberra, ACT: Department of the Environment. Available from: <u>http://www.environment.gov.au/biodiversity/publications/wildlife-</u><u>conservation-plan-migratory-shorebirds-2016</u>. In effect under the EPBC Act from 15-Jan-2016.

Department of Sustainability, Environment, Water, Population and Communities (2011a). *Approved Conservation Advice for the Lowland Rainforest of Subtropical Australia*. Canberra, ACT: Department of Sustainability, Environment, Water, Population and Communities. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/communities/pubs/101-conservation-advice.pdf</u>.

Department of Sustainability, Environment, Water, Population and Communities (2011b). *Approved Conservation Advice for* Botaurus poiciloptilus (*Australasian Bittern*). Canberra, ACT: Department of Sustainability, Environment, Water, Population and Communities. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/species/pubs/10</u> 01-conservation-advice.pdf.

Department of Sustainability, Environment, Water, Population and Communities (2013). *Conservation Advice for SUBTROPICAL AND TEMPERATE COASTAL SALTMARSH*. Canberra: Department of Sustainability, Environment, Water, Population and Communities. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/communities/pubs/118-conservation-advice.pdf</u>.

Department of the Environment (2015). *Conservation Advice* Anthochaera phrygia *regent honeyeater*. Canberra: Department of the Environment. Available from:

http://www.environment.gov.au/biodiversity/threatened/species/pubs/82 338-conservation-advice.pdf.

Department of the Environment, Water, Heritage and the Arts (2008a). *Approved Conservation Advice for* Arthraxon hispidus (*Hairy-joint Grass*). Canberra: Department of the Environment, Water, Heritage and the Arts. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/species/pubs/93</u>38-conservation-advice.pdf.

6

Department of the Environment, Water, Heritage and the Arts (2008b). *Approved Conservation Advice for* Baloghia marmorata (*Marbled Balogia*). Canberra: Department of the Environment, Water, Heritage and the Arts. Available from:

http://www.environment.gov.au/biodiversity/threatened/species/pubs/84 63-conservation-advice.pdf.

Jacobs (2016) Heritage Assessment fo Australian Communications and Media Authority Facility, Birkdale / Capalaba Receiving Station. Project No: IS178000

JLL (2016). Valuation Report 340-378 Old Cleveland Road East, Birkdale Qld 4159

Office of Environment and Heritage (2012). National Recovery Plan for Eastern Bristlebird Dasyornis brachypterus. Office of Environment and Heritage, Department of Premier and Cabinet (NSW), Sydney. Available from: <u>http://www.environment.gov.au/resource/national-recovery-plan-easternbristlebird-dasyornis-brachypterus</u>

Office of Environment and Heritage (2018). Crystal Creek Walnut – profile. NSW Government. Available from: http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?i d=10269

Queensland Fire and Emergency Services (2018). Fire Investigation Report, Fire Call Number QF5S-18-102674.

Threatened Species Scientific Committee (2015). Conservation Advice Pachyptila turtur subantarctica fairy prion (southern). Canberra: Department of the Environment. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/species/pubs/64</u> 445-conservation-advice-01102015.pdf.

Threatened Species Scientific Committee (2016a). *Conservation Advice* Lathamus discolor *swift parrot*. Canberra: Department of the Environment. Available from: http://www.environment.gov.au/biodiversity/threatened/species/pubs/744-conservation-advice-05052016.pdf.

Threatened Species Scientific Committee (2016b). Conservation Advice Limosalapponica baueri Bar-tailed godwit (western Alaskan). Canberra: Department oftheEnvironment.Availablefrom:http://www.environment.gov.au/biodiversity/threatened/species/pubs/86380-conservation-advice-05052016.pdf.

 Threatened Species Scientific Committee (2016c). Conservation Advice Limosa

 lapponica menzbieri Bar-tailed godwit (northern Siberian). Canberra: Department

 of
 the
 Environment.
 Available
 from:

 http://www.environment.gov.au/biodiversity/threatened/species/pubs/86

 432-conservation-advice-05052016.pdf

Threatened Species Scientific Committee (2017). Conservation Advice Argynnishyperbius inconstans Australian fritillary. Canberra: Department of theEnvironmentandEnergy.Availablehttp://www.environment.gov.au/biodiversity/threatened/species/pubs/88056-conservation-advice-15082017.pdf

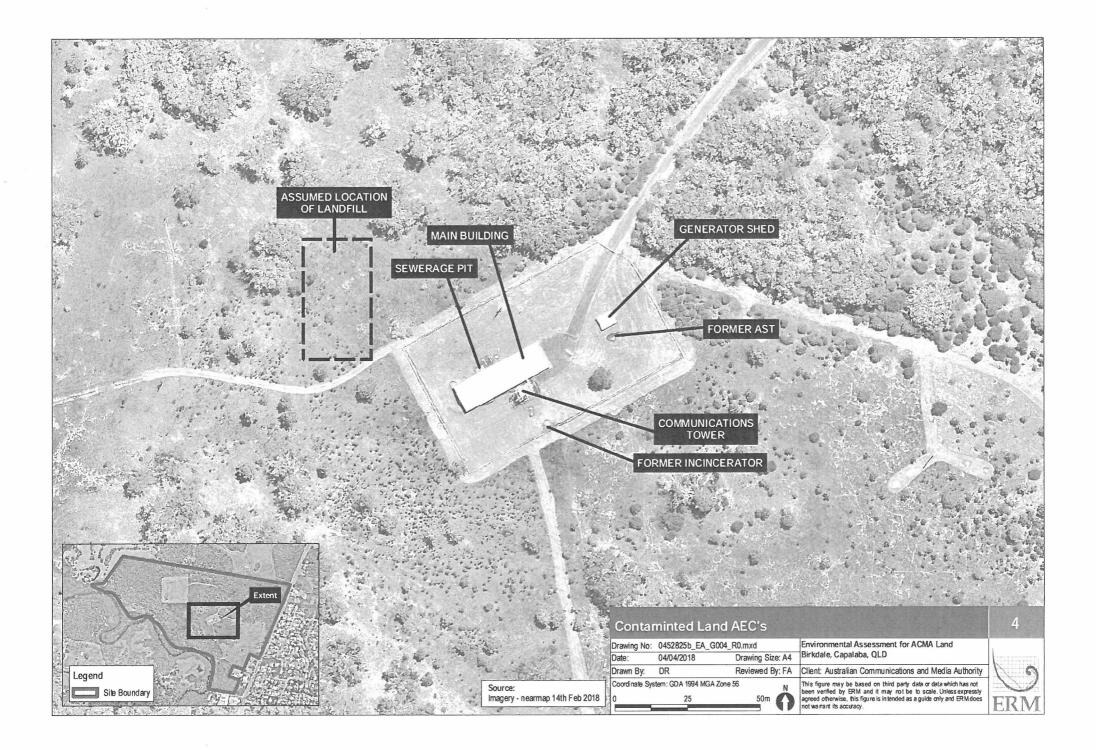
Figures





Legend Land Environmental		Koala	Habitat			2
RCC Koala Habitat		Drawing No:	0452825b_EA_C001	_R0.cdr	Environmental Assessment for ACMA Land	1
RE Remnant Koala Habitat		Date:	01/01/2016	Drawing size: A4	Birkdale, Capalaba, QLD	
RE Regrowth Koala Habitat		Drawn by:	DR	Reviewed by: FA	Client: Australian Communications and Media Authority	1
Urban Koala Habitat Trees	Source:	Drawing to A	pproximate Scale	N	This figure may be based on third party data or data which has not been	
Koala Sighting (Fieldwork March 2018)	Redlands City Council - 2018 http://gis.redland.qld.gov.au/redemap/	0 50	100 200m	Ő	verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.	







Le	g	e	Π	d

Land

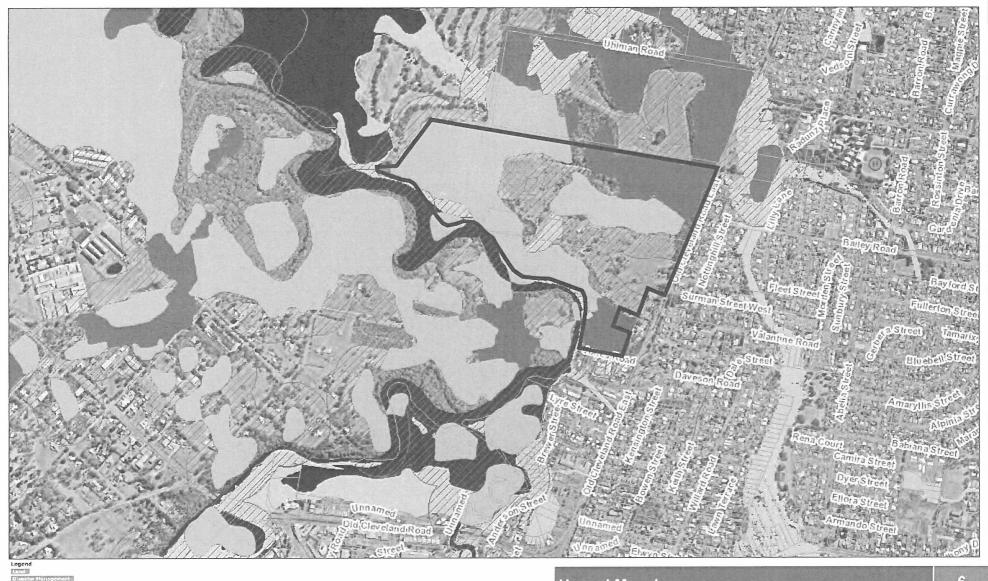
Redlands Planning Scheme V7.1

Acid Sulfate Soils Overlay

Below 5 metres AHD

Between 5 and 20 metres AHD

	Acid	Sulfate Soi	ils		5
	Drawing No:	0452825b_EA_C003	_R0.cdr	Environmental Assessment for ACMA Land	I
	Date:	29/03/2018	Drawing size: A4	Birkdale, Capalaba, QLD	
	Drawn by:	DR	Reviewed by: FA	Client: Australian Communications and Media Authority	
Source:	Drawing to A	pproximate Scale	N	This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed	
Redlands City Council - 2018 http://gis.redland.qld.gov.au/redemap/	0 50	100 200m	0	otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.	



SPP2017 - Potential Impact Butters SPP2017 - Bushfire Prone Area [] 100m Bushfire Buffer Flood Prone, Storm Tide and Drainage Constrained Land

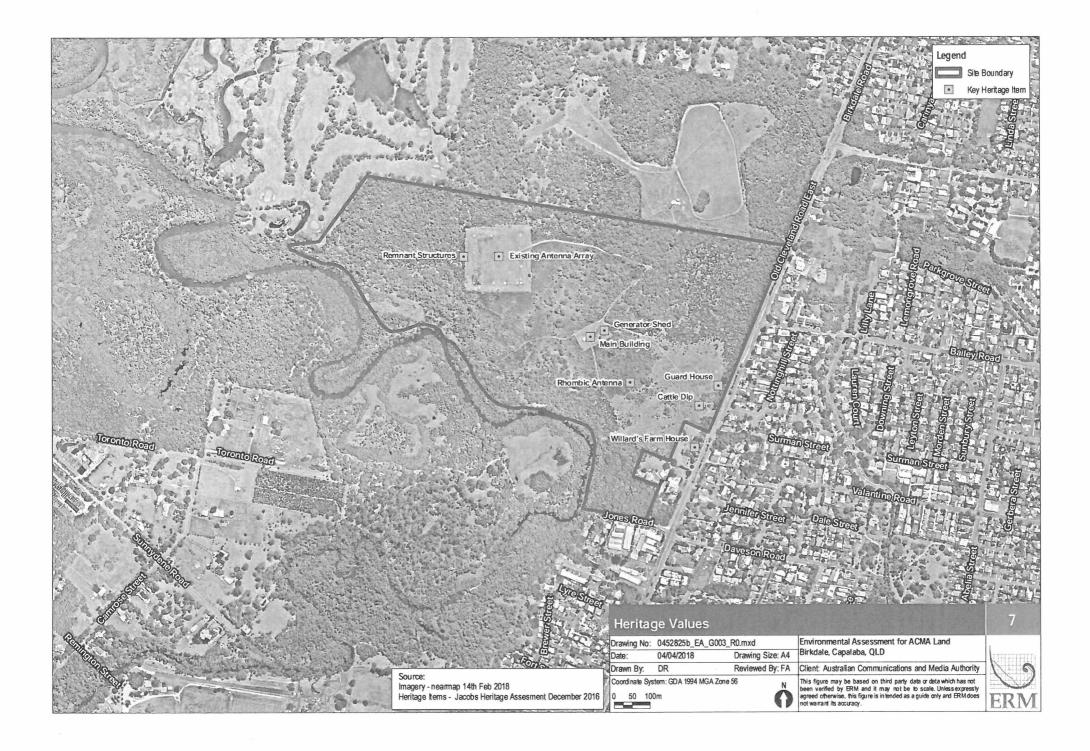
📕 Sterm Tide Ares

📓 High Potential Bushfire Intensity

Medium Potential Bush" ie Intensity

	Hazard Mapping						
	Drawing No:	0452825b_EA_C002	2_R0.cdr	Environmental Assessment for ACMA Land	1		
	Date:	29/03/2018	Drawing size: A4	Birkdale, Capalaba, QLD			
	Drawn by:	DR	Reviewed by: FA	Client: Australian Communications and Media Authority			
	Drawing to Approximate Scale		N	This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed			
ouncil - 2018 .qld.gov.au/redemap/	0 50	100 200m	0	otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.			

Source: Redlands City Council - 2018 http://gis.redland.qld.gov.au/redem



Annex A

Ecological Desktop Search Results



Wildlife Online Extract

Search Criteria:	Species List for a Specified Point
	Species: All
	Type: All
	Status: All
	Records: All
	Date: All
	Latitude: -27.5100
	Longitude: 153.2015
	Distance: 2
	Email: frances.alexander@erm.com
	Date submitted: Wednesday 14 Mar 2018 12:31:42
	Date extracted: Wednesday 14 Mar 2018 12:40:02

The number of records retrieved = 263

Disclaimer

As the DSITIA is still in a process of collating and vetting data, it is possible the information given is not complete. The information provided should only be used for the project for which it was requested and it should be appropriately acknowledged as being derived from Wildlife Online when it is used.

The State of Queensland does not invite reliance upon, nor accept responsibility for this information. Persons should satisfy themselves through independent means as to the accuracy and completeness of this information.

No statements, representations or warranties are made about the accuracy or completeness of this information. The State of Queensland disclaims all responsibility for this information and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs you may incur as a result of the information being inaccurate or incomplete in any way for any reason.

Kingdom	Class	Family	Scientific Name	Common Name	Ι	Q	А	Records
animals	amphibians	Bufonidae	Rhinella marina	cane toad	Y			16
animals	amphibians	Hylidae	Litoria caerulea	common green treefrog		С		13
animals	amphibians	Hylidae	Litoria latopalmata	broad palmed rocketfrog		С		4
animals	amphibians	Hylidae	Litoria fallax	eastern sedgefrog		С		18
animals	amphibians	Limnodynastidae	Limnodynastes tasmaniensis	spotted grassfrog		С		1
animals	amphibians	Limnodynastidae	Limnodynastes peronii	striped marshfrog		С		6
animals	amphibians	Myobatrachidae	Crinia parinsignifera	beeping froglet		С		1
animals	amphibians	Myobatrachidae	Pseudophryne coriacea	red backed broodfrog		С		1
animals	birds	Acanthizidae	Acanthiza lineata	striated thornbill		С		1
animals	birds	Acanthizidae	Chthonicola sagittata	speckled warbler		С		3
animals	birds	Acanthizidae	Acanthiza pusilla	brown thornbill		С		1
animals	birds	Acanthizidae	Gerygone olivacea	white-throated gerygone		С		18
animals	birds	Acanthizidae	Gerygone levigaster	mangrove gerygone		С		3
animals	birds	Acanthizidae	Sericornis frontalis	white-browed scrubwren		С		1
animals	birds	Acanthizidae	Acanthiza chrysorrhoa	yellow-rumped thornbill		С		1
animals	birds	Acanthizidae	Smicrornis brevirostris	weebill		С		2
animals	birds	Accipitridae	Accipiter cirrocephalus	collared sparrowhawk		С		1
animals	birds	Accipitridae	Haliaeetus leucogaster	white-bellied sea-eagle		С		1
animals	birds	Accipitridae	Haliastur sphenurus	whistling kite		С		5
animals	birds	Accipitridae	Aviceda subcristata	Pacific baza		С		5
animals	birds	Accipitridae	Pandion cristatus	eastern osprey		SL		4
animals	birds	Accipitridae	Elanus axillaris	black-shouldered kite		С		6
animals	birds	Accipitridae	Haliastur indus	brahminy kite		Ċ		4
animals	birds	Accipitridae	Accipiter sp.					1
animals	birds	Accipitridae	Aquila audax	wedge-tailed eagle		С		1
animals	birds	Aegothelidae	Aegotheles cristatus	Australian owlet-nightjar		С		1
animals	birds	Anatidae	Chenonetta jubata	Australian wood duck		С		19
animals	birds	Anatidae	Cygnus atratus	black swan		C		2
animals	birds	Anatidae	Anas superciliosa	Pacific black duck		С		14
animals	birds	Anhingidae	Anhinga novaehollandiae	Australasian darter		C		6
animals	birds	Anseranatidae	Anseranas semipalmata	magpie goose		Ċ		1
animals	birds	Apodidae	Hirundapus caudacutus	white-throated needletail		SL		1
animals	birds	Ardeidae	Nycticorax caledonicus	nankeen night-heron		C		3
animals	birds	Ardeidae	Egretta novaehollandiae	white-faced heron		С		7
animals	birds	Ardeidae	Ardea alba modesta	eastern great egret		С		5
animals	birds	Ardeidae	Egretta garzetta	little egret		С		4
animals	birds	Ardeidae	Bubulcus ibis	cattle egret		С		19
animals	birds	Ardeidae	Ardea intermedia	intermediate egret		С		3
animals	birds	Artamidae	Artamus leucorynchus	white-breasted woodswallow		Č		5
animals	birds	Artamidae	Cracticus torquatus	grey butcherbird		č		17
animals	birds	Artamidae	Strepera graculina	pied currawong		č		1
animals	birds	Artamidae	Artamus personatus	masked woodswallow		č		1
animals	birds	Artamidae	Cracticus tibicen	Australian magpie		č		44
animals	birds	Artamidae	Artamus sp.	Addunent megpie		Ŭ		1
animals	birds	Artamidae	Cracticus nigrogularis	pied butcherbird		С		27
animals	birds	Burhinidae	Burhinus grallarius	bush stone-curlew		č		1
anniais	onua	Darmindae	Daninao grananao	bush stone-ounew		0		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	А	Records
animals	birds	Cacatuidae	Cacatua sanguinea	little corella		С		6
animals	birds	Cacatuidae	Cacatua galerita	sulphur-crested cockatoo		С		31
animals	birds	Cacatuidae	Eolophus roseicapilla	galah		С		34
animals	birds	Campephagidae	Lalage tricolor	white-winged triller		С		2
animals	birds	Campephagidae	Coracina tenuirostris	cicadabird		С		4
animals	birds	Campephagidae	Lalage leucomela	varied triller		С		12
animals	birds	Campephagidae	Coracina novaehollandiae	black-faced cuckoo-shrike		С		35
animals	birds	Charadriidae	Vanellus miles novaehollandiae	masked lapwing (southern subspecies)		С		25
animals	birds	Charadriidae	Vanellus miles	masked lapwing		С		2
animals	birds	Cisticolidae	Cisticola exilis	golden-headed cisticola		С		12
animals	birds	Climacteridae	Climacteris picumnus	brown treecreeper		С		1
animals	birds	Climacteridae	Cormobates leucophaea metastasis	white-throated treecreeper (southern)		С		13
animals	birds	Columbidae	Streptopelia chinensis	spotted dove	Υ			29
animals	birds	Columbidae	Macropygia amboinensis	brown cuckoo-dove		С		2
animals	birds	Columbidae	Geopelia humeralis	bar-shouldered dove		С		19
animals	birds	Columbidae	Ocyphaps lophotes	crested pigeon		С		32
animals	birds	Columbidae	Geopelia striata	peaceful dove		С		5
animals	birds	Columbidae	Columba livia	rock dove	Y			2
animals	birds	Coraciidae	Eurystomus orientalis	dollarbird		С		24
animals	birds	Corvidae	Corvus orru	Torresian crow		С		44
animals	birds	Cuculidae	Chalcites basalis	Horsfield's bronze-cuckoo		С		2
animals	birds	Cuculidae	Chalcites lucidus	shining bronze-cuckoo		С		2
animals	birds	Cuculidae	Eudynamys orientalis	eastern koel		С		12
animals	birds	Cuculidae	Scythrops novaehollandiae	channel-billed cuckoo		С		8
animals	birds	Cuculidae	Centropus phasianinus	pheasant coucal		С		18
animals	birds	Cuculidae	Cacomantis flabelliformis	fan-tailed cuckoo		С		8
animals	birds	Dicruridae	Dicrurus bracteatus	spangled drongo		С		22
animals	birds	Estrildidae	Neochmia temporalis	red-browed finch		С		2
animals	birds	Estrildidae	Lonchura castaneothorax	chestnut-breasted mannikin		С		1
animals	birds	Estrildidae	Taeniopygia bichenovii	double-barred finch		С		3
animals	birds	Eurostopodidae	Eurostopodus mystacalis	white-throated nightjar		С		1
animals	birds	Falconidae	Falco cenchroides	nankeen kestrel		C		1
animals	birds	Falconidae	Falco peregrinus	peregrine falcon		С		1
animals	birds	Halcyonidae	Todiramphus sanctus	sacred kingfisher		С		20
animals	birds	Halcyonidae	Dacelo novaeguineae	laughing kookaburra		С		41
animals	birds	Halcyonidae	Todiramphus macleayii	forest kingfisher		С		6
animals	birds	Halcyonidae	Todiramphus sordidus	Torresian kingfisher		С		4
animals	birds	Hirundinidae	Hirundo neoxena	welcome swallow		С		31
animals	birds	Maluridae	Malurus cyaneus	superb fairy-wren		С		1
animals	birds	Maluridae	Malurus melanocephalus	red-backed fairy-wren		С		22
animals	birds	Maluridae	Malurus lamberti	variegated fairy-wren		С		14
animals	birds	Meliphagidae	Meliphaga lewinii	Lewin's honeyeater		С		6
animals	birds	Meliphagidae	Caligavis chrysops	yellow-faced honeyeater		С		7
animals	birds	Meliphagidae	Entomyzon cyanotis	blue-faced honeyeater		С		9
animals	birds	Meliphagidae	Lichmera indistincta	brown honeyeater		С		10
animals	birds	Meliphagidae	Philemon corniculatus	noisy friarbird		С		18

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	А	Records
animals	birds	Meliphagidae	Manorina melanocephala	noisy miner		С		42
animals	birds	Meliphagidae	Myzomela sanguinolenta	scarlet honeyeater		С		12
animals	birds	Meliphagidae	Philemon citreogularis	little friarbird		С		2
animals	birds	Meliphagidae	Gavicalis fasciogularis	mangrove honeyeater		С		12
animals	birds	Meliphagidae	Melithreptus albogularis	white-throated honeyeater		С		10
animals	birds	Meliphagidae	Plectorhyncha lanceolata	striped honeyeater		С		2
animals	birds	Meliphagidae	Acanthorhynchus tenuirostris	eastern spinebill		С		1
animals	birds	Meropidae	Merops ornatus	rainbow bee-eater		С		21
animals	birds	Monarchidae	Monarcha melanopsis	black-faced monarch		SL		4
animals	birds	Monarchidae	Symposiachrus trivirgatus	spectacled monarch		SL		1
animals	birds	Monarchidae	Grallina cyanoleuca	magpie-lark		С		38
animals	birds	Monarchidae	Myiagra rubecula	leaden flycatcher		С		12
animals	birds	Nectariniidae	Dicaeum hirundinaceum	mistletoebird		С		4
animals	birds	Neosittidae	Daphoenositta chrysoptera	varied sittella		С		5
animals	birds	Oriolidae	Oriolus sagittatus	olive-backed oriole		С		9
animals	birds	Oriolidae	Sphecotheres vieilloti	Australasian figbird		С		16
animals	birds	Pachycephalidae	Colluricincla harmonica	grey shrike-thrush		С		21
animals	birds	Pachycephalidae	Colluricincla megarhyncha	little shrike-thrush		С		2
animals	birds	Pachycephalidae	Pachycephala rufiventris	rufous whistler		С		28
animals	birds	Pachycephalidae	Pachycephala pectoralis	golden whistler		С		7
animals	birds	Pardalotidae	Pardalotus punctatus	spotted pardalote		С		3
animals	birds	Pardalotidae	Pardalotus striatus	striated pardalote		С		36
animals	birds	Passeridae	Passer domesticus	house sparrow	Y			5
animals	birds	Pelecanidae	Pelecanus conspicillatus	Australian pelican		С		4
animals	birds	Petroicidae	Petroica rosea	rose robin		С		3
animals	birds	Petroicidae	Eopsaltria australis	eastern yellow robin		С		8
animals	birds	Phaethontidae	Phaethon lepturus	white-tailed tropicbird		SL		1/1
animals	birds	Phalacrocoracidae	Phalacrocorax sulcirostris	little black cormorant		С		10
animals	birds	Phalacrocoracidae	Microcarbo melanoleucos	little pied cormorant		С		5
animals	birds	Phasianidae	Coturnix ypsilophora	brown quail		С		2
animals	birds	Pittidae	Pitta versicolor	noisy pitta		С		1
animals	birds	Podargidae	Podargus strigoides	tawny frogmouth		С		10
animals	birds	Pomatostomidae	Pomatostomus temporalis	grey-crowned babbler		С		1
animals	birds	Psittacidae	Trichoglossus haematodus moluccanus	rainbow lorikeet		С		41
animals	birds	Psittacidae	Platycercus adscitus palliceps	pale-headed rosella (southern form)		С		1
animals	birds	Psittacidae	Trichoglossus chlorolepidotus	scaly-breasted lorikeet		С		9
animals	birds	Psittacidae	Platycercus adscitus	pale-headed rosella		С		37
animals	birds	Psittacidae	Parvipsitta pusilla	little lorikeet		С		1
animals	birds	Psophodidae	Psophodes olivaceus	eastern whipbird		С		11
animals	birds	Ptilonorhynchidae	Sericulus chrysocephalus	regent bowerbird		С		1
animals	birds	Rallidae	Gallinula tenebrosa	dusky moorhen		С		5
animals	birds	Rallidae	Porphyrio melanotus	purple swamphen		С		8
animals	birds	Rallidae	Gallirallus philippensis	buff-banded rail		C		1
animals	birds	Recurvirostridae	Himantopus himantopus	black-winged stilt		C		1
animals	birds	Rhipiduridae	Rhipidura leucophrys	willie wagtail		C		40
animals	birds	Rhipiduridae	Rhipidura rufifrons	rufous fantail		SL		1

Kingdom	Class	Family	Scientific Name	Common Name	Ι	Q	А	Records
animals	birds	Rhipiduridae	Rhipidura albiscapa	grey fantail		С		14
animals	birds	Strigidae	Ninox boobook	southern boobook		С		8
animals	birds	Strigidae	Ninox strenua	powerful owl		V		1
animals	birds	Strigidae	Ninox connivens	barking owl		С		1
animals	birds	Sturnidae	Acridotheres tristis	common myna	Y			2
animals	birds	Sturnidae	Sturnus vulgaris	common starling	Y			3
animals	birds	Threskiornithidae	Threskiornis molucca	Australian white ibis		С		17
animals	birds	Threskiornithidae	Platalea regia	royal spoonbill		С		3
animals	birds	Threskiornithidae	Threskiornis spinicollis	straw-necked ibis		С		7
animals	birds	Threskiornithidae	Platalea flavipes	yellow-billed spoonbill		С		3
animals	birds	Timaliidae	Zosterops lateralis	silvereye		С		28
animals	birds	Turnicidae	Tumix maculosus	red-backed button-quail		С		1
animals	birds	Turnicidae	Tumix varius	painted button-quail		С		1
animals	birds	Tytonidae	Tyto tenebricosa tenebricosa	sooty owl		C		1
animals	insects	Hesperiidae	Cephrenes trichopepla	yellow palm-dart				1
animals	insects	Nymphalidae	Euploea corinna	common crow				4
animals	insects	Nymphalidae	Danaus plexippus	monarch				4
animals	insects	Nymphalidae	Doleschallia bisaltide australis	leafwing				1
animals	insects	Nymphalidae	Melanitis leda bankia	evening brown				2
animals	insects	Nymphalidae	Danaus affinis affinis	swamp tiger				2
animals	insects	Nymphalidae	Tirumala hamata hamata	blue tiger				4
animals	insects	Nymphalidae	Phaedyma shepherdi shepherdi	white-banded plane (southern				1
			, , , , ,	subspecies)				
animals	insects	Nymphalidae	Danaus petilia	lesser wanderer				4
animals	insects	Nymphalidae	Vanessa kershawi	Australian painted lady				3
animals	insects	Papilionidae	Graphium choredon	blue triangle				5
animals	insects	Papilionidae	Papilio aegeus aegeus	orchard swallowtail (Australian				1
				subspecies)				
animals	insects	Pieridae	Eurema hecabe	large grass-yellow				2
animals	insects	Pieridae	Catopsilia pomona	lemon migrant				1
animals	mammals	Canidae	Vulpes vulpes	red fox	Y			1
animals	mammals	Leporidae	Lepus europaeus	European brown hare	Y			4
animals	mammals	Molossidae	Tadarida australis	white-striped freetail bat		С		2
animals	mammals	Muridae	Mus musculus	house mouse	Y			2
animals	mammals	Muridae	Rattus rattus	black rat	Y			1
animals	mammals	Peramelidae	Perameles nasuta	long-nosed bandicoot		С		1
animals	mammals	Peramelidae	Isoodon macrourus	northern brown bandicoot		С		18
animals	mammals	Phalangeridae	Trichosurus vulpecula	common brushtail possum		С		7
animals	mammals	Phascolarctidae	Phascolarctos cinereus	koala		V	V	1601
animals	mammals	Pseudocheiridae	Pseudocheirus peregrinus	common ringtail possum		С		3
animals	mammals	Pseudocheiridae	Petauroides volans volans	southern greater glider		V	V	1
animals	mammals	Pteropodidae	Pteropus alecto	black flying-fox		С		5
animals	mammals	Pteropodidae	Pteropus poliocephalus	grey-headed flying-fox		С	V	5
animals	ray-finned fishes	Anguillidae	Anguilla reinhardtii	longfin eel				6
animals	ray-finned fishes	Anguillidae	Anguilla australis	southern shortfin eel				2
animals	ray-finned fishes	Eleotridae	Hypseleotris klunzingeri	western carp gudgeon				1
	-							

Kingdom	Class	Family	Scientific Name	Commor	n Name	I	Q	А	Records
animals	ray-finned fishes	Eleotridae	Hypseleotris compressa	empire guo	dgeon				2
animals	ray-finned fishes	Eleotridae	Gobiomorphus australis	striped guo	dgeon				2
animals	ray-finned fishes	Eleotridae	Hypseleotris galii	firetail gud	geon				3
animals	ray-finned fishes	Melanotaeniidae	Melanotaenia duboulayi	crimsonsp	otted rainbowfish				1
animals	ray-finned fishes	Mugilidae	Mugil cephalus	sea mullet	1				1
animals	ray-finned fishes	Poeciliidae	Xiphophorus maculatus	platy		Y			3
animals	ray-finned fishes	Poeciliidae	Xiphophorus hellerii	swordtail		Y			6
animals	ray-finned fishes	Poeciliidae	Gambusia holbrooki	mosquitofi		Y			8
animals	ray-finned fishes	Pseudomugilidae	Pseudomugil signifer	Pacific blue					1
animals	reptiles	Agamidae	Pogona barbata	bearded di			С		8
animals	reptiles	Agamidae	Intellagama lesueurii		ater dragon		С		11
animals	reptiles	Boidae	Morelia spilota	carpet pyth			С		7
animals	reptiles	Chelidae	Chelodina longicollis		ake-necked turtle		С		2
animals	reptiles	Colubridae	Tropidonophis mairii	freshwater			С		3
animals	reptiles	Colubridae	Dendrelaphis punctulatus	green tree			С		4
animals	reptiles	Elapidae	Pseudechis porphyriacus		l black snake		С		2/1
animals	reptiles	Elapidae	Demansia psammophis		ed whipsnake		С		3
animals	reptiles	Gekkonidae	Hemidactylus frenatus	house gec		Y			2
animals	reptiles	Pygopodidae	Lialis burtonis		gless lizard		С		1
animals	reptiles	Scincidae	Cryptoblepharus pulcher pulcher		ake-eyed skink		С		2 2
animals	reptiles	Scincidae	Calyptotis scutirostrum		uted calyptotis		С		2
animals	reptiles	Scincidae	Lampropholis delicata		ed garden sunskink		С		3
animals	reptiles	Scincidae	Tiliqua scincoides		ue-tongued lizard		С		3
animals	reptiles	Scincidae	Ctenotus spaldingi		owed ctenotus		С		1
animals	reptiles	Scincidae	Carlia vivax		inbow-skink		С		1
animals	reptiles	Typhlopidae	Anilios wiedii		uted blind snake		С		1/1
plants	higher dicots	Amaranthaceae	Alternanthera pungens	khaki wee		Y			1
plants	higher dicots	Amaranthaceae	Gomphrena celosioides	gomphren		Y	~		1
plants	higher dicots	Apocynaceae	Parsonsia straminea	monkey ro	pe		С		1
plants	higher dicots	Asteraceae	Emilia sonchifolia			Y			1
plants	higher dicots	Asteraceae	Praxelis clematidea			Y			1
plants	higher dicots	Asteraceae	Sphagneticola trilobata			Y			1
plants	higher dicots	Asteraceae	Bidens pilosa	B d = -1 = 1 =		Y			1
plants	higher dicots	Basellaceae	Anredera cordifolia	Madeira vi	ne	Y	~		1/1
plants	higher dicots	Byttneriaceae	Commersonia dasyphylla	Contan and		Y	С		2/2
plants	higher dicots	Caesalpiniaceae	Senna pendula var. glabrata	Easter cas	ssia	Ť	0		1 1/1
plants	higher dicots	Caryophyllaceae	Spergularia marina	automa ab			C		1/ 1
plants	higher dicots	Casuarinaceae	Casuarina glauca	swamp sho	e-oak		C C		1/1
plants	higher dicots	Chenopodiaceae	Enchylaena tomentosa var. glabra				c		
plants	higher dicots	Chenopodiaceae	Suaeda australis	nink hindu	land		c		1/1 1/1
plants	higher dicots	Convolvulaceae Euphorbiaceae	Polymeria calycina Euphorbia prostrata	pink bindw	reeu	Y	C		1/1
plants	higher dicots higher dicots	Euphorbiaceae	Macaranga tanarius	manarana	2	1	С		1
plants	higher dicots	Euphorbiaceae	Acalypha australis	macaranga	a	Y	0		1/1
plants	higher dicots	Haloragaceae	Haloragis heterophylla	rough room	weed	I	С		1/1
plants		Malvaceae	Hibiscus tiliaceus	rough rasp cotton tree			c		1/ 1
plants	higher dicots	Maracede	กามารถของ แก่สุดสินจ	Collon lifee	5		0		1

Kingdom	Class	Family	Scientific Name	Common Name	1	Q	А	Records
plants	higher dicots	Mimosaceae	Acacia fimbriata	Brisbane golden wattle		С		1 .
plants	higher dicots	Mimosaceae	Acacia disparrima subsp. disparrima			С		1
plants	higher dicots	Mimosaceae	Acacia leiocalyx subsp. leiocalyx			С		2/2
plants	higher dicots	Moraceae	Maclura cochinchinensis	cockspur thom		С		1
plants	higher dicots	Moraceae	Ficus coronata	creek sandpaper fig		С		1
plants	higher dicots	Myrsinaceae	Lysimachia arvensis		Y			1
plants	higher dicots	Myrtaceae	Eucalyptus seeana	narrow-leaved red gum		С		1/1
plants	higher dicots	Myrtaceae	Eucalyptus tereticornis			С		1
plants	higher dicots	Myrtaceae	Lophostemon suaveolens	swamp box		С		1
plants	higher dicots	Myrtaceae	Melaleuca irbyana			E		1/1
plants	higher dicots	Myrtaceae	Melaleuca quinquenervia	swamp paperbark		С		1
plants	higher dicots	Myrtaceae	Leptospermum polygalifolium	tantoon		С		1/1
plants	higher dicots	Oxalidaceae	Oxalis rubens			С		1/1
plants	higher dicots	Phyllanthaceae	Glochidion sumatranum	umbrella cheese tree		С		1
plants	higher dicots	Pittosporaceae	Bursaria spinosa subsp. spinosa			С		1/1
plants	higher dicots	Polygonaceae	Persicaria			С		1
plants	higher dicots	Rhamnaceae	Alphitonia excelsa	soap tree		С		1
plants	higher dicots	Rutaceae	Boronia rosmarinifolia	forest boronia		С		1/1
plants	higher dicots	Sapindaceae	Cupaniopsis anacardioides	tuckeroo		С		1
plants	higher dicots	Solanaceae	Solanum nigrum		Y			1
plants	higher dicots	Solanaceae	Solanum seaforthianum	Brazilian nightshade	Y			1
plants	higher dicots	Ulmaceae	Celtis sinensis	Chinese elm	Y			1
plants	lower dicots	Lauraceae	Cinnamomum camphora	camphor laurel	Y			1
plants	monocots	Arecaceae	Syagrus romanzoffiana	Queen palm	Y			1
plants	monocots	Commelinaceae	Commelina diffusa	wandering jew		С		1
plants	monocots	Hemerocallidaceae	Dianella caerulea	0,7		С		1
plants	monocots	Hemerocallidaceae	Dianella brevipedunculata			С		1/1
plants	monocots	Laxmanniaceae	Eustrephus latifolius	wombat berry		С		1/1
plants	monocots	Poaceae	Eriochloa procera	slender cupgrass		С		1/1
plants	monocots	Poaceae	Dichelachne montana			С		1/1
plants	monocots	Poaceae	Megathyrsus maximus		Y			1
plants	monocots	Poaceae	Paspalum mandiocanum		Y			1/1
plants	monocots	Poaceae	Phragmites australis	common reed		С		1
plants	monocots	Poaceae	Cynodon dactylon var. dactylon		Y			1
plants	monocots	Poaceae	Paspalum notatum	bahia grass	Ý			1

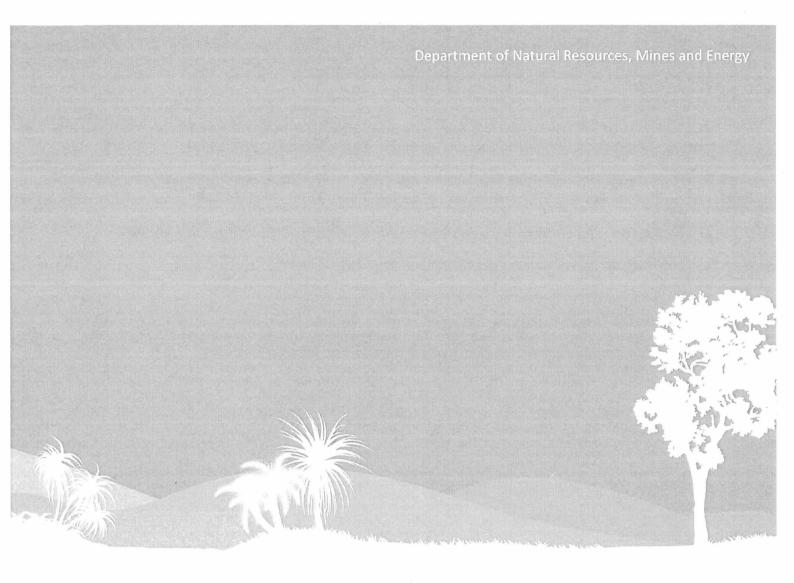
CODES

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

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992*. The codes are Extinct in the Wild (PE), Endangered (E), Vulnerable (V), Near Threatened (NT), Least Concern (C) or Not Protected ().

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

Records – The first number indicates the total number of records of the taxon for the record option selected (i.e. All, Confirmed or Specimens). This number is output as 99999 if it equals or exceeds this value. The second number located after the / indicates the number of specimen records for the taxon. This number is output as 999 if it equals or exceeds this value.



Vegetation management report

For Lot: 1 Plan: RP14143

Current as at 14/03/2018



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Overview

IMPORTANT INFORMATION

The Queensland Government introduced laws on 8th March 2018 that propose to:

- improve protection of high-value regrowth (proposed Category C); and
- extend riparian protection (Category R) over all six Great Barrier Reef catchments; and
- reinstate Essential Habitat protections for Near Threatened species.

What is the Proposed Regulated Vegetation Management Map?

The proposed regulated vegetation management map helps landholders to determine if their property will be affected by the proposed legislative changes.

Updated Version 10 Mapping

The Regulated Vegetation Management Map and Supporting Map have been updated to reflect the most up to date information available in relation to regional ecosystems, essential habitat and wetland mapping. This update is unrelated to the 2018 Vegetation Management Amendment Bill.

As a result of the new *Planning Act 2016*, which commenced on 3 July 2017, there are a number of changes to the Vegetation Management Framework. These changes include;

• Exemptions from the Vegetation Management Framework, commonly known as exemptions and detailed in the Sustainable Planning Regulations 2012, are now known as "exempt clearing works", and are detailed in the Planning Regulations Schedule 21; and

• Self-assessable vegetation clearing codes are now known as "accepted development vegetation clearing codes". However, as there are 15 self-assessable vegetation clearing codes available for use that will not be re-named as a result of the recent changes, the term self-assessable vegetation clearing code will be used throughout this report.

Vegetation clearing is predominantly regulated under the *Vegetation Management Act 1999* (VMA) and the *Planning Act 2016* (PA). A development permit is required to clear where the clearing is not exempt clearing work through the Planning Regulation 2017, or where it cannot be carried out under a self-assessable vegetation clearing code or an area management plan under the VMA.

Many routine vegetation management activities can be carried out as exempt clearing work listed in the Planning Regulation 2017, or through an self-assessable vegetation clearing code or an area management plan (AMP). Other activities may require you to apply for a development permit under the *Planning Act 2016*. The requirements for a development permit depend on the type of vegetation, the land tenure (e.g. freehold or leasehold land), the location, and the extent and purpose of the proposed clearing.

Please be aware that other requirements for clearing and managing vegetation may apply, even if the activity is not regulated by the Vegetation Management framework. Prior to commencing the clearing of vegetation, it is important to confirm that no other requirements apply under other legislation, including:

- · Local laws in your local government area;
- Other State legislation, such as Protected Plants under the Nature Conservation Act 1992 (NCA);
- The Commonwealth Government's Environmental Protection and Biodiversity Act 1999 (EPBC).

Please see section 6 for contact details of other agencies you should confirm requirements with before commencing vegetation clearing.

Please note that the requirements for clearing Category C or Category R areas are located in the self-assessable vegetation clearing codes (SAVCC) for managing Category C and Category R vegetation respectively.

The information in this report will assist you to determine the options for managing vegetation on your property. Based on the lot on plan details you have supplied, this report provides the following detailed information:

• Vegetation management framework - an explanation of the options that may be available to manage vegetation on your property.

• *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, land suitability and protected plants.

- Contact information.
- Maps a series of colour maps to assist in identifying regulated vegetation on your property.
- Other legislation contact information.

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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. This framework regulates the management and clearing of assessable vegetation in Queensland.

The VMA does not apply to all land tenures or vegetation types. State forests, national parks, forest reserves and some tenure types as defined under the *Forestry Act 1959* and *Nature Conservation Act 1992* are not regulated by the VMA.

Managing or clearing vegetation may require permits under these laws.

The information provided in Sections 2 and 3 of this report, as well as the maps provided in Section 5, will assist you to determine whether your proposed clearing is:

- exempt clearing works;
- requires notification and compliance with a self-assessable vegetation clearing code or area management plan;
- requires a development permit; and/or

• in a high risk area and is therefore subject to the protected plants legislative framework (see section 3.7 of this report).

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 the VM Regulation 2012; and
- a mangrove.

Although vegetation management laws may allow clearing, there may be other state, local or Commonwealth laws that apply, such as the Queensland Government's *Nature Conservation Act 1992* (see <u>Protected Plants</u>) and the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act regulates matters of national environmental significance, such as threatened species and ecological communities. You may need to obtain approval under the EPBC Act if your proposed clearing could have a significant impact on matters of national environmental significance. Further details are available at <u>www.environment.gov.au</u>.

1.1 Exempt Clearing Work

The vegetation management framework allows clearing for certain purposes without approval, known as an exempt clearing work. Exempt clearing work provisions under the *Planning Act 2016* were formerly called 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, or exempt from the VMA. For all other land tenures, contact DNRME before commencing clearing to ensure that the proposed activity is exempt clearing work. Please see Section 4 for DNRME's contact details.

A range of routine property management activities are considered exempt clearing work. A list of these is available at <u>https://www.gld.gov.au/environment/land/vegetation/exemptions/</u>.

Although vegetation management laws may allow clearing as exempt clearing work, there may be other state, local or Commonwealth laws that apply. For example, a clearing permit under the *Nature Conservation Act 1992* may be required for clearing protected plants. These requirements apply irrespective of the classification of the vegetation under the vegetation management framework. In addition, clearing that is exempt clearing work may not apply in an area subject to a development permit, a covenant, an environmental offset, an Exchange Area, a Restoration Notice, or an area mapped as Category A. Landholders considering clearing in any of these areas should contact DNRME prior to clearing to clarify if any conditions apply in the area that affect the use of the provisions for exempt clearing work.

1.2 Self-assessable vegetation clearing codes

Some clearing activities can be undertaken using a self-assessable vegetation clearing code and notification process. The codes can be downloaded at

https://www.qld.gov.au/environment/land/vegetation/codes/

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

Please note that a self-assessable vegetation clearing code cannot be used in an area mapped as Category A.(see section 5.1)

You can complete the online form at https://apps.dnrm.gld.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.

If an area management plan applies to your property, it will be listed in Section 2.2 of this report.

To clear under an existing AMP, you must notify the DNRME before clearing starts and follow the conditions listed in the AMP. You can download the area management plan notification form and obtain a copy of the relevant AMP at https://www.gld.gov.au/environment/land/vegetation/area-plans/

1.4 Development permits

If your proposed clearing is not exempt clearing work, or is not permitted under a self-assessable vegetation clearing code, or an AMP, you may be able to apply for a development permit. Information on how to apply for a development permit 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: RP14143 (Calculated area in Hectares - 38.98ha), 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	RP14143	Freehold	http://globe.information.qld.gov.au/cgi-bin/SmartMapgen.py?q=1\RP14143

The tenure of the land may affect whether the clearing is considered exempt clearing work.

Some self-assessable vegetation clearing codes apply only to freehold and leasehold land granted for grazing and agricultural purposes.

2.2 Property location

Table 2 provides a summary of the locations for property Lot: 1 Plan: RP14143, in relation to natural and administrative boundaries.

Local Government(s)	
Redland City	

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

Catchment(s)	
Logan-Albert	

For the purposes of the Self-assessable 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: RP14143

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.

Vegetation category	Area (ha)
Category B	9.08
Category X	29.94

Table 4

Category	Colour on Map	Description	Requirements
A	red	Compliance areas, environmental offset areas and voluntary declaration areas	There may be special conditions that apply in a Category A area. Before clearing, contact DNRME to confirm any requirements in a Category A area.
В	dark blue	Remnant vegetation areas	Clearing may be considered exempt clearing work, or can be undertaken after notifying under a self-assessable vegetation clearing code or an Area Management Plan, or may require a Development Permit.
С	light blue	High-value regrowth areas	Clearing may be considered exempt clearing work, or can be undertaken after notifying under the self-assessable vegetation clearing code for Managing Category C Regrowth vegetation.
R	yellow	Regrowth within 50m of a watercourse or drainage feature in the priority reef catchment areas	Clearing may be considered exempt clearing work, or can be undertaken after notifying under the self-assessable vegetation clearing code for Managing Category R Regrowth vegetation.
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 permit 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 Permit 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 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 <u>https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/descriptions/</u>

Regional Ecosystem	VMA Status	Category	Area (Ha)	Short Description	Structure Category
12.1.1	Of concern	В	0.43	Casuarina glauca woodland on margins of marine clay plains	Sparse
12.1.2	Least concern	В	0.91	Saltpan vegetation including grassland, herbland and sedgeland on marine clay plains	Grassland
12.1.3	Least concern	В	0.29	Mangrove shrubland to low closed forest on marine clay plains and estuaries	Dense
12.3.11	Of concern	В	5.94	Eucalyptus tereticornis +/- Eucalyptus siderophloia, Corymbia intermedia open forest on alluvial plains usually near coast	Mid-dense
12.3.6	Least concern	В	1.48	Melaleuca quinquenervia +/- Eucalyptus tereticornis, Lophostemon suaveolens, Corymbia intermedia open forest on coastal alluvial plains	Mid-dense
12.5.3	Endangered	В	0.04	Eucalyptus racemosa subsp. racemosa woodland on remnant Tertiary surfaces	Mid-dense
non-rem	None	х	29.94	None	None

Table 5: Regional ecosystems present on subject property

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
- · self assessable vegetation clearing codes
- performance outcomes in State Development Assessment Provisions (SDAP).

Some clearing purposes are limited to a particular group of regional ecosystems (e.g. encroachment) and some self-assessable vegetation clearing codes allow clearing only in certain regional ecosystems.

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

Vegetation management report, Department of Natural Resources, Mines and Energy, 2018

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

Essential habitat identifies areas in which species of wildlife that are Endangered or Vulnerable under the *Nature Conservation Act 1992* for which suitable habitat occurs on the lot, or where they have 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.

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

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

Label	Scientific Name	Common Name	NCA Status	Vegetation Community	Altitude	Soils	Position in Landscape
686	Crinia tinnula	walium froglet	v	Vegetation community is a mandatory essential habitat factor for this species. Pernanent to ephemeral acidic (pH 4.3 - 5.2), soft freshwater in Melaleuca (e.g. M. quinquenervia) swamps, sedgeland, wet and dry heathland (e.g. Banksia robur,	Sea level to 150m.	Sandy and sandy-alluvial substrates.	None
				Xanthorrhoea) and wallum (Banksia aemula shrubland/woodland) areas coastal lowlands on sand or sandstone, occasionally in adjacent open forest/woodland (e.g. Eucalyptus racernosa, Corymbia citriodora) with heathy understorey; known to persist in small remnants (<10ha); may be found well away from water.			

Label	Scientific Name	Common Name	NCA Status	Vegetation Community	Altitude	Soils	Position in Landscape
860	Phascolarctos	koala	v	SEQ: Open eucalypt forest and woodland that has: a) multiple	Sea level to	None	Riparian areas, plains
	cinereus			strata layers containing Eucalyptus, Corymbia, Angophora,	1000m.		and hill/escarpment
				Lophostemon or Melaleuca trees that-at 1.3 metres above the			slopes.
				ground-have a diameter both greater and less than 30			
				centimetres; and b) at least 1 of the following species: Eucalyptus			
				tereticomis, , E. propinqua, , E. microcorys , E. biturbinata, E.			
				robusta, E. camuldulensis, E. major and E.longirostrata. Other			
				species that may be locally important include; E. eugenioides, E.			
				racernosa, E. crebra, E. exserta, E. seeana, Lophosternon			
				confertus, L. suaveolens, Melaleuca quinquenervia, E. umbra, E.			
				carnea, E. latisinensis, E. fibrosa, E. grandis, E.acmenoides, E.			
				tindaliae, Eucalyptus bancroftii , Corymbia citriodora, C.henryi,			
				C.intermedia, Eucalyptus dunnii, E. populnea, E. resinifera, E.			
				siderophloia, Eucalyptus saligna, E.pilularis and E.molucanna.			
				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 tereticomis, E.			
				carnaldulensis, E. coolabah, E. drepanophylla, E. platyphylla, E.			
				orgadophilla, E. thozetiana, E. melanophioia, E. populnea,			
				E.brownii, E. melliodora, E. dealbata, E. microtheca, E. crebra, E.			
				exserta, E. blakelyi, E. papuana, E. terminalis, C. intermedia, E.			
				propinqua, E. seeana , E. microcorys , E. resinifera , E.			
				biturbinata, E. robusta, E. major, E.longirostrata, E.molucanna ,			
				E.acmenoides, E.pilularis, Allocasuarina torulosa , Lophostemon			
				confertus, L. suaveolens, Califris columellaris, Corymbia			
				tessellaris, C. citriodora, C.henryi, E.bancroftii, Eucalyptus dunnii ,			
				E. grandis, E. fibrosa, E. carnea, Eucalyptus saligna, E.			
				racemosa, E. eugenioides, E. siderophloia, E. tindaliae,			
				Melaleuca quinquenervia, and M. leucadendra.			

Label	Regional Ecosystem (mandatory unless otherwise specified)
696	12.2.5, 12.2.7, 12.2.9, 12.2.10, 12.2.12, 12.2.15, 12.3.4, 12.3.5, 12.3.6, 12.3.12, 12.3.14, 12.3.20, 12.5.2, 12.5.10. These regional ecosystems are not a mandatory essential habitat factor for this species.
	racion for unis species.

Label	Regional Ecosystem (mandatory unless otherwise specified)
860	SEQ: 11.3.2, 11.3.25, 11.3.26, 11.3.4, 11.8.2, 11.8.4, 11.8.5, 11.8.8, 11.9.9, 12.11.14, 12.11.16, 12.11.17, 12.11.18, 12.11.2, 12.11.22, 12.11.23, 12.11.24, 12.11.25, 12.11.26,
	12.11.27, 12.11.28, 12.11.3, 12.11.5, 12.11.6, 12.11.7, 12.11.8, 12.11.9, 12.12.11, 12.12.12, 12.12.14, 12.12.15, 12.12.2, 12.12.23, 12.12.24, 12.12.25, 12.12.28, 12.12.3, 12.12.5, 12.12.5, 12.12.24, 12.12.24, 12.12.25, 12.12.24, 12.12.25, 12.12.24, 12.12.25, 12.12.24, 12.12.25, 12.12.24, 12.12.25, 12.12.24, 12.12.25, 12.12, 12.25, 12.12, 12.25, 12.12, 12.25, 12.12, 12.25, 12.12, 12.25, 12.12, 12.25, 12.12, 12.25, 12.12, 12.25, 12.12, 12.25, 12.12, 12.25, 12.12, 12
	12 12.6, 12 12.7, 12 12.8, 12 12.9, 12 2 10, 12 2 5, 12 2 6, 12 2 7, 12 2 8, 12 3 10, 12 3 11, 12 3 14, 12 3 18, 12 3 19, 12 3 2, 12 3 20, 12 3 3, 12 3 4, 12 3 5, 12 3 6, 12 3 7, 12 3 9,
	12.5.1, 12.5.10, 12.5.12, 12.5.2, 12.5.3, 12.5.4, 12.5.6, 12.5.7, 12.8.1, 12.8.11, 12.8.12, 12.8.14, 12.8.16, 12.8.17, 12.8.20, 12.8.24, 12.8.25, 12.8.8, 12.8.9, 12.9-10.1, 12.9-10.11, 12.9-10,
	12.9-10.12, 12.9-10.14, 12.9-10.17, 12.9-10.18, 12.9-10.19, 12.9-10.2, 12.9-10.21, 12.9-10.26, 12.9-10.27, 12.9-10.28, 12.9-10.29, 12.9-10.3, 12.9-10.4, 12.9-10.5, 12.9-10.7,
	12.0-10.8. 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, 6.5.10, 6.5.2, 6.5.4, 6
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	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, 7.11.19, 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, 7.12.5, 7.12.21, 7.12.21, 7.12.22, 7.12.23, 7.12.24, 7.12.25, 7.12.28,
	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, 7.12.54, 7.12.54, 7.12.55, 7.12.54, 7.12.55, 7.12.54, 7.12
	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.
	8.5.7, 8.9.1, 8.10.1, 8.11.1, 8.11.3, 8.11.4, 8.11.5, 8.11.6, 8.11.6, 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, 8.1
	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, 9.3.22, 9.
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	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, 9.11.14, 9.11.15, 9.11.14, 9.11.15, 9.11.14, 9.11.14, 9.11.15, 9.11
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	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, 9.12.28, 9.12.24, 9.12.24, 9.12.25, 9.12.26, 9.12.27, 9.12.28, 9.12.24, 9.12.24, 9.12.24, 9.12.24, 9.12.24, 9.12.25, 9.12.26, 9.12.28, 9.12.28, 9.12.24, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12, 9.12,
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	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, 11.7.8, 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, 11.9.1, 11.9.2, 11.8.14, 11.8.15, 11.9.14, 11.9
	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, 11.10.14, 11.10.2, 11.10.4, 11.10.4, 11.10.5, 11.10.5, 11.10.6, 11.10.7, 11.10.9, 11.10.11, 11.10.12, 11.10.13, 11.10.2, 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, 11.10.2, 11.10.2, 11.10.3, 11.10.4, 11.10.5, 11.10.5, 11.10.6, 11.10.7, 11.10.9, 11.10.11, 11.10.12, 11.10.13, 11.10.2, 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, 11.10.12, 11.10.12, 11.10.12, 11.10.12, 11.10.12, 11.10.
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	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.

3.6 Land suitability

Land suitability mapping and information is required if you are applying to clear vegetation for high-value or irrigated high-value agriculture. Land suitability assessment addresses the capacity of land to sustain specific land uses such as cropping, irrigated agriculture and forestry.

A land suitability map for this property is provided in section 5.3. The map provides detailed land suitability, agricultural land classification, or soil and land resource mapping data where it is available.

The land suitability project that applies to this property is shown in Table 7 and Table 8.

Table 7: Land suitability project details for this property

Project name	Project code	Start date	Scale
Moreton Land Management Manual (MFM)	MFM	1982-01-01 00:00:00	250000
Soil Landscapes of Brisbane and South East Environs (ZAA)	ZAA	1987-01-01 00:00:00	100000

Table 8: Available land suitability project reports for this property

Project name	Availability of report	
Moreton Land Management Manual (MFM)	Available at www.publications.qld.gov.au	
Soil Landscapes of Brisbane and South East Environs (ZAA)	CSIRO report. Available at www.publications.qld.gov.au	

3.7 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 <u>Nature Conservation (Wildlife Management) Regulation 2006</u>. 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 <u>Operational policy</u>: <u>When a protected plant in</u> <u>Queensland is considered to be 'in the wild'</u>) and the exemptions under the <u>Nature Conservation (Wildlife Management)</u> <u>Regulation 2006</u> 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)
- self-assessable 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 <u>exempt clearing notification form</u> 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 ara 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 <u>application form clearing permit</u>.

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 <u>palm@des.qld.gov.au</u>.

3.8 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, farmers 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

Vegetation management report, Department of Natural Resources, Mines and Energy, 2018

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 the "Other relevant legislation contacts list" in 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 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.

Land suitability map

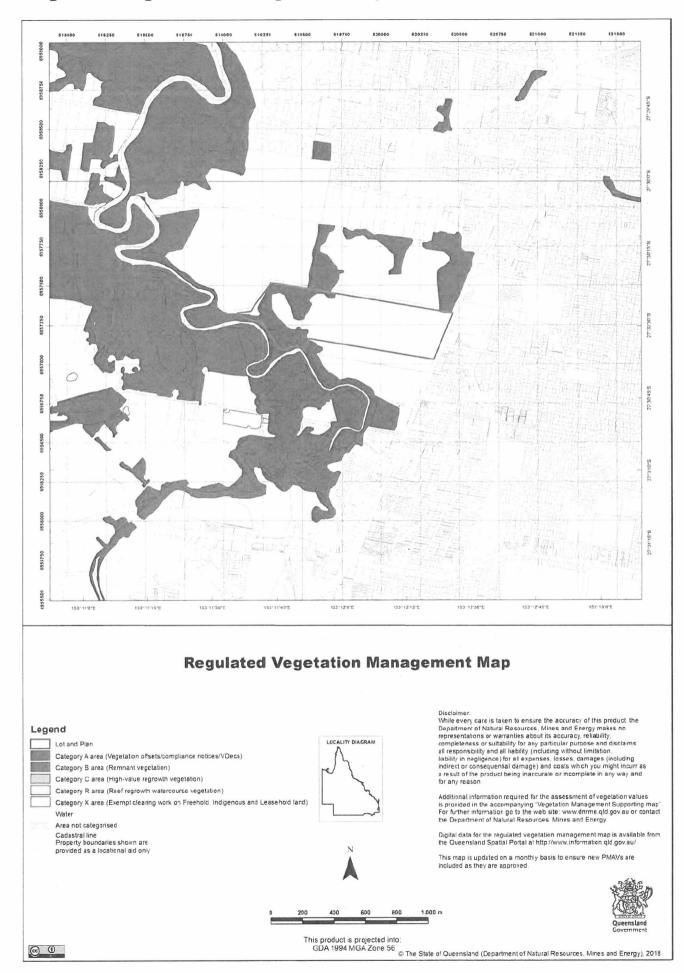
The land suitability map assists with identifying the land suitability category under the high-value and irrigated high-value agriculture vegetation clearing purpose.

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 self-assessable vegetation clearing codes and the State Development Assessment Provisions (SDAP).

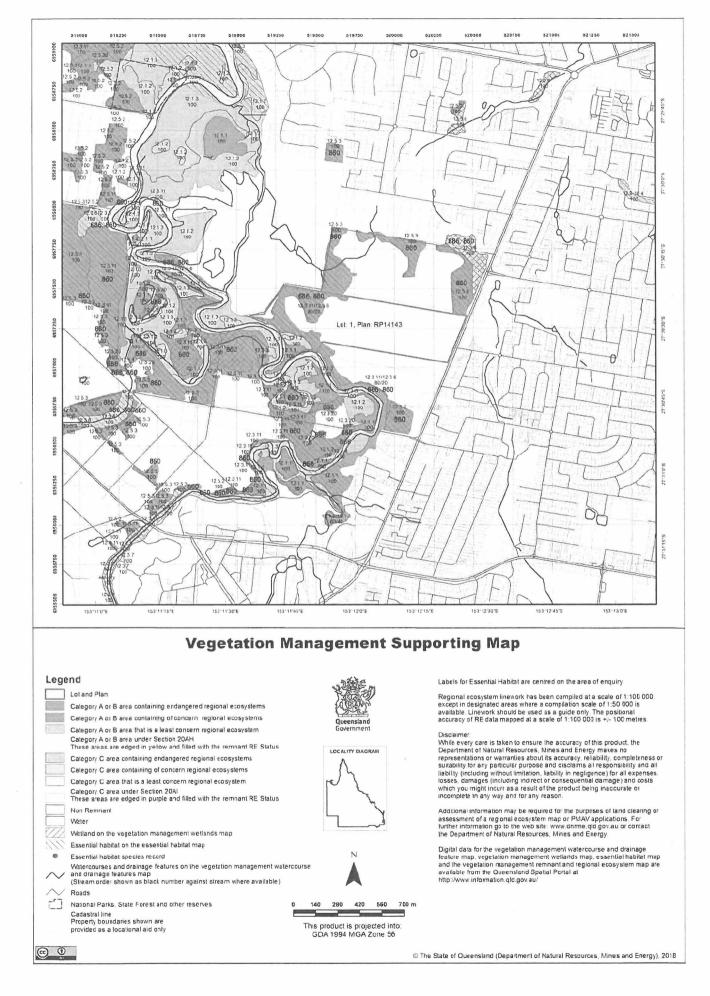
Protected plants map

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

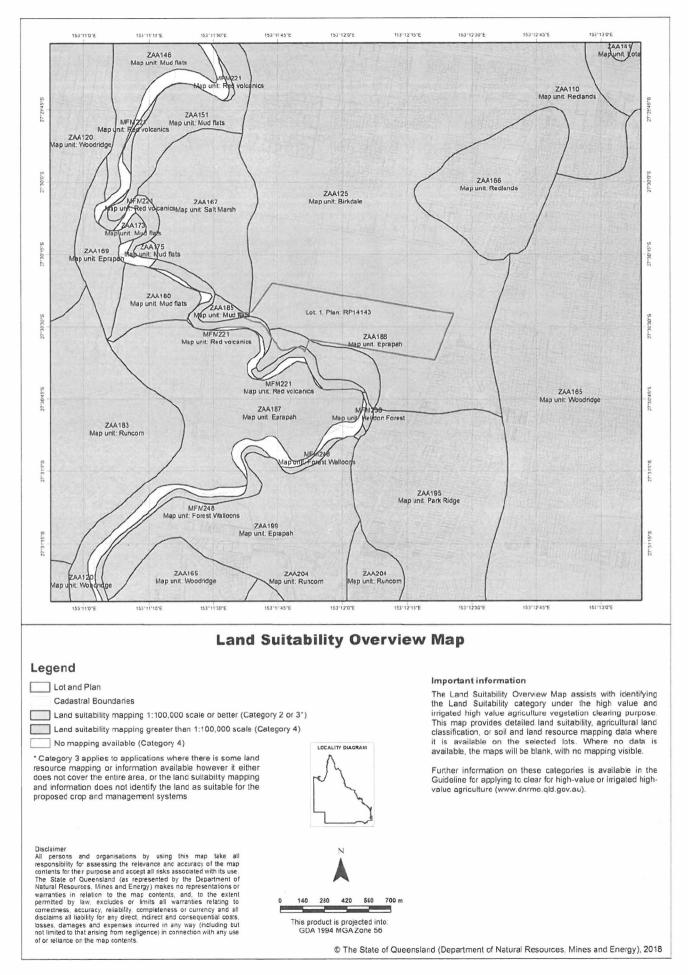


5.1 Regulated vegetation management map

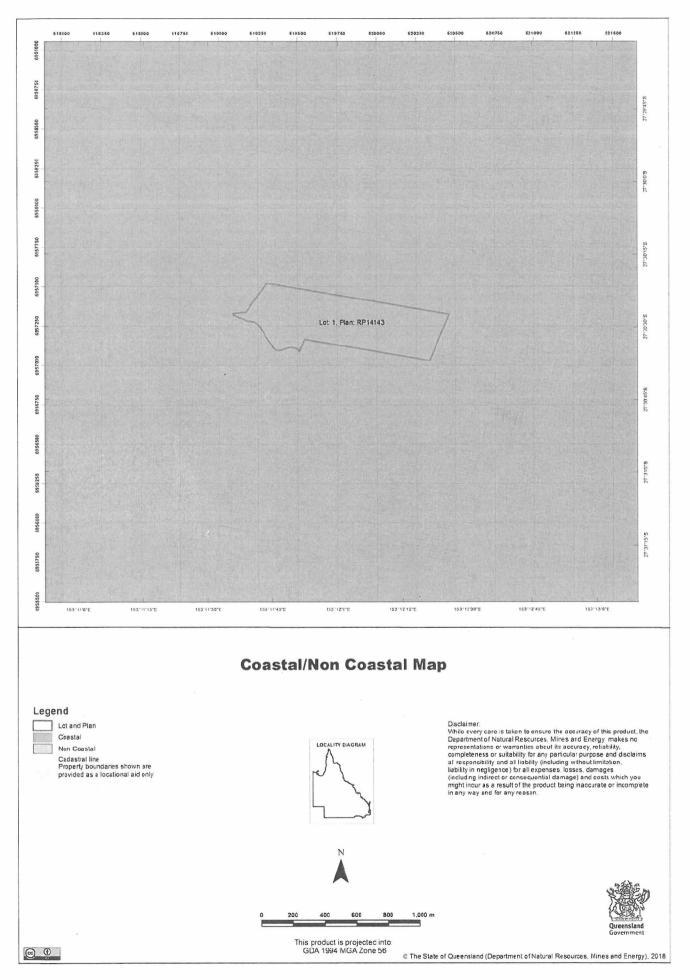
5.2 Vegetation management supporting map



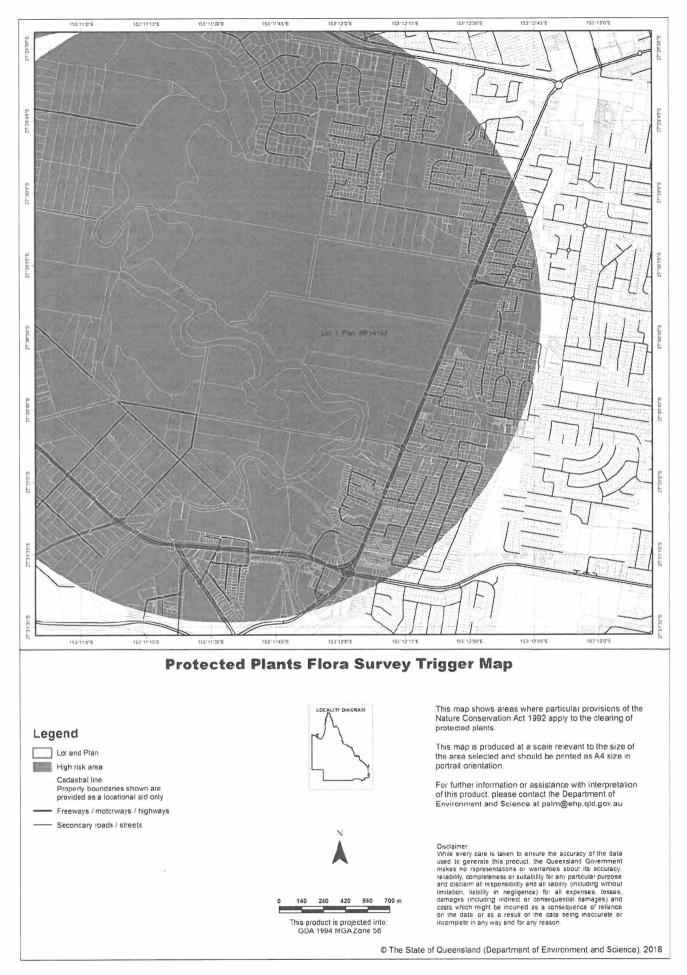
5.3 Land suitability map



5.4 Coastal/non coastal map



5.5 Protected plants map administered by DES



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.qov.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.qov.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.qov.au		
Interference with fish passage in a watercourse, mangroves Forestry activities	Fisheries Act 1994 Forestry Act 1959 ²	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	Department of State Development, Manufacturing, Infrastructure and Planning (Queensland Government)	Ph: 13 QGOV (13 74 68) www.statedevelopment.qld.qov.au		
State Development	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.statedevelopment.gld.gov.au		
Local government requirements	Local Government Act 2009	Local government	Contact your relevant local government office		

1. In Queensland, all plants that are native to Australia are protected plants under the <u>Nature Conservation Act 1992</u>, 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 <u>www.des.qld.gov.au</u>. 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 <u>palm@des.qld.gov.au</u>.

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.



EPBC Act Protected Matters Report

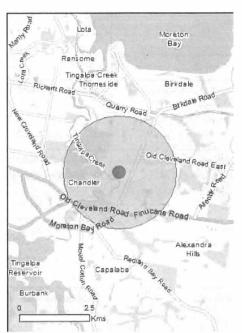
This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

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 <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 14/03/18 13:28:56

Summary <u>Details</u> <u>Matters of NES</u> <u>Other Matters Protected by the EPBC Act</u> <u>Extra Information</u> <u>Caveat</u> <u>Acknowledgements</u>



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

Coordinates	
Buffer: 2.0Km	

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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.

None
None
1
None
None
2
36
18

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

Commonwealth Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	26
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Commonwealth Reserves Marine:	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:	2
Regional Forest Agreements:	None
Invasive Species:	43
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar) Name <u>Moreton bay</u> [Resource Information] Proximity Within 10km of Ramsar

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 Lowland Rainforest of Subtropical Australia	Status Critically Endangered	Type of Presence Community may occur within area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area
Listed Threatened Species		[Resource Information]
Name	Status	Type of Presence
Birds		
Anthochaera phrygia		
Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area
Botaurus poiciloptilus		
Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
<u>Calidris canutus</u>		
Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
		known to occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat
		known to occur within area
Dasyornis brachypterus		
Eastern Bristlebird [533]	Endangered	Species or species habitat
		likely to occur within area
Erythrotriorchis radiatus		
Red Goshawk [942]	Vulnerable	Species or species habitat
		likely to occur within area
<u>Geophaps scripta</u> 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
	, 5	likely to occur within area
Limere lennenice heveri		
Limosa lapponica baueri Bar-tailed Godwit (baueri), Western Alaskan Bar-tailed	Vulnerable	Species or species habitat
Godwit [86380]		known to occur within area
Limosa lapponica_menzbieri Northern Siberian Bar-tailed Godwit, Bar-tailed	Critically Endangered	Species or species
Northern Olberlan Dar-tailed Gouwit, Dar-tailed	Chically Endangered	opecies of species

Name Godwit (menzbieri) [86432]	Status	Type of Presence habitat may occur within area
<u>Numenius madagascariensis</u> 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
<u>Poephila cincta</u> Southern Black-throated Finch [64447]	Endangered	Species or species habitat may occur within area
<u>Rostratula australis</u> Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
<u>Turnix melanogaster</u>		
Black-breasted Button-quail [923]	Vulnerable	Species or species habitat may occur within area
Insects		
<u>Argynnis hyperbius_inconstans</u> Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area
Mammals		
<u>Chalinolobus dwyeri</u>		
Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat may occur within area
<u>Dasyurus hallucatus</u> Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat may occur within area
Dasyurus maculatus maculatus (SE mainland populat Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	<u>ion)</u> Endangered	Species or species habitat may occur within area
<u>Petauroides volans</u> Greater Glider [254]	Vulnerable	Species or species habitat may occur within area
Descelerates since (combined nonulations of Old	NCM and the ACT)	
Phascolarctos cinereus (combined populations of Qld, Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104] Potorous tridactylus tridactylus	Vulnerable	Species or species habitat known to occur within area
Long-nosed Potoroo (SE mainland) [66645]	Vulnerable	Species or species habitat may occur within area
<u>Pteropus poliocephalus</u> Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area
<u>Xeromys myoides</u> Water Mouse, False Water Rat, Yirrkoo [66]	Vulnerable	Species or species habitat likely to occur within area
Plants		
<u>Arthraxon hispidus</u> Hairy-joint Grass [9338]	Vulnerable	Species or species habitat may occur within area
<u>Baloghia marmorata</u> Marbled Balogia, Jointed Baloghia [8463]	Vulnerable	Species or species habitat may occur within area
<u>Bosistoa transversa</u> Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat likely to occur within area

Name <u>Cryptocarya foetida</u>	Status	Type of Presence
Stinking Cryptocarya, Stinking Laurel [11976]	Vulnerable	Species or species habitat may occur within area
<u>Endiandra floydii</u> Floyd's Walnut [52955]	Endangered	Species or species habitat may occur within area
<u>Macadamia integrifolia</u> Macadamia Nut, Queensland Nut Tree, Smooth- shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat likely to occur within area
<u>Macadamia tetraphylla</u> Rough-shelled Bush Nut, Macadamia Nut, Rough- shelled Macadamia, Rough-leaved Queensland Nut [6581]	Vulnerable	Species or species habitat may occur within area
<u>Phaius australis</u> Lesser Swamp-orchid [5872]	Endangered	Species or species habitat likely to occur within area
<u>Samadera bidwillii</u> Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area
<u>Thesium australe</u> Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area
Reptiles		
<u>Delma torquata</u>		
Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area
<u>Saiphos reticulatus</u> Three-toed Snake-tooth Skink [88328]	Vulnerable	Species or species habitat may occur within area
Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on	the EDBC Act. Threatened	
Name	Threatened	Type of Presence
Migratory Marine Birds	Inteatened	Type of Tresence
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<u>Ardenna carneipes</u> Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Cuculus optatus		
Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area
<u>Hirundapus caudacutus</u>		
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
<u>Monarcha trivirgatus</u> Spectacled Monarch [610]		Species or species habitat likely to occur within area
		Tel
<u>Myiagra cyanoleuca</u> Satin Flycatcher [612]		Species or species habitat known to occur within area

Name <u>Rhipidura rufifrons</u> Rufous Fantail [592]

Migratory Wetlands Species Actitis hypoleucos Common Sandpiper [59309]

<u>Calidris acuminata</u> Sharp-tailed Sandpiper [874]

Calidris canutus Red Knot, Knot [855]

<u>Calidris ferruginea</u> Curlew Sandpiper [856]

<u>Calidris melanotos</u> Pectoral Sandpiper [858]

<u>Gallinago hardwickii</u> Latham's Snipe, Japanese Snipe [863]

Limosa lapponica Bar-tailed Godwit [844]

Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]

Pandion haliaetus Osprey [952]

<u>Tringa nebularia</u> Common Greenshank, Greenshank [832]

Other Matters Protected by the EPBC Act

 Listed Marine Species
 [Resource Information]

 * Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

 Name
 Threatened

 Name
 Threatened

 Birds

 Actitis hypoleucos

 Common Sandpiper [59309]

Species or species habitat known to occur within area

<u>Anseranas semipalmata</u> Magpie Goose [978]

<u>Apus pacificus</u> Fork-tailed Swift [678]

<u>Ardea alba</u> Great Egret, White Egret [59541]

Ardea ibis Cattle Egret [59542]

Threatened

Endangered

Critically Endangered

Type of Presence

Species or species habitat likely to occur within area

Species or species habitat known to occur within area

Species or species habitat known to occur within area

Species or species habitat known to occur within area

Critically Endangered Species or species habitat known to occur within area

Species or species habitat likely to occur within area

Species or species habitat may occur within area

Species or species habitat known to occur within area

Species or species habitat known to occur within area

Breeding known to occur within area

Species or species habitat likely to occur within area

Species or species habitat may occur within area

Species or species habitat likely to occur within area

Breeding known to occur within area

Species or species

Name

Calidris acuminata Sharp-tailed Sandpiper [874]

Calidris canutus Red Knot, Knot [855]

<u>Calidris ferruginea</u> Curlew Sandpiper [856]

<u>Calidris melanotos</u> Pectoral Sandpiper [858]

<u>Cuculus saturatus</u> Oriental Cuckoo, Himalayan Cuckoo [710]

<u>Gallinago hardwickii</u> Latham's Snipe, Japanese Snipe [863]

Haliaeetus leucogaster White-bellied Sea-Eagle [943]

<u>Hirundapus caudacutus</u> White-throated Needletail [682]

Lathamus discolor Swift Parrot [744]

Limosa lapponica Bar-tailed Godwit [844]

<u>Merops ornatus</u> Rainbow Bee-eater [670]

Monarcha melanopsis Black-faced Monarch [609]

Monarcha trivirgatus Spectacled Monarch [610]

Myiagra cyanoleuca Satin Flycatcher [612]

<u>Numenius madagascariensis</u> Eastern Curlew, Far Eastern Curlew [847]

Pachyptila turtur Fairy Prion [1066]

Pandion haliaetus Osprey [952]

<u>Puffinus carneipes</u> Flesh-footed Shearwater, Fleshy-footed Shearwater [1043] Threatened

Type of Presence habitat may occur within area

Species or species habitat known to occur within area

Species or species habitat

known to occur within area

Endangered

Critically Endangered

Species or species habitat known to occur within area

Species or species habitat likely to occur within area

Species or species habitat may occur within area

Species or species habitat may occur within area

Species or species habitat known to occur within area

Species or species habitat known to occur within area

Critically Endangered

Species or species habitat likely to occur within area

Species or species habitat known to occur within area

Species or species habitat may occur within area

Species or species habitat known to occur within area

Species or species habitat likely to occur within area

Species or species habitat known to occur within area

Critically Endangered Species or species habitat known to occur within area

> Species or species habitat likely to occur within area

Breeding known to occur within area

Species or species habitat likely to occur within area Threatened

Type of Presence

Species or species habitat likely to occur within area

<u>Rostratula benghalensis (sensu lato)</u> Painted Snipe [889]

<u>Tringa nebularia</u> Common Greenshank, Greenshank [832] Endangered*

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

[Resource Information]

Extra Information

Namo

Rhipidura rufifrons Rufous Fantail [592]

State and Territory Reserves	[Resource Information]			
Name	State			
Coolnwynpin Creek Corridor Koala (A)	QLD			
Coolnwynpin Creek Corridor Koala (B)	QLD			

Invasive Species

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name Status Type of Presence Birds Acridotheres tristis Common Myna, Indian Myna [387] Species or species habitat likely to occur within area Anas platyrhynchos Mallard [974] Species or species habitat likely to occur within area Carduelis carduelis European Goldfinch [403] Species or species habitat likely to occur within area Columba livia Species or species habitat Rock Pigeon, Rock Dove, Domestic Pigeon [803] likely to occur within area Lonchura punctulata Nutmeg Mannikin [399] Species or species habitat likely to occur within area Passer domesticus Species or species habitat House Sparrow [405] likely to occur within area Streptopelia chinensis Spotted Turtle-Dove [780] Species or species habitat likely to occur within area Sturnus vulgaris Common Starling [389] Species or species habitat likely to occur within area

Name Rhinella marina Cane Toad [83218]

Mammals Bos taurus Domestic Cattle [16]

Canis lupus familiaris Domestic Dog [82654]

Felis catus Cat, House Cat, Domestic Cat [19]

Lepus capensis Brown Hare [127]

Mus musculus House Mouse [120]

Oryctolagus cuniculus Rabbit, European Rabbit [128]

Rattus norvegicus Brown Rat, Norway Rat [83]

Rattus rattus Black Rat, Ship Rat [84]

Sus scrofa Pig [6]

Vulpes vulpes Red Fox, Fox [18]

Plants

Alternanthera philoxeroides Alligator Weed [11620]

Annona glabra Pond Apple, Pond-apple Tree, Alligator Apple, Bullock's Heart, Cherimoya, Monkey Apple, Bobwood, Corkwood [6311] Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643] Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425] Asparagus africanus Climbing Asparagus, Climbing Asparagus Fern [66907]

Cabomba caroliniana Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171] Chrysanthemoides monilifera Bitou Bush, Boneseed [18983] Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

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Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat may occur within

Status

Name

Chrysanthemoides monilifera subsp. rotundata Bitou Bush [16332]

Cryptostegia grandiflora Rubber Vine, Rubbervine, India Rubber Vine, India Rubbervine, Palay Rubbervine, Purple Allamanda [18913] Dolichandra unguis-cati Cat'a Claw Vine, Vallow Trumpet Vine, Cat'a Claw

Cat's Claw Vine, Yellow Trumpet Vine, Cat's Claw Creeper, Funnel Creeper [85119]

Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]

Hymenachne amplexicaulis Hymenachne, Olive Hymenachne, Water Stargrass, West Indian Grass, West Indian Marsh Grass [31754]

Lantana camara Lantana, Common Lantana, Kamara Lantana, Largeleaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892] Opuntia spp. Prickly Pears [82753]

Parthenium hysterophorus Parthenium Weed, Bitter Weed, Carrot Grass, False Ragweed [19566]

Prosopis spp. Mesquite, Algaroba [68407]

Protasparagus densiflorus Asparagus Fern, Plume Asparagus [5015]

Rubus fruticosus aggregate Blackberry, European Blackberry [68406]

Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]

Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]

Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]

Senecio madagascariensis Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]

Reptiles Hemidactylus frenatus Asian House Gecko [1708]

Ramphotyphlops braminus Flowerpot Blind Snake, Brahminy Blind Snake, Cacing Besi [1258] Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

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Species or species habitat likely to occur within area

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-huil and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

Coordinates

-27.510024 153.201558

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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Likelihood of Occurrence

Scientific Name	EPBC Act Status ¹	Distribution and Habitat Description ²	Records within site	Records within locality	Distribu tion	Habita t	LoO
THREATENED ECO	LOGICALCO	OMMUNITIES	·				
Lowland Rainforest of Subtropical	CE	Community primarily occurs from Maryborough in Queensland to the Clarence River (near Grafton) in New South Wales (NSW). (DSEWPaC 2011a).	-	-	1	×	Unlikely
Australia		The ecological community is generally a moderately tall (≥ 20 m) to tall (≥ 30 m) closed forest.					
		Typically there is a relatively low abundance of species from the genera <i>Eucalyptus, Melaleuca</i> and <i>Casuarina</i> . Buttresses are common as is an abundance and diversity of vines (DSEWPaC 2011a).					
Subtropical and Temperate Coastal	v	The Coastal Saltmarsh ecological community is mainly associated with the soft substrate shores of estuaries and embayments and on some open, low wave energy coasts.	\checkmark	-	-	-	Known
Saltmarsh		The Coastal Saltmarsh ecological community consists mainly of salt-tolerant vegetation including: grasses, herbs, sedges, rushes and shrubs. One regional ecosystem from the South East Queensland bioregion equates to the coastal saltmarshes ecological community. This is: RE 12.1.2 Saltpan vegetation including grassland and herbland on marine clay plains (DSEWPaC 2013).					

Likelihood of occurrence – Threatened Ecological Communities

Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
FLORA								
Arthraxon hispidus	Hairy-joint Grass	v	In Queensland it occurs north to Port Douglas, and west to mound springs in Carnavon National Park; however, most occurrences are from Noosa southwards (DEHWA 2008a). The site is within the DoEE 'species or species habitat may occur' mapped area.	×	×	~	×	Unlikely
			In NSW and Queensland, Hairy-joint Grass is found in or on the edges of rainforest and in wet eucalypt forest, often near creeks or swamps, as well as woodland (DEHWA 2008a).					
Baloghia marmorata	Marbled Balogia	V	The Queensland marbled Balogia distribution is confined to the Tamborine Mountains and Springbrook (DEWHA 2008b). The site is within the DoEE 'species or species habitat may occur' mapped area.	×	×	~	×	Unlikely
			Marbled Balogia is found in subtropical rainforest/notophyll vine forest and wet sclerophyll forest with rainforest understorey between 150 and 550 m above sea level (DEWHA 2008b).					

Likelihood of occurrence – threatened flora and fauna species

Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Bosistoa transversa	Three-leaved Bosistoa	V	Three-leaved Bosistoa is known from the Richmond River, NSW, to Mt Larcom near Gladstone, Queensland. The site is within the DoEE 'species or species habitat may occur' mapped area.	×	×	√ ×	×	Unlikely
			Three-leaved Bosistoa grows in wet sclerophyll forest, dry sclerophyll forest and rainforest up to 300m in altitude.					
Cryptocarya foetida	Stinking Cryptocarya	V	The Stinking Cryptocarya has been recorded from near Iluka, on the north coast of New South Wales, to Fraser Island in Queenland. The site is within the DoEE mapped 'species or species habitat may occur' distribution for the species.	×	×	4	x	Unlikely
			The Stinking Cryptocarya is restricted to coastal sands, or if not, then close to the coast, occurring in littoral rainforest on old sand dunes and subtropical rainforests over slate and occasionally on basalt to an altitude of 150 m.					
Endiandra floydii	Floyd's Walnut	E	Confined to one or two locations in south-east Queensland (OEH 2018). The site on the edge of the DoEE mapped 'species or species habitat may occur' distribution for the species.	×	×	1	×	Unlikely
			Warm temperate, subtropical rainforest or wet sclerophyll forest with Brush Box overstorey, and in and Camphor Laurel forest. The species can occur in disturbed and regrowth sites. The species generally prefers sheltered locations however it has been recorded on ridgelines, slopes, gullies and creek flats (OEH 2018).					

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Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Macadamia integrifolia	Macadamia Nut	V	The Macadamia Nut is found in remnant rainforest in northern NSW and south-east Queensland. The site is within the DoEE 'species or species habitat likely to occur' mapped area.	×	×	~	×	Unlikely
			The Macadamia Nut grows in remnant rainforest, preferring partially open areas such as rainforest edges. Vegetation communities in which the Macadamia Nut is found range from complex notophyll mixed forest, extremely tall closed forest, simple notophyll mixed very tall closed forest to simple microphyll-notophyll mixed mid-high closed forest with <i>Araucaria</i> and <i>Argyrodendron</i> emergents.	т Л				
Macadamia tetraphylla	Rough- shelled Bush Nut	V	Rough-shelled Bush Nut occurs from northern NSW to south-east Queensland. The site is within the DoEE 'species or species habitat may occur' mapped area. Rough-shelled Bush Nut generally occurs in subtropical rainforest and complex notophyll vineforest, at the margins of these forests and in mixed sclerophyll forest. It occurs in restricted habitat, growing on moderate to steep hillslopes on alluvial soils at well-drained sites.	x	×	× .	×	Unlikely
Phaius australis	Lesser Swamp- orchid	Ε	The Lesser Swamp-orchid occurs in southern Queensland and northern NSW. The site is within the DoEE 'species or species habitat likely to occur' mapped area. The Lesser Swamp-orchid is commonly associated with coastal wet heath/sedgeland wetlands, swampy grassland or swampy forest and often where Broad-leaved Paperbark or Swamp Mahogany are found.	x	~	1	~	Potential

Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Samadera bidwillii	Quassia	V	Quassia is currently known to occur in several localities between Scawfell Island, near Mackay, and Goomboorian, north of Gympie. The site is within the DoEE 'species or species habitat likely to occur' mapped area.	×	×	~	1	Potential
			Quassia commonly occurs in lowland rainforest or on rainforest margins, but it can also be found in other forest types, such as open forest and woodland. Quassia is commonly found in areas adjacent to both temporary and permanent watercourses.					
Thesium australe	Austral Toadflax	V	The site is within the DoEE 'species or species habitat may occur' mapped area. Austral Toadflax is semi-parasitic on roots of a range of grass species, notably Kangaroo Grass (<i>Themeda triandra</i>). It occurs in subtropical, temperate and subalpine climates over a wide range of altitudes. It occurs on soils derived from sedimentary, igneous and metamorphic geology on a range of soils including black clay loams to yellow podzolics and peaty loams.	x	x	~	×	Unlikely

Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
REPTILES							14.4	
Delma torquata	collared delma	V	Recorded in central and south east Queensland. The site is within the DoEE 'species or species habitat may occur' mapped area.	×	×	~	×	Unlikely
			Inhabits eucalypt-dominated woodlands and open-forests in Regional Ecosystem (RE) Land Zones: 3, 9 and 10.					
			Tends to be found on ridge tops and slopes. The presence of rocks, logs, bark and other coarse woody debris, and mats of leaf litter appears to be an essential characteristic of the collared delma microhabitat.					
Saiphos reticulatus	Three-toed Snake-tooth Skink	V	The Three-toed Snake-tooth Skink occurs from Crescent Head in north-east NSW to Fraser Island in south-east Queensland. The site is within the DoEE 'species or species habitat may occur' mapped area.	×	×	4	×	Unlikely
			The Three-toed Snake-tooth Skink has been found in loose, well mulched friable soil, in and under rotting logs, in forest litter, under fallen hoop pine bark and under decomposing cane mulch. In Queensland, the Three-toed Snake-tooth Skink has been recorded in rainforest, closed forest, wet sclerophyll forest, tall open Blackbutt (<i>Eucalyptus pilularis</i>) forest, tall layered open eucalypt forest and closed Brush Box (<i>Lophostemon confertus</i>) forest.					8

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Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Argynnis	Australian	CE	The Australian fritillary has been recorded in scattered locations across south-eastern	× .	×	~	×	Unlikely
hyperbius inconstans	Fritillary		Queensland and north-eastern New South Wales (TSSC 2017). The site is within the DoEE 'species or species habitat may occur' mapped area.					
			The Australian fritillary is restricted to areas where its larval food plant, <i>Viola betonicifolia</i> (the arrowhead violet), occurs (TSSC 2017).					
MAMMALS								
Chalinolobus dwyeri	large-eared pied bat	v	In Queensland, this species is associated with the central Queensland sandstone belt – namely the Carnarvon Ranges, Blackdown Tableland and Cania Gorge. The site is within the DoEE 'species or species habitat may occur' mapped area.	x	×	~	×	Unlikely
			This species occurs where sandstone gorges/cliffs occur near tall open forest, dry sclerophyll forests and woodland, and forest ecotones. It roosts in caves, crevices, holes in cliffs, mines and fairy martin (<i>Petrochelidon ariel</i>) nests. It forages within a few kilometres of roosting habitat.					

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Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Dasyurus hallucatus	northern quoll	E	In Queensland, the northern quoll is known to occur as far south as Gracemere and Mt Morgan, south of Rockhampton, as far north as Weipa, and extends west into central Queensland to the vicinity of Carnarvon Range National Park. There are occasionally records as far south in Queensland as Maleny on the Sunshine Coast hinterland. The site is within the DoEE 'species or species habitat may occur' mapped area.	×	×	√	×	Unlikely
			The species occupies a diversity of habitats across its range which includes rocky areas, eucalypt forest and woodlands, rainforests, sandy lowlands and beaches, shrubland, grasslands and desert. Northern quoll habitat generally encompasses some form of rocky area for denning purposes with surrounding vegetated habitats used for foraging and dispersal.					
Dasyurus maculatus maculatus (SE	spot-tailed quoll	E	The Spot-tailed Quoll occurs in south-east Queensland: coastally from Bundaberg to the border and inland to Monto and Stanthorpe. The site is within the DoEE mapped 'species or species habitat may occur' distribution for the species.	×	x	√ .		Unlikely
mainland population)		Variety of habitat including sclerophyll forest and woodland	Variety of habitat including sclerophyll forest and woodlands, coastal heathlands and rainforests. Requires intact vegetation through which to forage and suitable den sites (tree hollows and logs).					

Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Petauroides volans	greater glider	v	The greater glider is restricted to eastern Australia, occurring from the Windsor Tableland in north Queensland through to central Victoria. The site is within the DoEE mapped 'species or species habitat may occur' distribution for the species.	×	1	~	1	Potential
			The greater glider is largely restricted to eucalypt forests and woodlands. It is primarily folivorous, with a diet mostly comprising eucalypt leaves, and occasionally flowers. It is typically found in eucalypt forests with relatively old trees and abundant hollows. The greater glider favours forests with a diversity of eucalypt species. During the day it shelters in tree hollows.					
Phascolarctos cinereus	koala	v	The species' range extends from north-eastern Queensland to the south-east corner of South Australia. The site is within the DoEE mapped 'species or species habitat likely to occur' distribution for the species.	~	1	~	1	Known
			Koalas naturally inhabit a range of temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by <i>Eucalyptus</i> species.					
Potorous tridactylus tridactylus	Long-nosed Potoroo (SE mainland)	V	The Long-nosed Potoroo (SE Mainland) has scattered populations extending from south- eastern Queensland through to NSW. The site is within the DoEE mapped 'species or species habitat may occur' distribution for the species.	×	x	~	1	Potential
			The Long-nosed Potoroo (SE Mainland) is sparsely distributed along the coast and Great Dividing Range of south-east Queensland through NSW. The species can be found in wet eucalypt forests to coastal heaths and scrubs. The main factors would appear to be access to some form of dense vegetation for shelter and the presence of an abundant supply of fungi for food.					

Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Pteropus poliocephalus	grey-headed flying-fox	V	The Grey-headed Flying-fox occurs in the coastal belt from Rockhampton in central Queensland to Melbourne in Victoria. The site is within the DoEE mapped 'species or species habitat likely to occur' distribution for the species.	x	4	~	V	Potential
			The Grey-headed Flying-fox utilises vegetation communities including rainforests, open forests, closed and open woodlands, <i>Melaleuca</i> swamps and <i>Banksia</i> woodlands. The primary food source is blossom from <i>Eucalyptus</i> and related genera; it also feeds on introduced tree species in urban areas.					
Xeromys myoides	Water Mouse	V	The water mouse occurs in three regions of coastal Australia: The Northern Territory, central south Queensland and southeast Queensland. The site is within the DoEE 'species or species habitat likely to occur' mapped area.	×	Χ	~	1	Potential
			In central south Queensland, the water mouse has only been captured in the high inter- tidal zone in tall, closed fringing mangrove forest containing only <i>Ceriops tagal</i> and/or <i>Bruguiera</i> sp. Although not considered core habitat, the Water Mouse has also been captured in saline grassland adjacent to a closed forest of <i>Ceriops tagal</i> and <i>Bruguiera</i> sp. and in closed forest of <i>Avicennia marina</i> .					

Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
BIRDS								
Anthochaera phrygia	regent honeyeater	(ACT), to central Victoria (DoEE 2015). The site is within the DoEE 'species or species habitat likely to occur' mapped area.	~	Potential				
			The species mostly inhabits inland slopes of the Great Dividing Range, in areas of low to moderate relief with moist, fertile soils. It is most commonly associated with box-ironbark eucalypt woodland and dry sclerophyll forest, but also inhabits riparian vegetation such as sheoak (DoEE 2015).					
Botaurus poiciloptilus	Australasian bittern	Е	In Australia, the species occurs from southeast Queensland to southeast South Australia, Tasmania and in the southwest of Western Australia (DSEWPaC 2011b). The site is within the DoEE 'species or species habitat likely to occur' mapped area.	x	4	1	1	Potential
			Requires shallow water, less than 30 cm deep with medium to low density reeds, grasses or shrubs for foraging. It is largely recorded in freshwater wetlands and, rarely, in estuaries or tidal wetlands. Brackish water is tolerated in estuaries and tidal wetlands, sea coasts are avoided (DSEWPaC 2011b).					

Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Calidris canutus	Red Knot	E, Mi (Wetlan d)	The Red Knot is common in all the main suitable habitats around the coast of Australia. The site is within the DoEE 'species or species habitat may occur' mapped area. In Australasia the Red Knot mainly inhabit intertidal mudflats, sandflats and sandy beaches of sheltered coasts, in estuaries, bays, inlets, lagoons and harbours; sometimes on sandy ocean beaches or shallow pools on exposed wave-cut rock platforms or coral reefs.	x	~	~	×	Unlikely
Calidris ferruginea	curlew sandpiper	CE, Mi (Wetlan d)	The curlew sandpiper is widely distributed around the coast of Australia. The site is within the DoEE 'species or species habitat likely to occur' mapped area. The curlew sandpiper is typically associated with intertidal mudflats in coastal areas. Additionally, this species utilises coastal swamps, lakes and lagoons, as well as ponds at saltworks and sewage farms. The curlew sandpiper is less frequently recorded inland where exposed mud or sand abuts ephemeral and permanent water bodies such as lakes, dams and waterholes	×	~	~	~	Potential

ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LTD

Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Dasyornis brachypterus	eastern bristlebird	Е	The species has contracted to three disjunct regions of southeastern Australia: southern Queensland/northern NSW, the Illawarra and Jervis Bay region (OEH 2012). The site is within the DoEE 'species or species habitat may occur' mapped area.	×	×	~	×	Unlikely
			The habitat of the Eastern Bristlebird is defined by a similar structure of low, dense, ground or understorey vegetation. The species occupies grassland, sedgeland, heathland, swampland, scrubland, grassy sclerophyll forest and woodland, and rainforest. (OEH 2012).					
Erythrotriorchis radiatus	red goshawk	V	The red goshawk is very sparsely dispersed across coastal and sub-coastal Australia, from western Kimberley Division to northeastern NSW. The site is within the DoEE 'species or species habitat likely to occur' mapped area.	×	×	~	×	Unlikely
			The red goshawk occurs in coastal and sub-coastal areas in wooded and forested lands of tropical and warm-temperate Australia. The red goshawk nests in trees invariably within one km of permanent water. Forests of intermediate density are favoured, or ecotones between habitats of differing densities.					

Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Geophaps scripta scripta	squatter pigeon (southern)	V	The known distribution of the squatter pigeon (southern) extends south from the Burdekin-Lynd divide in the southern region of Cape York Peninsula to the Border Rivers region of northern NSW, and from the east coast to Hughenden, Longreach and Charleville, Queensland. The site is within the DoEE 'species or species habitat may occur' mapped area.	×	×	1	x	Unlikely
			Natural foraging habitat for the squatter pigeon is any remnant or regrowth open-forest to sparse, open-woodland or scrub dominated by <i>Eucalyptus, Corymbia, Acacia</i> or <i>Callitris</i> species, on sandy or gravelly soils, within 3 km of a suitable, permanent or seasonal waterbody. Groundcover generally consists of patchy, tussocky grasses.					
Lathamus discolor	swift parrot	E	The swift parrot breeds in Tasmania during the summer and the entire population migrates north to mainland Australia for the winter. (TSSC 2016a). The site is within the DoEE 'species or species habitat likely to occur' mapped area.	×	×	~	×	Unlikely
			On the mainland the swift parrot disperses widely to forage on flowers and <i>psyllid</i> lerps in Eucalyptus species, with the majority being found in Victoria and New South Wales (TSSC 2016a).					

Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Western Alaskan Bar- tailed Godwit	V	The bar-tailed godwit (both subspecies combined) has been recorded in the coastal areas of all Australian states. The site is on the edge of the species' mapped distribution. The bar-tailed godwit (western Alaskan) occurs mainly in coastal habitats. It has also been recorded in coastal sewage farms and saltworks, saltlakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats (TSSC 2016b).	×	V	~	1	Potential
Northern Siberian Bar- tailed Godwit	erian Bar-	The bar-tailed godwit (both subspecies combined) has been recorded in the coastal areas of all Australian states. It is widespread in the Torres Strait and along the east and south- east coasts of Queensland, NSW and Victoria (TSSC 2016c). The site is within the DoEE 'species or species habitat may occur' mapped area.	× ✓	~	*	1	Potential
		The bar-tailed godwit (northern Siberian) occurs mainly in coastal habitats. It has also been recorded in coastal sewage farms and saltworks, saltlakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats (TSSC 2016c).					
eastern curlew	CE, Mi (Wetlan d)	Within Australia, the eastern curlew has a primarily coastal distribution. Eastern curlews are rarely recorded inland. The site is within the DoEE 'species or species habitat likely to occur' mapped area.	×	1	~	1	Potential
		During the non-breeding season in Australia, the eastern curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass.					
	Name Western Alaskan Bar- tailed Godwit Northern Siberian Bar- tailed Godwit eastern	NameAct Status1Western Alaskan Bar- tailed GodwitVNorthern Siberian Bar- tailed GodwitCEeastern curlewCE, Mi (Wetlan	NameAct Status1Western Alaskan Bar- tailed GodwitVThe bar-tailed godwit (both subspecies combined) has been recorded in the coastal areas of all Australian states. The site is on the edge of the species' mapped distribution. The bar-tailed godwit (western Alaskan) occurs mainly in coastal habitats. It has also been recorded in coastal sewage farms and saltworks, saltlakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats (TSSC 2016b).Northern Siberian Bar- tailed GodwitCEThe bar-tailed godwit (both subspecies combined) has been recorded in the coastal areas of all Australian states. It is widespread in the Torres Strait and along the east and south- east coasts of Queensland, NSW and Victoria (TSSC 2016c). 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Scientific Name	Common Name	EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO
Pachyptila turtur subantarctica	Fairy Prion (southern)	V	The species as a whole has a circumpolar distribution, and probably frequents subtropical waters during the non-breeding period (TSSC 2015). The site is not within the DoEE mapped distribution, but abuts the 'species or species habitat likely to occur' mapped area.	×	×	×	×	Unlikely
			The burrows of fairy prions (southern) are usually in crevices, in hollows beneath cushions of <i>Colobanthus muscoides</i> or in burrows in peaty soil held together by a thick cover of <i>Cotula plumosa</i> (TSSC 2015).					
Poephila cincta cincta	southern black- throated finch	E	The southern black-throated finch occurs at two general locations: Townsville, Ingham, Charters Towers area; and at scattered sites in central-eastern Queensland between Aramac and Great Basalt Wall National Park. The site is within the DoEE 'species or species habitat may occur' mapped area.		×	~	×	Unlikely
			The southern black-throated finch occurs mainly in grassy, open woodlands and forests, typically dominated by <i>Eucalyptus</i> , <i>Corymbia</i> and <i>Melaleuca</i> , and occasionally in tussock grasslands or other habitats, often along or near watercourses, or in the vicinity of water.					
Rostratula australis	Australian painted snipe	E	The Australian painted snipe has been recorded at wetlands in all states of Australia. The site is within the DoEE 'species or species habitat likely to occur' mapped area. The Australian painted snipe generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans.	×	x	4	~	Potential

Scientif Name		EPBC Act Status ¹	Distribution and Habitat Requirements	Records within site	Records within locality	Distribu tion	Habitat	LoO	
Turnix melanogaste	Black- r breasted Button-quail	, V	The Black-breasted Button-quail is restricted to coastal and near-coastal regions of south- eastern Queensland and north-eastern New South Wales. The main populations occur within south-east Queensland. The site is within the DoEE 'species or species habitat may occur' mapped area.	×	×	×	x	Unlikely	
			The Black-breasted Button-quail is restricted to rainforests and forests, mostly in areas with 770-1200 mm rainfall per annum. They prefer drier low closed forests, particularly semi-evergreen vine thicket, low microphyll vine forest, araucarian microphyll vine forest and araucarian notophyll vine forest						
1. Ca	1. Conservation Status: V = Vulnerable, E = Endangered, CE = Critically Endangered, Mi = Migratory								
2. Di	2. Distribution and Habitat Requirements are sourced from the DoEE Species Profiles and Threats database unless otherwise specified.								
3. 'L	'Locality' refers to a 2 km buffer of the site for Wildlife Online searches and a 5 km buffer of the site for Atlas of Living Australia searches.								

Department of Sustainability, Environment, Water, Population and Communities (2011a). *Approved Conservation Advice for the Lowland Rainforest of Subtropical Australia*. Canberra, ACT: Department of Sustainability, Environment, Water, Population and Communities. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/communities/pu</u> <u>bs/101-conservation-advice.pdf</u>.

Department of Sustainability, Environment, Water, Population and Communities (2011b). *Approved Conservation Advice for* Botaurus poiciloptilus *(Australasian Bittern)*. Canberra, ACT: Department of Sustainability, Environment, Water, Population and Communities. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/species/pubs/10</u> 01-conservation-advice.pdf.

Department of Sustainability, Environment, Water, Population and Communities (2013). *Conservation Advice for SUBTROPICAL AND TEMPERATE COASTAL SALTMARSH*. Canberra: Department of Sustainability, Environment, Water, Population and Communities. Available from:

http://www.environment.gov.au/biodiversity/threatened/communities/pubs/118-conservation-advice.pdf.

Department of the Environment (2015). *Conservation Advice* Anthochaera phrygia *regent honeyeater*. Canberra: Department of the Environment. Available from:

http://www.environment.gov.au/biodiversity/threatened/species/pu bs/82338-conservation-advice.pdf.

Department of the Environment, Water, Heritage and the Arts (2008a). *Approved Conservation Advice for* Arthraxon hispidus (*Hairy-joint Grass*). Canberra: Department of the Environment, Water, Heritage and the Arts. Available from:

http://www.environment.gov.au/biodiversity/threatened/species/pu bs/9338-conservation-advice.pdf.

Department of the Environment, Water, Heritage and the Arts (2008b). *Approved Conservation Advice for* Baloghia marmorata (*Marbled Balogia*). Canberra: Department of the Environment, Water, Heritage and the Arts. Available from:

http://www.environment.gov.au/biodiversity/threatened/species/pu bs/8463-conservation-advice.pdf.

Office of Environment and Heritage (2012). *National Recovery Plan for Eastern Bristlebird* Dasyornis brachypterus. Office of Environment and Heritage, Department of Premier and Cabinet (NSW), Sydney. Available from: <u>http://www.environment.gov.au/resource/national-recovery-</u> plan-eastern-bristlebird-dasyornis-brachypterus

Office of Environment and Heritage (2018). Crystal Creek Walnut – profile. NSW Government. Available from: http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile. aspx?id=10269

Threatened Species Scientific Committee (2015). *Conservation Advice* Pachyptila turtur subantarctica *fairy prion* (*southern*). Canberra: Department of the Environment. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/species/pubs/64445-conservation-advice-01102015.pdf</u>.

Threatened Species Scientific Committee (2016a). Conservation Advice Lathamus discolor swift parrot. Canberra: Department of the Environment. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/species/pu</u> <u>bs/744-conservation-advice-05052016.pdf</u>.

Threatened Species Scientific Committee (2016b). *Conservation Advice* Limosa lapponica baueri *Bar-tailed godwit (western Alaskan)*. Canberra: Department of the Environment. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/species/pu</u> <u>bs/86380-conservation-advice-05052016.pdf</u>.

Threatened Species Scientific Committee (2016c). *Conservation Advice* Limosa lapponica menzbieri *Bar-tailed godwit (northern Siberian)*. Canberra: Department of the Environment. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/species/pu</u> <u>bs/86432-conservation-advice-05052016.pdf</u>

Threatened Species Scientific Committee (2017). Conservation Advice Argynnis hyperbius inconstans Australian fritillary. Canberra: Department of the Environment and Energy. Available from: <u>http://www.environment.gov.au/biodiversity/threatened/species/pu</u> bs/88056-conservation-advice-15082017.pdf Annex C

Wildlife Online Search

CURRENT TITLE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 28303800 Search Date: 29/03/2018 09:56

Title Reference: 50489123 Date Created: 13/04/2004

Previous Title: 50489109

REGISTERED OWNER

Dealing No: 707630801 08/04/2004

AUSTRALIAN COMMUNICATIONS AUTHORITY

ESTATE AND LAND

Estate in Fee Simple

LOT 2 SURVEY PLAN 146445 Local Government: REDLAND

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Commonwealth by Deed of Grant No. 10028085 (POR 46)

ADMINISTRATIVE ADVICES - NIL UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

** End of Current Title Search **

CURRENT TITLE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 28303782 Search Date: 29/03/2018 09:55

Title Reference: 50489108 Date Created: 13/04/2004

Previous Title: 12714071

REGISTERED OWNER

Dealing No: 707635748 13/04/2004

AUSTRALIAN COMMUNICATIONS AUTHORITY

ESTATE AND LAND

Estate in Fee Simple

LOT 2 REGISTERED PLAN 14144 Local Government: REDLAND

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Commonwealth by Deed of Grant No. 10177099 (POR 42)

ADMINISTRATIVE ADVICES - NIL UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

** End of Current Title Search **

CURRENT TITLE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 28303739 Search Date: 29/03/2018 09:53

Title Reference: 50489107 Date Created: 13/04/2004

Previous Title: 12714071

REGISTERED OWNER

Dealing No: 707635748 13/04/2004

AUSTRALIAN COMMUNICATIONS AUTHORITY

ESTATE AND LAND

Estate in Fee Simple

LOT 1 REGISTERED PLAN 14143 Local Government: REDLAND

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Commonwealth by Deed of Grant No. 10177099 (POR 42)

ADMINISTRATIVE ADVICES - NIL UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

** End of Current Title Search **

HISTORICAL TITLE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 28303813 Search Date: 29/03/2018 09:56

Title Reference: 50489109 Date Created: 13/04/2004

Previous Title: 12714071

This Title Has Been Fully Cancelled.

REGISTERED OWNER

Dealing No: 707635748 13/04/2004

AUSTRALIAN COMMUNICATIONS AUTHORITY

ESTATE AND LAND

Estate in Fee Simple

LOT 2 REGISTERED PLAN 74062 Local Government: REDLAND

EASEMENTS, ENCUMBRANCES AND INTERESTS

- 1. SURVEY PLAN NO 707630801
 subdivides the land into
 LOTS 1 AND 2 ON SP146445
 Lodged at 11:15 on 08/04/2004
- 2. Rights and interests reserved to the Commonwealth by Deed of Grant No. 10028085 (POR 46)

ADMINISTRATIVE ADVICES - NIL UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

Caution - Charges do not necessarily appear in order of priority

** End of Historical Title Search **

.

HISTORICAL TITLE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 28303753 Search Date: 29/03/2018 09:54

Title Reference: 12714071 Date Created: 06/01/1953

Previous Title: 12451043

This Title Has Been Fully Cancelled.

REGISTERED OWNER

Dealing No: 702778527 09/07/1998

AUSTRALIAN COMMUNICATIONS AUTHORITY

TRANSFER NO 702778527 AUSTRALIAN COMMUNICATIONS AUTHORITY Lodged at 16:04 on 09/07/1998

ESTATE AND LAND

Estate in Fee Simple

- LOT 1 REGISTERED PLAN 14143 Local Government: REDLAND
- LOT 2 REGISTERED PLAN 14144 Local Government: REDLAND
- LOT 2 REGISTERED PLAN 74062 Local Government: REDLAND

EASEMENTS, ENCUMBRANCES AND INTERESTS

- 1. REQUEST FOR INDEFEASIBLE TITLE NO 707635748 to issue an Indefeasible Title for LOT 1 ON REGISTERED PLAN 14143 LOT 2 ON REGISTERED PLAN 14144 LOT 2 ON REGISTERED PLAN 74062 COUNTY OF STANLEY PARISH OF CAPALABA Lodged at 13:44 on 13/04/2004
- 2. Rights and interests reserved to the Commonwealth by Deed of Grant No. 10028085 (POR 46) Deed of Grant No. 10177099 (POR 42)

ADMINISTRATIVE ADVICES - NIL UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

Caution - Charges do not necessarily appear in order of priority

** End of Historical Title Search **

12714071 V0 See ATS for Status Page 1 of 2

Certificate of Title.

QUEENSLAN

ACC: 9

No.

VOLIS 2714 FOL: 71

2714 Follo 71

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11

Realster Book, Vol

RÉFERENCE TO PREVIOUS Vol 2451 Folio 43

(C)

880

No.

P.S.

THE COMMONWEALTH OF AUSTRALIA

Pursuant to Memorandum of Request No. B102638 received the fourteenth day of May 1952 is now seized of an Estate in Pee-simple, subject nevertheless to such encumbrances, liens, and interests as are by memorandum notified hereon in ALL that piece of Land situated in the County of Stanley Parish of Capalaba containing One hundred and fifty four acres twenty three perches and two tenths of a perch more or less, as shown on the Plan hereon, and therein edged red, BEING Subdivisions 1 and 2 of Portion 42 and Subdivision 2 of Portion 46 on Plane Cat. Nos. 14143, 14144 and 74052 deposited in the Office of the Registrar of Titles, Bristone, which said piece of Land is part of the portions marked 42 and 46 delineated in the Public Map of the said perich deposited in the Office of the State, criginally granted by. Decede of Grant Nos. 22839 (Portion 42) and 7324 (Portion 46).

IN WITNESS WHEREOF, I have hereunto signed my name and affixed my seal, this sixth day of January One thousand nine hundred and fifty three

SIGNED, SEALED and DELIVERED the

6th day of Jenuary 1953 in presence of

S. am

Parish of Capalaba

REGISTRAR 23.2 154 . 0. 42 2 C 10PP:42 0P THE DESCRIPTION OF ATHE WITHIN LAND IN TO LOTION 1 ON RP 14143 AND P.42 TO LOT 2 ON RPILY144 AND SUB 2 OF PORTION 26 TO 201 ON REGISTERED PLAN NO. 74062. Scale 15 chains per inch 2 5 AUG 1986 TILES

12451043 V0 See ATS for Status Page 1 of 2

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Volume

2055

519

S. No.

A



THE CONMONWEALTH OF AUSTRALIA

pursuant to Acquisition No. A823295 under Section 4 (3) of "The Real Property (Commonwealth Titles) Act of 1924! produced the Twenty ninth day of November 1948, registered the Ninth day of December 1948, is now seized of an Estate in Fec-simple in ALL that piece of Land situated in the County of Sanley Perish of Capelaba containing One hundred and fifty nine sores more or less, as shown on the Plan hereon, and therein edged red, Being Portion 46 and Subdivisions 1 and 2 of Portion 42 on Plans Ost. Nos. 14143 and 14144 deposited in the Office of the Registrar of Titles, Brisbane, which eaid piece of Land is the whole of the portions marked 42 and 45 delineated in the Public Map of the said parish deposited in the Office of the Surveyor-General of this State, orginally granted by Deeds of Grant Nos. 22839 (Portion 42) and 7324 (Portion 46), the same having been acquired by the said The Commonwealth of Australia for Postal purposes at Ospalabs, Queensland under the "Lands Acquisition Act, 1906-1936" by notification of Acquisition published in the Commonwealth of Australia Gazette Ro. 101 dated the First day of July One thousand nine hundred and forty eight.

In Witness whereof, I have hereupto signed my name and affixed my seal, this One thousand nine hundred and forty nine Fifth day of Septembar

Bigned, Seeled, and Delivered, the 5th 1949, in presence of day of September N. Tuesa

REGISTRAR OF TITLES.

Capalaba TLUGHIA M RAS. 159 acres 46 Cf 080 Scale, 15 Ohains per inch.

No B. 993 62 TRANSFER of Hac 3 rds 16 to pell Mill of Fer 46 to Tossanary land Produced 4 dep 1952 29 apr 1932 at 9.50 m., registered Cancelled as above vide Val27.11. Fol. 12.0 R'S Sunt REGISTIAR OF TITLES -quella No. R. 12638 REQUEST to Issue Certificate of Title for 574 and 23 Tr pater State 1 and 2 Grand High 1958 at 9:52 m., registored High 1952 Cancelles and Contract State Vol. 2414 Fei High 錢 ENGL REGISTRAR OF TITLES

FULLY CANCELLED

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÷x	Certificate of Citle.	
20	(C) $OUEENSLAND No. 392235$	
116456	REFERENCE TO PREVIOUS VOL 1359' FOLIO S 144 and 145 REFERENCE TO PREVIOUS REFERENCE TO PREVIOUS REFERENCE REFE	
No		
	HUBERT OTIAR DUNIET	
,	of Conveyance No. A3688220 pursuant to Mémorandum of Conveyance No. A3688220 produced the minth day of November 1938 ,	
	registered the eleventh day of Noramher 193 8 18 now seized of an Estate in Fee-simple, subject nevertheless to such encumbrances, liens, and interests as are by memorandum notified hereon, in An that piece of Lond situated in the County of Stanley Parish of Ospielaba	1
ж.	oonteining one hundred and fourteen aores	н. : -
	more or less, as shown on the Plan herson, and therein edged red, Being subdivisions 1 and 2 of Portion 42 on plan Cat. No. 14143 deposited in the Office of the Registrar of Titles Erisbano	
	which said piece of Land is part of the portion marked _42 delineated in the Public Map of the said parish deposited in the Office of the Surveyor-General, originally granted by Deed of Grant No. 22839 to William Cardinal	1 /
	Saving Always to the Cnown all the rights and interests reserved to it by the said Deed of Grant.	
	IN WINNESS whoreof, I have hereunto eigned my name and affixed my scal, this eighteenth	
	Signed, And Bellower, the <u>eighteenth</u> day of <u>November</u> 1988, in presence of momenty.	
	Parish of Capalaba Road Road Road	
	42 114 Bornes	۰ ه در ۱۹
	3000 2 The search and the search an	
	Hosemany Fines Cotton Wife of Dolglas alfred Cotton	at
	Scale, 15 chains per inch.	
X	REDISTRAR OF TITLES	یہ م

© The State of Queensland (Dept of Natural Resources and Mines) 2018

No A644298 BILL OF MORTGAGE projuged. 12mar A644.298 96 12,40 mar 19 46 MEter of aspareton registered Bur 16116 Vide 1 alasia to secure the payrillant Ba \$1: nt nd interest thereis referred to. ang REGISTRAR OF TITLES No. 1823.295 PURSUANT to the provisions of the Lands Acquisition Acts 1906 and "The Real Property (Commonwealth Titles) Act of 1924," the within land is now vested in "The Commonwealth of Australia," as appears by documentary evidence produced 29 Nov 1948at 10:000m. 1948 at 10.0 a.m. Conceller Inter Dec: 19 48 AR A UR る後 REGISTRAR OF TITLES FULLY CANCELLED 6 2.1

Certificate of Title. VOL 5 2000 FO QUEENSLAN No.392237 36458 (\mathbf{C}) REFERENCE TO PREVIOUS REGISTER BOOK, VO2055 FOLIO. Vor. 1339 Forto s 143 and 143 No. HUBERT CLIVE DANIEL đ ٢ _pursuant to Memorandum of Conveyance No. A388220 ______ produced the ninth _____ day of November _____ -- 1938 registered the_elavanth______day of <u>November_____</u>108 8 is now seized -of an Estate in Ree-simple, subject nevertheless to such encumbrances, liens, and interests as are by memorandum notified hereon, in All that piece of Land situated in the County of Stanley _____ Parish of Capaleba containing fortyfive sores more or less, as shown on the Plan hereon, and therein edged red, Being Portion 48 which said piece of Land is the whole of the portion marked 46 -delinested in the Public Map of the said parish _____ deposited in the Office of the Surveyor-General, originally granted by Deed of Grant No.7324 ----- James Willard and Mark Blundell Saving Always to the CROWN all the rights and Interests reserved to it by the said Deed of Grant. IN WITNESS whereof, I have hereunto signed my name and affixed my seal, this cichteenth day of November One thousand nine hundred and thirty eight Mut. Hie Signed, Scaled, and Peliberry, the eighteenth _ 193 8 , in presence of } day of November Parish of Capalaba REGISTRAT OF TITLES 2 42 PURSUANT to Memo of TRANSFER No 1482-58 Broduced 3 June 19 4/102 1 the proved Confumeral 94 0 45 acres annel 4 Trada log 0 46 glas alfred bottom -Lenow SEISED of an Estate IN FEE 1227 SPIPLE in the WHOLE of the within Land Road DOGATEAR CF TITLE Scale, 15 chains per inch.

HAG44298 BILL OF MORIGACE prograd 12 mar AUADA Astator Augustion Istics of augustion Viac of bill May 19+6 otto por Bach ustralasia and interest merein referred to a secure acopt. 1 43 REGISTRAR OF TOTLES No. 48232.95 PURSUANT to the provisions of the Lands Acquisition Acts 1906, and "The Real Property (Commonwealth Tilles) Act of 1924," the within land is now vested in "The Commonwealth of Australia," as appears by documentary evidence produced 29 Most 1948 at 10.0 cmm. 4 C 1948 Dee regimered. aceter × · Holdings 43 the SENBLA REGISTRAR OF TITLES ~ 4 FULLY CANCELLED F ŝ.

01.5 1359 FOL, 142 Certificate of Citle. QUEENSLAA CHED. No. 237152 (C) 14 REFERENCE TO PREVIOUS No. REGISTUR BOON, VOL. 1359 FOLIO 142 96 FOLIO 59 Vor. 0 _WILLIAM WILLARD _ Transmission Birkdale ____ near Brisbane pursuant to Memorandum OBRYGHARS No. 673786 produced the twenty seventh day of September-_ 191 6 registered the <u>twenty scoold</u> and day of <u>Sovember</u> 191 6, is now selsed of an Estate in Fee-simple, as tenant in common with another _____ ______in____ one _____ undivided half _____ part or share 🛛 , subject nevertheless to such encumbrances, liens, and interests as are by mamorandum notified hereon, in All that piece of Land situated in the County of Stanley _____ Parish of Capalaba __ containing forty five aores_ more or less, as shown on the Plan hereon, and therein edged red, Being ___ portion for ty six __ which said piece of Land is the whola ____ of the portion _____ marked____ 46 _____ delineated in the Public Map of the said parish __ deposited in the Office of the Surveyor-General, originally granted by Deed of Grant No. 7324 to ____ James Willard and Mark Rlundell Stating Alwaps to the Grown all the rights and interests reserved to it by the said Deed of Grant. ANNAY. Twenty eighthe IN WITNESS whereof, I have hercunto signed my name and affixed my seal this____ ____One thousand nine hundred and sixteen ____ day of _____ November ____ Signed, Scaleb, and Wellbeerb, the dry of NOTEBOAR _____ 191 6, in presence of Parish of Capalard Amuth REDISTRAN OF TIMES. LEASE 1922 Aron Aur 22.020 Ferman Rentation -192alloweth mad AIJ5443 C.) EA U. EGISTRAR OF FLES by Probate Copy of Will mand documentary evidence. Produced 8 Nor Entered 9 9 et - 1924 8_ Morr. ---- 192.5-21-3-18.4- h.m. Nad 175442 TRANSPERSE Produced 5 July 1932 225 PM 1932 from Storade Rodered Of LEASE No. A 34 615 istered = Victor Ginen 84 REDISTRAR OF TITLES. FASLAN AFOISTRAR OF TITLES. Scale, 20 chains per inch.

No Alys 4444 LEASE FILE 126 5 July 1332 Managener Hills Concept of Walland Walland Furstan Concept of Walland Walland Furstan Concept of July 12 patrick The Mars Hills Concept of July 12 patric LEASE North uced & Way A107 84-1 STRAREOF TITLES 1:50 110 1 0 20. 20 and the second second ----No#388229 RANSFER of the whole of the land ion Produced W Mar 1938 9-12-19-38:1/7 Participured Concelled in full vide Vol 20.55For 17 5. Ruesinie. 580 ohn REGISTRAR OF TITLES.

FULLY CANVERENDE

11359143 V0 See ATS for Status Page 1 of 2

C. 4.	(C) $U^{E} E^{NSL} A$ No. 237153	
h No. 22.	BEFERENCE TO PREVIOUS VOL. 96 FOLIO 59 MARGARET WILLARD	
ŧ	transmission of <u>Birkdale</u> <u>near Brisbane</u> <u>Spinster</u> pursuant to Manorandum by Death of <u>Conveyance</u> No. <u>673786</u> produced the <u>twenty seventh</u> day of <u>September</u> 1916, registered the <u>twonty second</u> <u>day of <u>November</u> 1916, is now seized of an Estate in Fee-simple, as tanant in common with <u>ano ther</u> in <u>one</u> <u>undivided half</u> part or share , subject nevertheless to such encumbrances, liens, and interests as are by memorandum notified hereon, in All that piece</u>	
	of Land situated in the County of <u>Stenley</u> Parish of <u>Capalaba</u> containing forty five mares more or less, as shown on the Plan hereon, and therein edged red, Being portion forty six	
	of the said <u>nariah</u> deposited in the Office of the Surveyor-General, originally granted by Deed of Grant No. 7324	
	day of <u>November</u> One thousand nino hundred and <u>Bixteen</u> Signith, Scale, not Billiaria, the <u>JS</u> day of <u>November</u> 1916, in presence of Parish of Capalaba Admithe MMAMM	. ,
	No Althers LEASE produced in CO Oct 1927	Swepper. Az 15443
	a Martin Presister ed. 122 Perter 1927 form Redistrict Construction of the second of t	Lee Anystray 7-7-32 Surylice Margart
	Scale, 20 chains per inch.	

NJ385220 IRANSFER of the whole of the lend in Gancelled in full vide Vol. 3025 Fol. 77 134 LUS EGISTRAN OF TITLES.





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QUEENSLAND [CERTIFICATE OF TITLE. (C) Der a of formate 7324 Nº 12 0.36 Via COUNTY PARJERS CAMARE Register Book Vel. XC.VT 86 FOL 10:05! Parsnaut to Memorantium of Conveyance so. 11038 A.D. 1864, Signed, sealed, and delivered by Junika of the one part, and Milland of the other part Annes Milland of Prichance is for an Estate in Feo Simple, subject nevertheless to such encumbrances, liens, now seized interests, as are by memorandym notified hereon, of 311 that pieces of Land containing by admeasurement and aured by the Same anone on leas ditudity in Lasurto & Staula Antion Sectifica. BA110 \$ Consumance 0.01.81 ntine Browker Forty ling and brank Aluns BP ic mingad sighta. 100 plin Showing Showns to the Orown all the rights and interests reserved to it by the said Deed of Grant. (IN WITNESS wharcof, I have herounto signed my name and affixed my seal this Builteralls lluquel One thousand eight hundred and sixty- fie day of_ Signed, scaled, mit biliberit, the Beccelecce Ch day of Celergesse 1866, In presence o locall Farish of Capitaba Willant 95 a.c \$7 Chairis per 11056

But of Marrique Marring Dura James Muland 10 Mill manipal purit sutured marty hill Repayable 12 Sumo 1500 Autorial de Ka 11 \$15 pur anting per antenior margille Decarborly Keinallina 00 Stor Rad Gard 1. 50783 Nommanin of Trades presived 8th January 1878 at 11: 18 and reg. 22 January 1875 from William Blev Marnick to Mency Desamon Manish and John Beresford Learner as pushes for the pusposes 29+402= DEM & Alusar) Alconeine nonestioned. Sep Rig 328 14/9/95 NEW TITLE HO.82 99600 PURSUANT TO MEMOR OF THANSPER TO TA GALAND AND TODOCCO Margret Willard wife of Sames minthettow SEISED of an Estate IK-FEE Shipte in the WHOLE of the within land, Search fame WHLAOSS! Rogistias of Tilies, 12 673786 NO. 573783 TRANSMISSION BY DEATH. In consequence of the death of the above named - Bargarce Willard of the booke nomina -10, system of ostate in face simple in the within an the 13 June 19rb an ostate in face simple in the within hand begame transmitted to <u>Williams Withiand</u> and hangaret Willard Spencette + DS durisions As tenante in comment by Probate Dupy of Will ______ and documentary orldenee Produced 27, 540 K976 612.050 m. Entered Zie Nov 1916 Jasiles Cancelled. Oucces # 001359 Fel 13Dep-Registrer of Titles. 5,1 a carde al example of a pro-spectrum office Ali emera inchermentes

3591	44 V0 See ATS for Status Page 1 of 2	
and the second		annealth Barland Henry Lang August
	(C) UNIT U Certificate of Citle. (C) UNIT U U E E N S L A V $No. 237154$	
b No.	REFERENCE TO PREVIOUS VOL. <u>276</u> FOLIO <u>247</u> 202 156 WILLIAM WILLARD	
		CT-
0	of Birkdale near Brisbanepurguant to Memorandum by Death of Conveyance No. 673786produced the twenty seventh day of September 1916,	
	registered the <u>twenty second</u> <u>day of <u>November</u> 1916, is now selsed of an Estate in Fee-simple, as temant in common with <u>enother</u> <u>in one</u> <u>undivided helf</u> part or share , subject nevertbeless to such encumbrances, liens, and interests as are by memorandum notified hereon, in All that piece</u>	
	of Lend situated in the County of Stenley Parish of Gapaleba	
	more or less, as shown on the Plan bereen, and therein edged red, Being subdivisions one and two of partion	э
·	which said piece of Land is the wholeof the portion marked 42 delineated in the Public Map of the said parish deposited in the Office of the Surveyor-General, originally granted by Deed of Grant No. 22889 toVillen-Oerdinel	
	Southing Albuars to the Orown all the rights and interests reserved to it by the said Deed of Grant.	
	quilty IN WITNESS whereof, I have hereunto signed my name and affixed my seal this Twenty segletto	
	day of <u>November</u> One thousand nine hundred and <u>aixtaon</u>	
	Huy Min 114.0.0 No Asthe Late Produced 10 Asthe Agent 1927	7 D 88458-9
	Unduarded and effe of etal No. 8215.89. TRANSMISSION BY DEATH Inconsequence of the death of the above named. H. Olon	Surflee April-443
	by Probate Copy of William and cocumentary avidence. Produced Schotz 1923 at 3:39,4.m Entered 23 9 el 1924.	Lae A195-1144 2-7-3-
3	REGISTRAR OF TITLES.	
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1932 No. A1754.44 - LEASS PHUE leand rest vi pati Hang Ver . \$ 3.2 Tert urn. A want LEASE No. 4 3 17866 常心 TITLES, TELSY ā 15.1 Not 388229 TRANSFER of the whole of the land ta-<u>9 Mov</u> 1998 au 17 pm2 registered 11 Mov 1998 Cancelled in full vide Vol. 2000 Fol Re-un Russie. blue REGISTRAN OF TITLES

FULLY CANCELLER.

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11359145 VO See ATS for Status Page 1 of 2

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Strikels Transit as ion pursuant is Memoreneous provide and is Memoreneous and Conservation in the Strikets Transit as ion pursuant is Memoreneous and the Strikets of Conservations 1016 - registened the trenty second day of Marganhaz 1028 , is now select of an Estation Free- and the trenty second day of Marganhaz 1028 , is now select of an Estation Free- and the trenty second day of Marganhaz 1028 , is now select of an Estation Free- and the country of Estations area of Land situated in the Country of Estations Data in the Country of Estations Data in the Country of Estations oresisting from on pursue of the Yao on a plane day in the Plan haven, and there are set of the Bog estation of the set plane of Yao on a plane day. No. 2021 to n. Data in the Plan haven, and there are set of the Bog estation of the set plane of Yao on a plane day. No. 2021 to n. Data is now of the Plan haven, and there are set of the Bog estation of the Bog of the set plane of the set plane of the Strike and from the Strike and the Country of Britles which and plane of Yao of a plane of the Strike of the Count of the Count of the Bog of the set plane of the set plane of the set plane of the set plane of the set of the Strike of Count of the Strike of Count of the Strike of Count of the Strike of the Count of the Strike of Count of the set of the Strike of Count of the Strike of Count of the Strike of Count of the Strike of True Mark of Count of the Strike of Count of the Strike of the Strike of True Strike of True Mark of Count of the Strike of Count of the Strike of True Striff of Count of the Strike of	No.	Certificate of Citle. (C) REFERENCE TO PREVIOUS VOL. $\frac{376}{247}$ Certificate of Citle. No. $\frac{237155}{1359}$ Reference Book, Vol. 1359 Foldo 145		
of SHIFESION		MARGARET WILLARD		
No Allfele LEASE production of the second of		of		2
Scale, 20 chains per inch.		No Addition of the second of t	Sur A76 Le Argente Sur Argente	2443 2443 2-32-32 2-444 2-32

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Not 38722 TRANSFER of the whole of the land to Produced Q 7/0 1938 at 1. 7, 200 registered Cancelled in full vide Vol. 2052 Fol. 75 W. M. Revisie. REGISTRAN OF TITLES.

1 . B.H













VOL: 5 276 FOL: 247 QUEENSLA (C) agant 22839 Book Vol. TLE. CANCELLE CERTIFICATE OF TITLE. of. pursuant to Memorandum of Conveyance No. 4.192 _____ registered the fiftune tel day of A.D. 187 6 , 12 now seized of an Estate in Fee Simple, subject nevertheless to such besty. encumbrances, liens, and interests, as are by memorandum notified hereon, in 311 that piece of Land situated in the Parish of Capulatia County of Manslein Carrier of particularing one of prational parting them containing by admeasurement minister. at conver of publicarian more or less commencing at the Frankhr Mesurest Formaling, of thist on the a grunne plantania farme the mgalpa anuc on the and of presidenteriord Heinne greast shemi champ La wroud unuant chama. aning 206 unton Anonice elimin ch the Youthurst Carosy 2.54 Barnh time funtion than cer becamera 124 Turnhy Varian west by that one to upwards brathar crester and on anathingtond of mintaned dand dan of the hontarri which said piece of land is hant delineated in the Public Map of the said fichidar markod 42 deposited in the Office of the Surveyor-Gonaral, originally granted the Justights day of debidandiful PY/ Doed of Grant, No. 222.19 under the Seal of the Colony of hilden alound by and the Hand of flage the quarties tomstandance Blangins of Varmanty formally Governor of the said Colony, to Mulduan bardenal Saving Blways to the Crown all the rights and interests reserved to it by the said Deed of Grant. Win WITNESS wharcof, I have hereunto signed my name and affixed my seal this liver by fuf the Ust lag One thousand eight hundred and seveniy di day of 1.5 1 Signed, scaled, and belivered, tho_ 1870', in presence of Auly day of unnow ploplonos Bill of Mortgage produced 18 Jany 1893at 10.53 a.m. registering 19 Sour 189? from Niciland ARA Parish of Capalaba hu HIM BOOUTER (principal 96 ac 1789 pounde sterling repayable s percontum per annun interest at the Re of payable quiterly QL. AMUUMA Scale 20 charms per mon Dep.-Registrar of Titles

No 373742 TRANSMISSION BY DEATH. In consequences of the death of the bernown on the 22 day of Been 1948 - , _____ Area interest in Bill of Mortgage No. 26605+ became transmitted to John Corners -Barrow Landen Relation barrow and Brand Hallinon Cameron as Excenters as appears by documentary evidence, produced 24 day of Homerson as 2 30 pm - entered - 3- day of Yerty 1902 K AL - Sta Dot. Registrat of THANSMISSION BY DEATH. In consequence of the death of the above named JAMALE Willaka on the 2 Death - 101 fran estate An fel. Denny Like in the will had been to a state in fel. Denny Like in the will had been to a state in the will had 9/D 63+10-8 in the within land boosons transmitted to many the second boosons transmitted to many the second boosons to th AD-alles 7/0-6739-8 Dep. Registrer of Titles. 173780 Nobist TRANSMISSION BY DEATH. In consequences of the death of the ebove assure forgares William on the 10 June 1916 an estate in les simple in the within up the 15 June 1475 an estate in the simple in the within Hand bearnet transmitted to William Willard and Margaret Willard Epinster As present by Philoute copy of Will Produced 27 Sep. 19/6-at 2-5 Spin - Enterse 22 Nov 1966. Canallea in fall bide 12 Hare Dep. Registrar of Titles. THE REAL PROPERTY. . . .

101:5 202 FOL: 188 QUEENSLAN (O)10222156 Nº. 29160. No. OF PREVIOUS. deced of apart 22839. OERTIFICATE OF TITLE. amars Willand of Canalaba pursuant to Memorandum of Conveyonce No. 2. C. O. 2 4 registered the Autor day of dental encumbrances, llens, and interests, as are by memorandium notified hereon, in 311 that piece of Land situated in the 4) County of Thelas Les Phrist of lagralabour Wing publicition the up parta an for hy luce containing by admonsurement 1.1 Stat ficere de more or less commending and the ender and cover of the producing and baren ded thence in the South by the north bean davas of post on fairy sic be over if -wattlein an mine chara van fin build into the Venge and ach on the trans-against and for the panit of commencement ly sugard bean granthe 1.3" lour checketo plating and benthe condice apple landes af a torike an the Kouth by de tint heaving weat forty chains we have ander and the Meat Sig a providencia cantal que ant this there in the set of first and to the for alfed build build by which said piece of land is factor at the fladian delineated in the Public May of the said factate marked 12 day of Tetramber 1871 deposited in the Office of the Surveyor-General, originally grated the Level filter under the Seal of the Colony of Lucanolcure de by Deed of Grant, No. 2282 9 and the Hand of Tylange angualers Canadandaine Manquis of Kamanda Governor of the sold Oblony, to Wallane Conclusion Sauing Elways to the Grown all the rights and interests reserved to it by the said Deed of Grant. IN WITHESS whereof, I have hereunto signed my name and affixed my soul this matternake One thousand eight hundred and sevenly full Ine day of Signes, senieb; and belilerreb, th Nerin Petuson June 187 3. ILJELI Den REGISESO O SKREED ASMILL Aallongosi Bill of Mostgage produced 18 18 at 153 at n. registered ig from from from for any the lander faut varie 392 to Rogerste of Capelaba No. principat sume pounde starlig 18075 repayablesty 22 1000 interstratethe Seper bentum pel annum 46 paymie que 10100012 Dep. Registrar of Titles Frate 10 Grains periorche

No.722742 TRANSMISSION BY DEATH. In consequence of the death of form harmon on the day of the day of the second day of the s Phan 1942-No. 8/4/15+ became transmitted to fer former Commund Hearing Hilder or Samerow and Mount Recence Gearman of an Evenentian as appears by documentary evidence, produced 242 day of Stone 1812 and 2. 80 prosen entered Aday of totta 121 9600 1912 Dep. Neglatfar of Titles. No.r.\$11.98. TRANSMISSION BY DEATH. In consequence of the death The Berne of the above hange on the 2 Och 1914 an astate wire fet prinstly In the within Ignd become transmitted to ********* --------1114114414 and dooumentary evidence, Produced 2.9. Rang 1915.at 2 - 18 for the Enterod listopher 1975 A.M. Alla 71D. 1-12786 Dep. Registrar of Titles. NO.4378 TRANSMISSION BY DEATH. In consequence of the death of the above named - Rangite to Utiliand on the 15 June 1915 en estate in joe simple in the within and became transmitted to William Willard and Spinster ----pargaret Willard hy Probale Copy of Will and dooumentery syldenee Friduced 27, 3-1916 at 255 m. Enterod 22 1000 Churcerso in fill with Voe 13:440 lio 140 to Hencalaly Dep. Registrar of Titles. -C'

GROUNDWATER DATABASE

BORE REPORT

REG NUMBER 79640

CHECKED Y

REGISTRATION DETAILS

		BASIN	1450	LATITUDE	27-30-56	MAP-SCALE 2	253
OFFIC	E Brisbane	SUB-AREA		LONGITUDE	153-12-17	MAP-SERIES	N
DATE LOG REC	D	SHIRE	6250-REDLAND	EASTING	520218	MAP-NO S	9542-41
D/O FILE N	O . 84825	LOT	7	NORTHING	6956443	MAP NAME	
R/O FILE NO.		PLAN	RP192720	ZONE	56	PROG SECTION	
H/O FILE NO.		ORIGINAL DESCRIPTION		ACCURACY	INSP	PRES EQUIPMENT	SP
				GPS ACC			
GIS LA	AT -27.51563616	PARISH NAME	947-CAPALABA			ORIGINAL BORE NO	
GIS LN	IG 153.2046804	COUNTY	STANLEY			BORE LINE	-

POLYGON RN OF BORE REPLACED DATA OWNER

FACILITY TYPE Sub-Artesian Facility STATUS Existing ROLES WS DATE DRILLED 01/01/1991 DRILLERS NAME DRILL COMPANY METHOD OF CONST. ROTARY

CASING DETAILS

**** NO RECORDS FOUND ****

STRATA LOG DETAILS

STRATIGRAPHY DETAILS

**** NO RECORDS FOUND ****

AQUIFER DETAILS

**** NO RECORDS FOUND ****

PUMP TEST DETAILS PART 1

**** NO RECORDS FOUND ****

PUMP TEST DETAILS PART 2
***** NO RECORDS FOUND *****

DATE 29/03/2018

BORE REPORT

REG NUMBER 79640

BORE CONDITION

**** NO RECORDS FOUND ****

ELEVATION DETAILS

**** NO RECORDS FOUND ****

WATER ANALYSIS PART1

PIP	DATE	RD AN/	ALYST Q	AN	DEPT H (m)	RMK	SRC	COND (uS/cm)	рН	Si (mg/L)	TOTAL IONS (mg/L)	TOTA SOLID (mg/l	S	HARD	ALK	FIG. OF MERIT	SAR	RAH
A	10/01/199	2 1 DPI	3	7	27.00		GB	200	5.5		119.50	107.3	30	41	20	0.9	1.4	
							7	WATER ANAL	SIS P	ART 2								
PIPE DA A 10/01/) Na 1 21.0	К 5.5	Ca 8.0	Mg 5.0	N	ſn	HCO3 24.0	Fe	CO3	CI 46.0	F	NO3	SO4 10.0	Z	n A	В	Cu

WATER LEVEL DETAILS

WIRE LINE LOG DETAILS

**** NO RECORDS FOUND ****

FIELD MEASUREMENTS

**** NO RECORDS FOUND *****

SPECIAL WATER ANALYSIS

**** NO RECORDS FOUND ****

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REG NUMBER 145683

REGISTRATION DETAILS

		BASIN	1450	LATITUDE	27-31-03	MAP-SCALE
OFFICE	Brisbane	SUB-AREA		LONGITUDE	153-12-14	MAP-SERIES
DATE LOG RECD	05-MAR-08	SHIRE	6250-REDLAND	EASTING	520148	MAP-NO
D/O FILE NO.		LOT	10	NORTHING	6956234	MAP NAME
R/O FILE NO.		PLAN	RP124205	ZONE	56	PROG SECTION
H/O FILE NO.		ORIGINAL DESCRIPTION		ACCURACY		PRES EQUIPMENT
				GPS ACC		
GIS LAT	-27.5174468	PARISH NAME	947-CAPALABA			ORIGINAL BORE NO
GIS LNG	153.2040194	COUNTY	STANLEY			BORE LINE -
CHECKED	Y					
						POLYGON
						RN OF BORE REPLACED
FACILITY TYPE	FACILITY TYPE Sub-Artesian Facility		19/02/2008			DATA OWNER
STATUS	Existing	DRILLERS NAME	MATHAMS, STEVEN	ROBERT		
ROLES	WS	DRILL COMPANY	DRILLPOWER			

CASING DETAILS

PIP E	DATE	RECORD NUMBER	MATERIAL DESCRIPTION	MAT SIZE (mm)	SIZE DESC	OUTSIDE DIAM (mm)	TOP (m)	BOTTOM (m)
А	19/02/2008	1	Polyvinyl Chloride	5.900	WT	140	0.00	51.00
А	19/02/2008	2	Grout				0.00	5.00
А	19/02/2008	3	Gravel Pack	5.000	GR		5.00	51.00
А	19/02/2008	4	Perforated or Slotted Casing	2.000	AP		33.00	39.00
А	19/02/2008	5	Perforated or Slotted Casing	2.000	AP		45.00	51.00

STRATA LOG DETAILS

RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION
1	0.00	6.00	CLAY, RED-YELLOW
2	6.00	18.00	SANDSTONE, YELLOW, DECO
3	18.00	32.00	SANDSTONE, GREY
4	32.00	36.00	SANDSTONE, QUARTZ, CLEAN

METHOD OF CONST. ROTARY AIR

REG NUMBER 145683

RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION			
5	36.00	45.00	SANDSTONE, WHITE			
6	45.00	51.00	MUDROCK, GREY			

STRATIGRAPHY DETAILS

**** NO RECORDS FOUND ****

AQUIFER DETAILS

REC	TOP BED(M)	BOTTOM BED(M)	BED LITHOLOGY	DATE	SWL (m)	FLOW	QUALITY	YIELD CTR (I/s)	CONDIT FO	RMATION NAME
1	32.00		SDST	19/02/2008	-21.00	N	150PPM SALT	0.13 N	PS	

PUMP TEST DETAILS PART 1

**** NO RECORDS FOUND ****

PUMP TEST DETAILS PART 2

**** NO RECORDS FOUND ****

BORE CONDITION

**** NO RECORDS FOUND ****

ELEVATION DETAILS

**** NO RECORDS FOUND ****

WATER ANALYSIS PART1

**** NO RECORDS FOUND ****

WATER ANALYSIS PART 2

**** NO RECORDS FOUND ****

WATER LEVEL DETAILS

**** NO RECORDS FOUND *****

WIRE LINE LOG DETAILS

REG NUMBER 145683

**** NO RECORDS FOUND ****

FIELD MEASUREMENTS

**** NO RECORDS FOUND ****

SPECIAL WATER ANALYSIS

**** NO RECORDS FOUND ****

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Page 1 of 4

BOTTOM

(m)

36.00 36.00

BORE REPORT

REG NUMBER 133707

REGISTRATION DETAILS

		BASI	N 1450	LATITUDE	27-30-37	MAP-SCALE	
OFFICE Brisbane		SUB-ARE	A	LONGITUDE	153-12-34	MAP-SERIES	
DATE LOG RECD 13-MAR-06		SHIR	E 6250-REDLAND	EASTING	520688	MAP-NO	
D/O FILE NO.		LO	Т 3	NORTHING	6957020	MAP NAME	
R/O FILE NO.		PLA	N RP843977	ZONE	56	PROG SECTION	
H/O FILE NO.	OR	IGINAL DESCRIPTIO	N	ACCURACY	GPS	PRES EQUIPMENT	
				GPS ACC	10		
GIS LAT -27	.5103452	PARISH NAM	E 947-CAPALABA			ORIGINAL BORE NO	
GIS LNG 153	.2094719	COUNT	Y STANLEY			BORE LINE	-
CHECKED Y							
						POLYGON	
						RN OF BORE REPLACED	
FACILITY TYPE Sub-Artesiar	n Facility	DATE DRILLE	D 26/01/2006			DATA OWNER	
STATUS Existing		DRILLERS NAM	E SCHUMACHER,	EVAN LYALL			
ROLES WS		DRILL COMPAN					
		METHOD OF CONS	T. ROTARY AIR				
				CASING DETAILS			
PIP E	DATE	RECORD MATE NUMBER	RIAL DESCRIPTION		IZE SIZE DESC nm)	C OUTSIDE DIAM (mm)	TOP (m)
A	26/01/2006	1 Polyvi	nyl Chloride	9.	000 WT	140	0.00
A	26/01/2006	2 Perfor	ated or Slotted Casin	ig 4.	000 AP		30.00
A	26/01/2006	3 Grave	Pack	5.	000 GR		7.00

А	26/01/2006	3 Gravel Pack	5.000 GR		7.00	36.00
А	26/01/2006	4 Cuttings or other fill between casing and ho			5.00	7.00
А	26/01/2006	5 Grout		200	0.00	5.00

STRATA LOG DETAILS

RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION
1	0.00	1.00	TOPSOIL
2	1.00	8.00	CLAY
3	8.00	27.00	SANDSTONE
4	27.00	31.00	CLAY

REG NUMBER 133707

RECORD	STRATA	STRATA	STRATA DESCRIPTION
NUMBER	TOP (m)	BOT (m)	
5	31.00	, ,	SANDSTONE *

STRATIGRAPHY DETAILS

**** NO RECORDS FOUND ****

AQUIFER DETAILS

REC	TOP BED(M)	BOTTOM BED(M)	BED LITHOLOGY	DATE	SWL (m)	FLOW	QUALITY	YIELD C (!/s)	TR	CONDIT	FORMATION NAME
1	32.00		SDST	26/01/2006	0.00	Ν		1.52	Y	PS	WOOGAROO SUBGROUP

	PUM	P TEST	DETAILS	PART 1
--	-----	--------	---------	--------

PIPE	DATE	REC RN OF NO. PUMP-BORE	TOP (m)	BOTTOM (m)	DIST METH (m)	TEST TYPES	PUMP TYPE	SUCTION SET (m)	Q PRIOR TO TEST (I/s)	PRES ON ARRIV (m)	Q ON ARRIV (I/s)	
А	26/01/2006	1 133907			PUM		AIR					

						PUMP TES	T DETAILS P	ART 2							
PIP	DATE	REC TEST	SWL	RECOV.	RESID.	MAX DD	Q at	TIME TO	Max	CALC	DESIGN	DESIGN	SUCT.	TMSY	STOR
E		DUR	(m)	TIME	DD	or P RED	MAX DD	MAX DD	Q	STAT	YIELD	BP	SET ((m2/DAY)	
		(mins)		(mins)	(m)	(m)	(I/s)	(mins)	(l/s)	HD (m)	(l/s)	(m)	(m)		
А	26/01/2006	1 60	0.00								1.52				

BORE CONDITION

**** NO RECORDS FOUND ****

ELEVATION DETAILS

**** NO RECORDS FOUND ****

WATER ANALYSIS PART1

**** NO RECORDS FOUND ****

WATER ANALYSIS PART 2

**** NO RECORDS FOUND ****

SOURCE

BORE REPORT

REG NUMBER 133707

WATER LEVEL DETAILS

WIRE LINE LOG DETAILS

**** NO RECORDS FOUND ****

FIELD MEASUREMENTS

PIPE	DATE	DEPTH (m)	COND (uS/cm)	pH	TEMP (C)	NO3 (mg/L)	DO (mg/L)	Eh (mV)	ALK (mEq)	METH	SOU
A	26/01/2006		130							PU	GB

SPECIAL WATER ANALYSIS

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3

5.00

15.10 DECO ROCK

Page 1 of 4

BORE REPORT

REG NUMBER 145270

REGISTRATION DETAILS

			BASIN	1450	LATITUDE	27-30-07	MAP-SCALE		
OFFICE Brisba	ne		SUB-AREA		LONGITUDE	153-12-12	MAP-SERIES		
DATE LOG RECD 28-MA	Y-07		SHIRE	6250-REDLAND	EASTING	520083	MAP-NO		
D/O FILE NO.			LOT	2	NORTHING	6957953	MAP NAME		
R/O FILE NO.			PLAN	RP89797	ZONE	56	PROG SECTION		
H/O FILE NO.		ORI	GINAL DESCRIPTION		ACCURACY		PRES EQUIPMENT		
					GPS ACC				
GIS LAT	-27.5	5019295	PARISH NAME	947-CAPALABA			ORIGINAL BORE NO		
GIS LNG	153.2	2033289	COUNTY	STANLEY			BORE LINE	-	
CHECKED Y									
							POLYGON		
							RN OF BORE REPLACED		
FACILITY TYPE Sub-Ar	tesian	Facility	DATE DRILLED				DATA OWNER		
STATUS Existing	9			PATRICK COOPER					
ROLES WS				BUSHMENS DRILLIN	G				
			METHOD OF CONST.	ROTARY AIR					
				CASI	NG DETAILS				
	PIP	DATE	RECORD MATERI			IZE SIZE DES	C OUTSIDE	TOP	BOTTOM
	E	DATE	NUMBER	AL DESCRIPTION		1m)	DIAM (mm)	(m)	(m)
	А	15/03/2007	1 Polyvinyl	Chloride	5.	900 WT	140	0.00	20.60
	A	15/03/2007	2 Grout					0.00	5.00
	А	15/03/2007	3 Cuttings	or other fill between cas	sing and hc			5.00	12.00
	А	15/03/2007	4 Grout					12.00	13.00
	А	15/03/2007	5 Gravel P	ack	4.	000 GR		13.00	20.60
	А	15/03/2007	6 Perforate	ed or Slotted Casing		000 AP		14.00	20.60
				STRATA	LOG DETAILS				
RECORD NUMBER		STRATA TOP (m)	STRATA STRAT BOT (m)	TA DESCRIPTION					
1	1	0.00	1.00 CLAY,	BROWN					
2	2	1.00	5.00 CLAY,	YELLOW					

REG NUMBER 145270

RECORD	STRATA	STRATA STRATA DESCRIPTION	
NUMBER	TOP (m)	BOT (m)	
4	15.10	20.60 BLACK SOFT ROCK	

STRATIGRAPHY DETAILS

**** NO RECORDS FOUND ****

AQUIFER DETAILS

REC	TOP BED(M)	BOTTOM BED(M)	BED LITHOLOGY	DATE	SWL (m)	FLOW	QUALITY	YIELD (I/s)	CTR	CONDIT	FORMATION NAME
1	15.10		XXXX	15/03/2007	-13.00	Ν	POTABLE	0.12	Ν	XX	
2	18.10		XXXX	15/03/2007	-14.00	N	POTABLE	0.30	Ν	XX	

PUMP TEST DETAILS PART 1

**** NO RECORDS FOUND ****

PUMP TEST DETAILS PART 2
***** NO RECORDS FOUND ****

BORE CONDITION

**** NO RECORDS FOUND ****

ELEVATION DETAILS

**** NO RECORDS FOUND ****

WATER ANALYSIS PART1

**** NO RECORDS FOUND ****

WATER ANALYSIS PART 2

**** NO RECORDS FOUND ****

WATER LEVEL DETAILS

**** NO RECORDS FOUND ****

WIRE LINE LOG DETAILS

REG NUMBER 145270

**** NO RECORDS FOUND ****

FIELD MEASUREMENTS

**** NO RECORDS FOUND ****

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GROUNDWATER DATABASE

BORE REPORT

REG NUMBER 138666

REGISTRATION DETAILS

					BASIN	1450		LATITUDE	27-29	9-55	MAP-SCAL	E 253	
OFFICE Brisba	ane			SUE	B-AREA		1	ONGITUDE	153-1	2-22	MAP-SERIE	SM	
DATE LOG RECD 30-JU	IL-07				SHIRE	6250-REDLAND		EASTING	5203	47	MAP-N	o 9543-32	
D/O FILE NO.					LOT	47		NORTHING	6958	319	MAP NAM	1E	
R/O FILE NO.					PLAN	RP856261		ZONE	56		PROG SECTIO	N	
H/O FILE NO.		c	RIGINAL DE	ESCR	IPTION			ACCURACY	GPS		PRES EQUIPMEN	т	
								GPS ACC		10			
GIS LAT	-27.	4986245	PA	RISH	INAME	947-CAPALABA					ORIGINAL BORE N	O SMYTHE	
GIS LNG	153.	2060005		С	OUNTY	STANLEY					BORE LIN	E -	
CHECKED Y													
											POLYGO	N	
											RN OF BORE REPLACE	D	
FACILITY TYPE Sub-A	rtesian	Facility	DA	TE D	RILLED	17/07/2007					DATA OWNE	R	
STATUS Existin	ng		DRIL	LER	S NAME	SCHUMACHER, E	VAN LYALI						
ROLES WS			DRIL	LCC	MPANY	DRILLMARK		(*)					
			METHO	OOF	CONST.	ROTARY AIR							
								ALLO					
						-	ASING DET						DOTTON
	PIP E	DATE	NUME		MATERIA	AL DESCRIPTION		MAT S (n	IZE 1m)	SIZE DESC	OUTSIDE DIAM (mm)	TOP (m)	BOTTOM (m)
	А	17/07/200	7	1	Polyvinyl	Chloride		5.	900	WT	140	0.00	24.00
	А	17/07/200	7	2	Perforate	d or Slotted Casing		4.	000	AP	140	18.00	24.00
	х	17/07/200	7	3	Grout						200	0.00	6.00
	х	17/07/200	7	4	Bentonite	Seal					200	6.00	7.00
	х	17/07/200	7	5	Bentonite	Seal					175	7.00	8.00
	х	17/07/200	7	6	Gravel Pa	ack		5.	000	GR	175	8.00	24.00
						STRA	ATA LOG D	ETAILS					

RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION
1	0.00	1.00	TOPSOIL
2	1.00	7.00	HARD RED/ORANGE CLAY
3	7.00	13.00	DECOMPOSED BASALT

DATE 29/03/2018

BORE REPORT

REG NUMBER 138666

RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION
4	13.00	17.00	FIRM BASALT
5	17.00	21.00	BROKENN BASALT
6	21.00	24.00	HARD BASALT

STRATIGRAPHY DETAILS

**** NO RECORDS FOUND ****

AQUIFER DETAILS

REC	TOP BED(M)	BOTTOM BED(M)	BED LITHOLOGY	DATE	SWL (m)	FLOW	QUALITY	YIELD CTR (I/s)	CONDIT	FORMATION NAME
1	17.00	21.00	BSLT	17/07/2007	-5.00	N	600 PPM	0.60 Y	FR	PETRIE FORMATION

PUMP TEST DETAILS PART 1

**** NO RECORDS FOUND ****

PUMP TEST DETAILS PART 2

**** NO RECORDS FOUND ****

BORE CONDITION

**** NO RECORDS FOUND ****

ELEVATION DETAILS

**** NO RECORDS FOUND ****

WATER ANALYSIS PART1

**** NO RECORDS FOUND ****

WATER ANALYSIS PART 2

			WATER LE	VEL DETAILS								
PIPE DATE	MEASURE N/R RMK	MEAS P	PIPE DATE	MEASURE N/R	RMK	MEAS	PIPE	DATE	MEASURE N/	RR	WK MEA	AS
	(m)	TYPE		(m)		TYPE			(m)		TYP	'E

TYPE

MEASURE N/R RMK MEAS

PIPE DATE

(m)

DATE 29/03/2018

BORE REPORT

REG NUMBER 138666

PIPE DATE MEASURE N/R RMK MEAS

TYPE

(m)

PIPE DATE MEASURE N/R RMK MEAS (m) TYPE

NR A 17/07/2007 -5.00 R

WIRE LINE LOG DETAILS

**** NO RECORDS FOUND ****

FIELD MEASUREMENTS

**** NO RECORDS FOUND ****

SPECIAL WATER ANALYSIS

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** End of Report. Produced: 29/03/2018 09:53:17 AM **

GROUNDWATER DATABASE

Page 1 of 4

BORE REPORT

REG NUMBER 152005

REGISTRATION DETAILS

			BAS	SIN 1450	LATITUDE	27-31-01	MAP-SCALE	253	
OFFICE Brisb	ane		SUB-AR	EA	LONGITUDE	153-11-34	MAP-SERIES	Μ	
DATE LOG RECD 23-AF	PR-12		SHI	RE 1000-BRISBANE	C. EASTING	519045	MAP-NO	9542-41	
D/O FILE NO.			L	OT 196	NORTHING	6956304	MAP NAME		
R/O FILE NO.			PL	AN M31107	ZONE	56	PROG SECTION		
H/O FILE NO.		O	RIGINAL DESCRIPTI	ON	ACCURACY		PRES EQUIPMENT		
					GPS ACC				
GIS LAT	-27.5	1682972	PARISH NA	VIE 4585-TINGALPA			ORIGINAL BORE NO		
GIS LNG	153.1	1928411	COUN	TY STANLEY			BORE LINE	-	
CHECKED Y									
							POLYGON		
							RN OF BORE REPLACED		
FACILITY TYPE Sub-A	Artesian	Facility		ED 18/02/2011			DATA OWNER		
STATUS Existin	ng			ME SCHUMACHER, E					
ROLES WS				NY SCHUEY BROS D	RILLING				
			METHOD OF CON	ST. ROTARY AIR					
				C	ASING DETAILS				
	PIP	DATE	RECORD MAT	ERIAL DESCRIPTION	MAT S	ZE SIZE DES	C OUTSIDE	TOP	BOTTOM
	Е		NUMBER		(m	ım)	DIAM (mm)	(m)	(m)
	А	18/02/2011	1 Poly	vinyl Chloride	5.9	7W 006	140	0.00	27.00
	A	18/02/2011	2 Perfo	orated or Slotted Casing	4.0	000 AP	140	18.00	27.00
	Х	18/02/2011	3 Grou	t			200	0.00	1.00
	Х	18/02/2011	4 Grou	t			175	1.00	5.00
	Х	18/02/2011	5 Grav	el Pack			175	5.00	27.00
					ATA LOG DETAILS				
RECORE		STRATA TOP (m)	STRATA ST BOT (m)	RATA DESCRIPTION					
	1	0.00	0.50 SA	NDY SOIL					
	2	0.50	2.00 1/5						

- 2 0.50 2.00 YELLOW CLAY
- 3 2.00 9.00 WEATHERED BASALT
 - 4 9.00 14.00 HARD BASALT

REG NUMBER 152005

RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION
5	14.00	18.00	FRACTURED BASALT
6	18.00	23.00	FIRM BASALT
7	23.00	27.00	HARD BASALT

STRATIGRAPHY DETAILS

SOURCE	RECORD NUMBER	STRATA TOP (m)	STRATA STRATA DESCRIPTION BOT (m)	
DNR	1	0.00	27.00 PETRIE FORMATION	

AQUIFER DETAILS

REC	TOP BED(M)	BOTTOM BED(M)	BED LITHOLOGY	DATE	SWL (m)	FLOW	QUALITY	YIELD CTR (I/s)	CONDIT	FORMATION NAME
1	14.00	18.00	BSLT	18/02/2011	-9.00	N	400 PPM	0.25 Y	FR	PETRIE FORMATION

PUMP TEST DETAILS PART 1

**** NO RECORDS FOUND ****

PUMP TEST DETAILS PART 2

**** NO RECORDS FOUND ****

BORE CONDITION

**** NO RECORDS FOUND ****

ELEVATION DETAILS

**** NO RECORDS FOUND ****

WATER ANALYSIS PART1

**** NO RECORDS FOUND ****

WATER ANALYSIS PART 2

**** NO RECORDS FOUND ****

WATER LEVEL DETAILS

GROUNDWATER DATABASE

Page 3 of 4

TYPE

MEASURE N/R RMK MEAS

PIPE DATE

(m)

BORE REPORT

MEASURE N/R RMK MEAS

TYPE

REG NUMBER 152005

PIPE DATE MEASURE N/R RMK MEAS (m) TYPE

(...,

A 18/02/2011 -9.00 R NR

WIRE LINE LOG DETAILS

**** NO RECORDS FOUND ****

(m)

PIPE DATE

FIELD MEASUREMENTS

**** NO RECORDS FOUND ****

SPECIAL WATER ANALYSIS

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SEARCH RESPONSE ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Brian Fainton Level 4 201 Leichhardt Street Spring Hill QLD 4000

Transaction ID:504Cheque Number:Client Reference:

BIRKDALE

50446540

EMR Site Id:

27 March 2018

This response relates to a search request received for the site: Lot: 1 Plan: RP14143 362-388 OLD CLEVELAND Road East

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

All search responses include particulars of land listed in the EMR/CLR when the search was generated. The EMR/CLR does NOT include:-

- 1. land which is contaminated land (or a complete list of contamination) if EHP has not been notified
- 2. land on which a notifiable activity is being or has been undertaken (or a complete list of activities) if EHP has not been notified

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Administering Authority



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SEARCH RESPONSE ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Brian Fainton Level 4 201 Leichhardt Street Spring Hill QLD 4000

Transaction ID: 50446539 Cheque Number: Client Reference: EMR Site Id:

27 March 2018

This response relates to a search request received for the site: Lot: 2 Plan: RP14144 362-388 OLD CLEVELAND Road East BIRKDALE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

All search responses include particulars of land listed in the EMR/CLR when the search was generated. The EMR/CLR does NOT include:-

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SEARCH RESPONSE ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Brian Fainton Level 4 201 Leichhardt Street Spring Hill QLD 4000

Transaction ID: 50446538 Cheque Number: Client Reference: EMR Site Id:

27 March 2018

This response relates to a search request received for the site: Lot: 2 Plan: SP146445 362-388 OLD CLEVELAND Road East BIRKDALE

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

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