REPORT

Ecology Assessment Report

Q-4160-15-RP-0015

Australia Pacific LNG Project

This report provides an overview of the ecological values for the Site contained within Lots 1494L3482 and 1211L3459 associated with DA #1935.

Revision	Date	Description	Originator	Checked	QA/Eng	Approved
0	12/08/2015	Issued for Use	C Zappone	A Schimpf	A Schimpf	T Williams

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Table of Contents

1. Introduction 5
1.1. Scope of Works 5
1.2. Definitions & Abbreviations 5
1.2.1. Definitions 5
1.2.2. Abbreviations 6
1.2.3. Document Revision Table 6
1.2.4. Document References 7
2. Site Context 10
3. Methodology 11
3.1. Desktop and Literature Review 11
3.2. Field Survey 12
3.2.1. Vegetation Community Survey 12
3.2.2. Habitat Surveys 12
3.2.3. Threatened Flora and Fauna Survey 12
3.2.4. Exotic Fauna Survey 13
3.2.5. Disturbance Survey 13
3.2.6. Watercourse/wetland Survey 13
3.2.7. Survey Limitations 13
4. Results and Discussions 14
4.1. Desktop and Literature Review 14
4.2. Field Survey 14
4.2.1. Commonwealth Environmental Matters 14
4.2.2. Queensland Environmental Matters 28
4.2.3. Disturbance 33
4.2.4. Watercourses and Wetlands 33
5. Conclusions 35
Appendix A: Site Location and Survey Points 36
Appendix B: Results of EPBC Protected Matters Search Tool 37
Appendix C: Wildlife Online Database Search Results 38
Appendix D: DNRM Mapped Regional Ecosystems 39
Appendix E: DEHP Mapping of ESAs and Other Environmental Values on Site (including mapped Referable Wetlands) 40
Appendix F: List of Flora and Fauna Species Identified on Site 41
Appendix G: Ground Truthed Threatened Ecological Communities 44
Appendix H: Ground Truthed Regional Ecosystems 45
Appendix I: Ground Truthed EPBC Migratory and Marine Species Present on Site 46
Appendix J: Ground Truthed Pest Fauna Present on Site 47

Appendix K: Ground Truthed Drainage Features, Watercourses and Wetlands Present on Site.48

List of Tables

Table 1: Definitions 5
Table 2: Abbreviations 6
Table 3: Revision History 6
Table 4: Associated Document References 7
Table 5: Site Context 10
Table 6: Desktop and Literature Review Sources 11
Table 7: Commonwealth Environmental Matters – Field Survey Results 15
Table 8: Field survey results for EPBC Act threatened flora with potentially suitable habitat and likelihood of occurrence. 16
Table 9: Field survey results for EPBC Act threatened fauna with potentially suitable habitat and likelihood of occurrence. 19
Table 10: Field survey results for EPBC Act migratory fauna with potentially suitable RE and likelihood of occurrence 23
Table 11: Field survey results for EPBC Act marine fauna with potentially suitable RE and likelihood of occurrence. 25
Table 12: State environmental matters – field survey results 28
Table 13: Field survey results for NC Act EVNT flora with potentially suitable RE and likelihood of occurrence. 30
Table 14: Field survey results for NC Act EVNT fauna with potentially suitable habitat and likelihood of occurrence 30
Table 15: Pest Fauna Recorded on Site 33

1. Introduction

This report provides a description of the ecological values found within Lots 1494L3482 and 1211L3459 herein referred to as 'the Site'. The results are based on an initial desktop assessment followed by a field survey to confirm the vegetation communities, flora and fauna species, habitat values and areas of disturbance.

This report has been compiled by Origin Field Environmental Advisor Claud Zappone. The field surveys were conducted by Claud Zappone under the direction of Origin Senior Field Environmental Advisor Anjeanette Schimpf.

Anjeanette Schimpf is approved to undertake ecological surveys by Commonwealth Department of Environment (formerly the Department of Sustainability, Environment, Water, Population and Communities) in writing on 13th September, 2012.

1.1. Scope of Works

An ecological survey was required to be carried out on Lots 1494L3482 and 1211L3459 in anticipation of proposed development of the Site. The Survey Area is defined as the area contained within the boundaries of the above listed lot/plans with exception to the homestead location and surrounding northern paddocks. Refer to Appendix A: Site Location and Survey Points for an overview of the Site and Survey Area.

1.2. Definitions & Abbreviations

1.2.1. Definitions

Table 1: Definitions

Term	Definition
Likely (with regard to likelihood of occurrence assessment)	Species, population or ecological community could occur and study area is likely to provide suitable habitat. Previous records in the locality and/or suitable potential habitat in the study area.
Present (with regard to likelihood of occurrence assessment)	Species, population or ecological community was recorded during the field investigations.
Project	Australia Pacific LNG Project
Ramsar	Convention on Wetlands of International Importance (the Ramsar Convention) was signed in Ramsar, Iran on 2 February 1971. The Ramsar Convention aims to halt the worldwide loss of wetlands and to conserve, through wise use and management, those that remain. The Convention encourages member countries to nominate sites containing representative, rare or unique wetlands, or that are important for conserving biological diversity, to the List of Wetlands of International Importance (Ramsar sites).
Survey Area	The area encompassed by the cadastral boundaries of Lots 1494L3482 and 1211L3459 with exception to the homestead location and surrounding northern paddocks (refer Appendix A).
The Site	The area encompassed by the cadastral boundaries of Lots 1494L3482 and 1211L3459 with exception to the homestead location and surrounding northern paddocks (refer Appendix A).
Trimble	Trimble integrates positioning technologies such as GPS, laser and optical with application software, wireless communications and services to provide innovative positioning solutions for applications such as surveying, construction and engineering.
Unlikely (with regard to	Species, population or ecological community is not likely to occur. Lack of previous

Term	Definition
likelihood of occurrence assessment)	recent (<25 years) records and suitable potential habitat limited or not available in the study area.

1.2.2. Abbreviations

The following abbreviations are found throughout this report.

Table 2: Abbreviations

Abbreviation	Description
°C	Degrees centigrade
BoM	Bureau of Meteorology
DEHP	Department of Environment and Heritage Protection (Qld)
DNRM	Department of Natural Resources and Mines (Qld)
DoE	Department of the Environment (Cth)
EPBC, EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (C'th)
ESA	Environmentally Sensitive Area
GPS	Global positioning system
km	Kilometre
LNG	Liquefied Natural Gas
LP, LP Act	*Land Protection (Pest and Stock Route Management) Act 200* (Qld).
Ma	EPBC listed marine species
Mi	EPBC listed migratory species
m	Metres
mm	Millimetre
MNES	Matters of National Environmental Significance
N/A	Not applicable
NC, NC Act	*Nature Conservation Act 1992* (Qld)
RE, REs	Regional Ecosystem(s)
TEC, TECs	Threatened Ecological Community(ies)

1.2.3. Document Revision Table

Table 3: Revision History

Revision	Date	Description

1.2.4. Document References

The following documents are referred to throughout this report.

Table 4: Associated Document References

Document Number	Title
Q-LNG01-15-MP-0109	Australian Pacific LNG (2011) Environmental Constraints Planning and Field Development Protocol.
	Australian Weeds Committee (2015). http://www.weeds.org.au/ Last accessed 12/08/2015.
	BoM (2015) *Bureau of Meteorology - Climate statistics for Australian Locations*. Australian Government, Canberra. http://www.bom.gov.au/climate/averages/tables/cw_042023.shtml Last accessed 12/08/2015.
	DAFF (2015a) *Declared animals of Queensland*. Department of Agriculture and Fisheries, Brisbane. https://www.daf.qld.gov.au/plants/weeds-pest-animals-ants/pest-animals/declared-animals/class-2 Last accessed 13/08/2015.
	DNRM (2015) *Regional Ecosystem and Remnant Map—version 9 for the purpose of the Vegetation Management Act 1999*. The Department of Natural Resources and Mines, Brisbane. https://www.qld.gov.au/environment/land/vegetation/map-request/ Last accessed 12/08/2015.
	DoE (2013) *Protected Matters Search Tool*. Department of the Environment. Canberra. http://www.environment.gov.au/epbc/pmst/index.html Last accessed 12/08/2015.
	DoE (2015a) *Species Profile and Threats Database (EPBC Act List of Threatened Ecological Communities)*. Department of the Environment, Water, Heritage and the Arts, Canberra. http://www.environment.gov.au/cgi-bin/sprat/public/publiclookupcommunities.pl Last accessed 12/08/2015.
	DoE (2015b) *Species Profile and Threats Database (EPBC Act List of Threatened Flora and Fauna)*. Department of the Environment, Water, Heritage and the Arts, Canberra. http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl Last accessed 12/08/2015.
	DoE (2015c) *Environmental Protection and Biodiversity Conservation Act 1999*, Department of Sustainability, Environment, Water, Population and Communities. http://www.environment.gov.au/epbc/about/index.html Last accessed 12/08/2015.
	EHP (2013) *Map of Referable Wetlands*. Department of Environment and Resource Management, Brisbane. http://www.ehp.qld.gov.au/ecosystems/wetlands/referable-wetlands-maps.html Last accessed 12/08/2015.
	EHP (2014a). *Regional Ecosystem Land Zone definitions,* Department of Environment and Heritage Protection, Brisbane. http://www.qld.gov.au/environment/plants-animals/plants/ecosystems/land-zones/ Last accessed 12/08/2015.
	EHP (2014b) *Wildlife Online.* Department of Environment and Heritage Protection, Brisbane. http://www.ehp.qld.gov.au/wildlife/wildlife-online/ Last accessed 12/08/2015.
	EHP (2014c) *Species Profile Search.* Department of Environment and Heritage Protection, Brisbane. https://environment.ehp.qld.gov.au/species-search/ Last accessed 13/08/2015.
	EHP (2015a) *Denhamia parviflora*, WetlandInfo. Department of Environment and Heritage Protection, Queensland Government, Brisbane. http://wetlandinfo.ehp.qld.gov.au/wetlands/ecology/components/species/?denhamia-parvifolia.

Document Number	Title
	Last accessed 13/08/2015.
	EHP (2015b) *Thesium australe*, WetlandInfo. Department of Environment and Heritage Protection, Queensland Government, Brisbane. http://wetlandinfo.ehp.qld.gov.au/wetlands/ecology/components/species/?thesium-australe Last accessed 13/08/2015.
	EHP (2015c) *Botaurus poiciloptilus*, WetlandInfo. Department of Environment and Heritage Protection, Queensland Government, Brisbane. http://wetlandinfo.ehp.qld.gov.au/wetlands/ecology/components/species/?botaurus-poiciloptilus Last accessed 13/08/2015.
	EHP (2015d) *Grantiella picta*, WetlandInfo. Department of Environment and Heritage Protection, Queensland Government, Brisbane. http://wetlandinfo.ehp.qld.gov.au/wetlands/ecology/components/species/?grantiella-picta Last accessed 13/08/2015.
	EHP (2015e) *Protected Plants Flora Survey Trigger Map*. Department of Environment and Heritage Protection, Brisbane. https://www.ehp.qld.gov.au/licences-permits/plants-animals/protected-plants/map-request.php Last accessed 11/08/2015
	EHP (2015f) *Fimbristylis vagans, WetlandInfo*, <http://wetlandinfo.ehp.qld.gov.au/wetlands/ecology/components/species/?fimbristylis-vagans. Accessed 28 June 2015
	Hyett, J. and Shaw, N. (1980). Australian Mammals: A Field Guide for NSW, Victoria, South Australia and Tasmania, Thomas Nelson Australia, Melbourne.
	Neldner, V.J., Wilson, B. A., Thompson, E.J. and Dillewaard, H.A. (2012). *Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland. Version 3.1.*Updated September 2005. Queensland Herbarium, Environmental Protection Agency, Brisbane.128 pp.
	OEH (2010) *Anthochaera phrygia,* Threatened Species Profile. Office of Environment and Heritage, New South Wales Government. http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10841 Last accessed 13/08/2015.
	OEH (2012) *Tympanocryptis pinguicolla,* Threatened Species Profile. Office of Environment and Heritage, New South Wales Government. http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10817 Last accessed 13/08/2015
	OEH (2014a) *Anseranas semipalmata,* Threatened Species Profile. Office of Environment and Heritage, New South Wales Government. http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10056 Last accessed 13/08/2015.
	OEH (2014b) *Jalmenus eubulus,* Threatened Species Profile. Office of Environment and Heritage, New South Wales Government. http://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=20123 Last accessed 13/08/215.
	Pizzey G & Knight F (2012). The Field Guide to the Birds of Australia. Ninth Edition. Harper Collins Publishers, Sydney Australia.
	Queensland Parliamentary Counsel (2002) Land Protection (Pest and Stock Route Management) Act , Queensland Government, Brisbane. http://www.legislation.qld.gov.au/legisltn/current/l/landprpsrma02.pdf
	Queensland Parliamentary Counsel, (2006) Nature Conservation (Wildlife) Regulation, Queensland Government, Brisbane. http://www.legislation.qld.gov.au/LEGISLTN/CURRENT/N/NatureConWiR06.pdf
	Sattler, P.S., and Williams, R.D (eds.) (1999). *The Conservation Status of Queensland's*

Document Number	Title
	Bioregional Ecosystems. Environmental Protection Authority, Brisbane.

2. Site Context

Table 5: Site Context

Bioregion	The Site is located in the Eastern Darling Downs Province (11.31) within the Brigalow Belt south bioregion. The Eastern Darling Downs Province comprises spurs and foothills of Main Range along the eastern boundary of the bioregion, low hills in the south and the Condamine River plain in the central and western parts. Substrates include Tertiary basalt in the extreme east, Jurassic sediments in the south-east, Triassic-Jurassic sediments in the north-east and alluvial soils of varying age along the Condamine River plain. The basalt vegetation communities are predominantly woodlands of *Eucalyptus crebra* (narrow-leaved ironbark), *E. melliodora* (yellow box), *E. tereticornis* (forest red gum), *E. albens* (white box) or *E. orgadophila* (mountain coolibah). The sandstone hills support *E. crebra* woodland with *E. moluccana*/*E. microcarpa* (gum-topped box) and *E. populnea* (poplar box) woodland on lower slopes and valleys. There are also some areas of semi-evergreen vine thicket/araucarian microphyll rainforest, particularly in the south-east, and *Acacia harpophylla* (brigalow) open forest and vine thicket in the north-east. Prior to clearing, the heavy cracking clays and black earths of the Condamine River plain supported *Dicanthium sericeum* (bluegrass) grassland and grassy woodlands of *E. populnea*, with *E. tereticornis-camaldulensis* (forest red gum-river red gum) and *Angophora floribunda* (rough-barked apple) adjacent to drainage lines. In the eastern part of the Condamine River plain, the black earths appear to have supported a grassy woodland of *E. tereticornis*, *A. floribunda* rather than the *Dicanthium* grasslands and *E. populnea* woodlands of the central and western parts (Sattler and Williams 1999).
Current land use	The Site is predominantly cleared and currently utilised for grazing purposes. A narrow corridor of riparian vegetation has been retained along the Condamine River which bounds the site along the southern boundary. A recreational motorcross track exists within and alongside the riparian zone.
Landform and soils	The landform of the site comprises river terraces, channels and associated alluvial plains which are subject to periodic flooding. Soil types in this landform include skeletal soils (mainly rudosols), deep alluvial sands and cracking clays.
Climate	The nearest weather station to the Site is located at the Miles Post Office (Bureau of Meteorology (BoM) station ID 042023) located approximately 45km to the west of the Site. The Miles Post Office has a mean annual rainfall of 652 mm, with most rain falling between December and February, with August being the driest month. The average annual maximum temperature at Miles is 27.1oC (BoM, 2015).

3. Methodology

The methodology employed in compilation of this Ecology Assessment Report consisted of:

- A desktop and literature review of ecological databases and literature sources as direct references for the survey undertaken
- A field survey of the Site

An explanation of these activities is outlined in this section.

3.1. Desktop and Literature Review

Sources utilised in the desktop and literature review are listed in Table 6 below.

Table 6: Desktop and Literature Review Sources

Database	Co-ordinates or search area	Date of search	Appendix
Environment Protection and Biodiversity Conservation Act 1999 (*EPBC Act*) Protected Matters Search Tool	Lat -26.7950, Long 150.5509	07/08/2015	Appendix B: Results of EPBC Protected Matters Search Tool
Nature Conservation Act 1992 (*NC Act)* Protected Species Lists Wildlife Online Database	Lat -26.7950, Long 150.5509	07/08/2015	Appendix C: Wildlife Online Database Search Results
Department of Natural Resources and Mines (DNRM) Regulated Vegetation, Regional Ecosystem and Remnant Map—version 9	Lot 1494L3482 and Lot 1211L3459	07/08/2015	Appendix D: DNRM Mapped Regional Ecosystems
DEHP Map of Environmentally Sensitive Areas	Lat -26.7950, Long 150.5509	07/08/2015	Appendix E: DEHP Mapping of ESAs and Other Environmental Values on Site (including mapped Referable Wetlands)
EHP Map of Referable Wetlands and Wetland Protection Areas	Lot 1494L3482 and Lot 1211L3459	07/08/2015	Appendix E: DEHP Mapping of ESAs and Other Environmental Values on Site (including mapped Referable Wetlands)
Queensland Geological Mapping, Chinchilla Map SHEET SG56-09 and 1:250,000 Geological series (1971).	N/A	07/08/2015	N/A

Data searches were conducted using a 10 km buffer around the coordinate Lat -26.7950, Long 150.5509 which corresponds to the approximate centre point of the survey area.

3.2. Field Survey

Ecological surveys were conducted in accordance with:

- The *Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland* (Neldner et al. 2012)
- In line with the methodology described in the *Environmental Constraints Planning and Field Development Protocol* (Q-LNG01-15-MP-0109, Australia Pacific LNG 2011).

Field surveys were undertaken between the 9th and 11th August, 2015.

3.2.1. Vegetation Community Survey

Baseline botanical surveys were undertaken to describe dominant flora and vegetation community structure throughout the survey site. Botanical surveys were consistent with the quaternary level of data collection as described in Neldner et al. (2012).

The vegetation community surveys were undertaken within 50m x 10m plots for the purpose of typifying the vegetation community under assessment. Vegetation community data was entered into the data fields provided by the Trimble data capture system. A total of two (2) formal vegetation community surveys were undertaken within the Site. Ground-truthing of the DNRM RE designation (DNRM 2015) at and surrounding the Site was undertaken via quaternary level and random meanders transect assessments, as defined by Neldner et al. (2012).

The locations of the vegetation community survey sites are presented in Appendix A: Site Location and Survey Points.

Relative abundance data was collected for each stratum within the community as per the methodology described in the *Environmental Constraints Planning and Field Development Protocol* (Q-LNG01-15-MP-0109 Australia Pacific LNG (2011)), as presented by the vegetation structure point data sheet of the Trimble unit. Where necessary, representative photo(s) were taken of the subject vegetation community via the Trimble unit or camera. Photo aspect data was recorded as required.

3.2.2. Habitat Surveys

Habitat surveys were undertaken in conjunction with vegetation community survey within the 50m x 10m quadrant. One (1) formal habitat survey was undertaken across the Site (Appendix A: Site Location and Survey Points).

Within the habitat survey, a range of habitat features was recorded on the relevant Trimble data sheet. Where deemed appropriate, representative photo(s) were taken of the given habitat patch via the Trimble unit. Photo aspect data was entered into the relevant data sheet as required.

3.2.3. Threatened Flora and Fauna Survey

Threat-listed species are those listed under the *EPBC Act 1999* and the *Nature Conservation (Wildlife) Regulation 2006*.

Targeted threat-listed flora searches were undertaken for species highlighted by the database and literature review. Searches were undertaken based on incidental field observations of high quality habitat, the identification of distinct ecological features through the preliminary desktop and literature review, or within the vicinity of a vegetation community survey/habitat feature plots where field ecologists deemed the given area to be of sufficient potential value to a threatened species to warrant such a search.

Fauna species were recorded opportunistically throughout the survey area.

Any observations of threatened species (whether within search areas or opportunistically) were recorded using the Trimble data capture system. Where practicable, photo(s) were taken of the subject threatened species. Any flora specimens deemed as potential threatened species and not conclusively identified by the ecologists were forwarded to the Queensland Herbarium for verification.

3.2.4. Exotic Fauna Survey

Presence and abundance of declared fauna as defined by the *Land Protection (Pest and Stock Route Management) Act 2002 (LP Act)*, were recorded at the time of the survey both within survey plots and opportunistically while traversing the Site. Exotic fauna species were entered into the Trimble data capture system when encountered.

Note: Exotic flora species were also identified concurrently, but recorded in a separate Weed Survey Report.

3.2.5. Disturbance Survey

Evidence of disturbance at survey sites was recorded for type, severity and estimated time of most recent occurrence. The recording of disturbance was also conducted at opportunistic levels where appropriate.

3.2.6. Watercourse/wetland Survey

All mapped ordered streams within each property were assessed, across their full length, to determine if these mapped features were watercourses or drainage features as defined by the *Water Act 2000*. Ordered stream assessments included assessment of the presence/absence of a defined channel with bed and banks, riparian vegetation and presence/absence of hydrophytes. The extent of streams assessed as watercourses was mapped using imagery and/or a GPS-derived track log.

3.2.7. Survey Limitations

A number of factors are considered likely to influence survey results for particular species or species groups. These factors are:

- Timing (seasons) and duration of the survey period
- Weather conditions in the preceding seasons and immediately prior to the survey
- Restricted spatial area of the habitats within the Site

Due to the above-listed items, the surveys undertaken may not provide a true indication of seasonal habitat utilisation by fauna species within the Site. Some cryptic flora species may only be detected during particular flowering periods. The field investigations undertaken were limited to passive techniques (e.g. no live trapping) and were limited to the winter season. Additional survey effort would be required to provide a more comprehensive inventory of species, both threatened and common.

4. Results and Discussions

This section includes the results of the database and literature review.

4.1. Desktop and Literature Review

Results of the desktop and literature review can be found in Appendices B to E, as listed in Table 6.

4.2. Field Survey

Results of field surveys are detailed in the following sections. A comprehensive list of flora and fauna species identified during the field survey is included in Appendix F: List of Flora and Fauna Species Identified on Site.

4.2.1. Commonwealth Environmental Matters

Field survey results for Commonwealth environmental matters (Matters of National Environmental Significance (MNES), TECs, threat-listed species) are outlined in Table 7.

Table 7: Commonwealth Environmental Matters – Field Survey Results

Commonwealth environmental matters	Present (Y/N)	Location	Description	EPBC Act Status	Condition	Comments
TECs	Yes	Lot 1494L3482 and Lot 1211L3459	Coolibah-Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	Endangered	Community generally in good condition with limited weed incursion.	Present as remnant RE11.3.3 fringing the Condamine River. Recorded in association with other riverine vegetation communities including RE11.3.25 and 11.3.4. It should be noted that this TEC was declared on 1st March 2011, after EPBC Act approval for the Australia Pacific LNG Project was received on 21st February, 2011. As such, the Coolibah-Black Box Woodland TEC does not constitute a constraint to the Project.
EPBC threat-listed flora	No	--	--	--	--	--
EPBC threat-listed fauna	No	--	--	--	--	--
Migratory species	No	--	--	--	--	--
Marine species	Yes	Lot 1494L3482	*Coracina novaehollandiae* (black-faced cuckoo-shrike)	Listed Marine Species	N/A	2 individuals observed over consecutive days in the same location.
		Lot 1494L3482	*Grallina cyanoleuca* (magpie-lark)	Listed Marine Species	N/A	2 individuals observed.
		Lot 1494L3482	*Pelecanus conspicillatus* (Australian pelican)	Listed Marine Species	N/A	1 individual observed within Condamine River.
		Lot 1494L3482	*Threshkiornis spinicollis* (straw-necked ibis)	Listed Marine Species	N/A	3 individuals observed.
		Lot 1211L3459	*Todiramphus sanctus* (sacred kingfisher)	Listed Marine Species	N/A	1 individual observed along bank of Condamine River.

4.2.1.1. Ground-truthed Threatened Ecological Communities

As described in Table 7 above, one TEC - Coolibah-Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions, was recorded along the southern boundary of The Site, present as a narrow corridor along the Condamine River. It should be noted that this TEC was declared on 1st March 2011, after EPBC Act approval for the Australia Pacific LNG Project was received on 21st February, 2011. As such, the Coolibah-Black Box Woodland TEC does not constitute a constraint to the Project.

4.2.1.2. Threatened Flora

No EPBC Act listed threatened flora were recorded during the field survey at the Site.

Based on field inspection results, an assessment of the likelihood of occurrence of EPBC Act listed threatened flora identified within the desktop searches (Table 6) is summarised in Table 8.

Table 8: Field survey results for EPBC Act threatened flora with potentially suitable habitat and likelihood of occurrence.

Family	Scientific/Common Name	EPBC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
Surianaceae	*Cadellia pentastylis* (ooline)	Vulnerable	Moderately fertile soils preferred for agriculture and pasture development. Occurs in a range of vegetation types including semi-evergreen vine thicket, brigalow-belah, poplar box and bendee communities (EHP 2014c).	No	Unlikely – appropriate habitat for this species is absent from The Site.
Celastraceae	*Denhamia parvifolia* (small-leaved denhamia)	Vulnerable	Vineforests and semi-evergreen vine thickets (softwood and brigalow scrub), commonly on basalt-derived, brown or red soils above 300 m altitude. It is occasionally found in ecotone areas with open forest. Associated species include: *Cadellia pentastylis, Acacia harpophylla, Backhousia angustifolia, Geijera salicifolia, Flindersia xanthoxyla, F. australis and*	No	Unlikely – appropriate habitat for this species is absent from The Site.

			Cupaniopsis parvifolia (EHP2015a).		
Poaceae	*Homopholis belsonii* (Belson's panic)	Vulnerable	Poor soils in dry woodlands. Rocky, basaltic hills supporting *Eucalyptus albens, Geijera parviflora* woodland. Flat to gently undulating alluvial areas supporting *Casuarina cristata* forest and sometimes *Acacia harpophylla* or *G. parviflora*. Drainage lines supporting *C. cristata* and sandy country dominated by cypress pine-bloodwood-ironbark-sheoak forest (DoE 2015b).	11.3.3, 11.3.4 and 11.3.25	Likely - suitable habitat for this species occurs within riparian zone vegetation.
Santalaceae	*Thesium australe* (Austral toadflax)	Vulnerable	Grassland or woodland, often in damp sites. Examples of associated vegetation includes: open woodland with *Eucalyptus tereticornis* and *E. tindaliae* on skeletal soils; on heavy alluvium soil in grassy *E. populnea* woodland; on black cracking clay in grassland of *Dichanthium sericeum*; and grassland dominated by *Themeda triandra* and *Heteropogon contortus* on basaltic, rocky soils (EHP2015b).	11.3.3, 11.3.4 and 11.3.25	Likely - suitable habitat for this species occurs within riparian zone vegetation.

4.2.1.3. Threatened Fauna

As detailed in Table 7: Commonwealth Environmental Matters – Field Survey Results, five (5) Listed Marine Species were recorded as a result of the field surveys.

Further, an assessment of the likelihood of occurrence of *EPBC Act* listed threatened fauna, based on field results, is summarised within

Table 9.

Table 9: Field survey results for EPBC Act threatened fauna with potentially suitable habitat and likelihood of occurrence.

Class	Scientific / Common Name	EPBC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
Birds	*Botaurus poiciloptilus* (Australasian bittern)	Endangered	Shallow (less than 30cm deep), permanent freshwater and brackish swamps or lagoons that are densely vegetated (e.g. tall reeds, sedges, lignum). They also inhabit bore drains with tussocky vegetation and occasionally saltmarsh. They use temporary pools when population densities are high and deep swamps when breeding (EHP2015c).	11.3.3, 11.3.4 and 11.3.25	Likely - suitable habitat for this species occurs within the immediate banks of the Condamine River.
	Erythrotriorchis radiatus (red goshawk)	Vulnerable	Eucalypt woodland, open forest, tall open forest, gallery rainforest, swamp schlerophyll forest and rainforest margins. Edges of woodland or forest where they meet grassland, cleared land, roads or watercourses (DoE 2015b).	11.3.3, 11.3.4 and 11.3.25	Likely – suitable habitat for this species present throughout the site.
	Geophaps scripta scripta (squatter pigeon)	Vulnerable	Open forests to sparse, open woodlands and scrub that are mostly dominated in the overstorey by *Eucalyptus*, *Corymbia, Acacia or Callitris* species. Remnant, regrowth or partly modified vegetation communities. Within 3km of water bodies or courses (DoE 2015b).	No	Unlikely. Suitable habitat is absent.
	Lathamus discolor (swift parrot)	Endangered	Wintering habitat mainland Australia. *Eucalyptus crebra*, *E. tereticornis* and *E. melliodora* forests. Tree-hollows used for nesting can be vertical or horizontal. They can be in trunks, branches or spouts of living, senescing or dead eucalypts. Trees commonly used are over-mature, often damaged by fire and with abundant hollows (DoE 2015b).	11.3.3, 11.3.4 and 11.3.25	Likely – suitable habitat for this species present throughout the site.

Class	Scientific / Common Name	EPBC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
	Poephila cincta cincta (black-throated finch (southern)	Endangered	Grassy, open woodlands and forests, typically dominated by *Eucalyptus, Corymbia* and *Melaleuca*, and occasionally in tussock grasslands or other habitats (for example freshwater wetlands), often along or near watercourses, or in the vicinity of water (DoE 2015b).	No	Unlikely. Suitable habitat is absent.
	Rostratula australis (Australian painted snipe)	Endangered	Shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. They also use inundated or waterlogged grassland or saltmarsh, dams, rice crops, sewage farms and bore drains (DoE 2015b).	No	Unlikely. Suitable habitat is absent.
Fish	*Maccullochella peelii* (Murray cod)	Vulnerable	Diverse range of habitats from clear rocky streams, such as those found in the upper western slopes of NSW (including the ACT), to slow-flowing, turbid rivers and billabongs (DOE 2015b).	Condamine River	Likely – suitable habitat for this species occurs within the Condamine River
Mammals	*Chalinolobus dwyeri* (large-eared pied bat)	Vulnerable	Sandstone cliff/escarpment to provide roosting habitat that is adjacent to higher fertility sites, particularly box gum woodlands or river/rainforest corridors which are used for foraging (DoE 2015b).	No	Unlikely. Suitable habitat is absent.
	Nyctophilus corbeni (south-eastern long-eared bat)	Vulnerable	Inland woodland vegetation types, including box, ironbark and cypress pine woodlands. The species also occurs in bulloake, brigalow, belah woodland and smooth-barked apple woodlands. *Eucalyptus camaldulensis* forests lining watercourses and lakes and *Eucalyptus largiflorens* dry sclerophyll forest (DoE 2015b).	11.3.3, 11.3.4 and 11.3.25	Likely – suitable habitat for this species present throughout the site.

Class	Scientific / Common Name	EPBC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
	Phascolarctos cinereus (koala)	Vulnerable	Temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by *Eucalyptus* species. Any forest or woodland containing species that are known koala food trees, or shrubland with emergent food trees (DoE 2015b).	No	Unlikely. Suitable habitat is absent.
Reptiles	*Anomalopus mackayi* (five-clawed worm-skink)	Vulnerable	*Dichanthium sericeum* (bluegrass) and/or Mitchell Grass dominated grasslands or mixed grasslands dominated by other grass species. River Red Gum–Queensland blue gum–coolibah–bimble/poplar box grassy woodland/open forests (DoE 2015b).	No	Unlikely. Suitable habitat is absent.
	Delma torquata (collared delma)	Vulnerable	Eucalypt-dominated woodlands and open-forests. REs include RE11.3.2 poplar box woodland on alluvial plains, RE11.9.10 poplar box/brigalow open forest, RE11.10.1 lemon scented gum open forest and 11.10.4 gum-topped ironbark, budgeroo +/- *Eucalyptus* species, *Corymbia* species, *Acacia* species woodland (DoE 2015b).	11.3.3, 11.3.4 and 11.3.25	Likely – suitable habitat for this species present throughout the site.
	Egernia rugosa (yakka skink)	Vulnerable	Open dry sclerophyll forest, woodland and scrub. Common woodland and open forest types include brigalow, mulga , bendee , lancewood, belah, poplar box, ironbark and white cypress pine (DoE 2015b).	No	Unlikely. Suitable habitat is absent.
	Furina dunmalli (Dunmall's snake)	Vulnerable	Forests and woodlands on black alluvial cracking clay and clay loams dominated by brigalow, *Acacia spp.* (*A. burowii, A. deanii, A. leioclyx*), native cypress or bull-oak. Various blue spotted gum, ironbark (*Eucalyptus crebra* and *E. melanophloia*), white cypress pine and bulloak open forest and woodland associations on sandstone derived soils (DoE 2015b).	No	Unlikely. Suitable habitat is absent.

Class	Scientific / Common Name	EPBC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
	Tympanocryptis pinguicolla (grassland earless dragon)	Endangered	Restricted to a small number of Natural Temperate Grassland sites dominated by *Nothodanthonia spp*. (wallaby grasses), *Austrostipa spp.* (spear grasses), *Poa sieberiana* (Poa Tussock), *Bothriochloa macra* (red grass), and occasionally *Themeda australis* (kangaroo grass) (OEH 2012)	No	Unlikely. Suitable habitat is absent.

4.2.1.4. Migratory Fauna

As detailed in Table 7: Commonwealth Environmental Matters – Field Survey Results, No *EPBC Act* Migratory Species were recorded as a result of the field surveys. An assessment of the likelihood of occurrence of *EPBC Act* listed migratory fauna, based on field results, is summarised within Table 10.

Table 10: Field survey results for EPBC Act migratory fauna with potentially suitable RE and likelihood of occurrence

Class	Scientific / Common Name	EPBC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
Birds	*Apus pacificus* (fork-tailed swift)	Migratory/ Marine	Mostly occur over inland plains but sometimes above foothills or in coastal areas. They often occur over cliffs and beaches and also over islands and sometimes well out to sea. They also occur over settled areas, including towns, urban areas and cities. They mostly occur over dry or open habitats, including riparian woodland and tea-tree swamps, low scrub, heathland or saltmarsh. They are also found at treeless grassland and sandplains covered with spinifex, open farmland and inland and coastal sand-dunes. The sometimes occur above rainforests, wet sclerophyll forest or open forest or plantations of pines (DoE 2015b).	NA – exclusively aerial	Likely. This species may fly over the site.
	Hirundapus caudacutus (white-throated needletail)	Migratory/ Marine	Mostly occur above wooded areas, including open forest and rainforest, and may also fly between trees or in clearings, below the canopy, but they are less commonly recorded flying above woodland (DoE 2015b).	NA – exclusively aerial	Likely. This species may fly over the site.
	Merops ornatus (rainbow bee-eater)	Migratory/ Marine	Occurs mainly in open forests and woodlands, shrublands, and in various cleared or semi-cleared habitats, including farmland and areas of human habitation. It usually occurs in open, cleared or lightly-timbered areas that are often, but not always, located in close proximity to permanent water (DoE 2015b).	11.3.3, 11.3.4 and 11.3.25,	Likely. Suitable habitat and foraging opportunities throughout the site. Opportunities exist for habitat burrows within watercourse banks within REs:11.3.2 and 11.3.25.

Class	Scientific / Common Name	EPBC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
	Myiagra cyanoleuca (satin flycatcher)	Migratory/ Marine	Heavily vegetated gullies in eucalypt-dominated forests and taller woodlands, and on migration, occur in coastal forests, woodlands, mangroves and drier woodlands and open forests (DoE 2015b).	11.3.3, 11.3.4 and 11.3.25,	Likely. Suitable habitat exists within *E. coolibah* dominated woodlands.
	Rhipidura rufifrons (rufous fantail)	Migratory/ Marine	Mainly inhabits wet sclerophyll forests, often in gullies dominated by eucalypts such as tallow-wood, mountain grey gum, narrow-leaved peppermint, mountain ash, alpine ash, blackbutt or red mahogany; usually with a dense shrubby understorey often including ferns (DoE 2015b).	No	Unlikely. Suitable habitat is absent.
	Ardea alba (white egret) (*Ardea modesta*)	Migratory/ Marine	Wetland habitats (for example inland and coastal, freshwater and saline, permanent and ephemeral, open and vegetated, large and small, natural and artificial). These include swamps and marshes; margins of rivers and lakes; damp or flooded grasslands, pastures or agricultural lands; reservoirs; sewage treatment ponds; drainage channels; salt pans and salt lakes; salt marshes; estuarine mudflats, tidal streams; mangrove swamps; coastal lagoons; and offshore reefs (DoE 2015b).	No	Unlikely. Suitable habitat is absent.
	Ardea ibis (cattle egret)	Migratory/ Marine	Tropical and temperate grasslands, wooded lands and terrestrial wetlands. Occasionally in arid and semi-arid regions however this is extremely rare (DoE 2015b).	Yes – freshwater riverine habitat and cleared grazing land is present at The Site	Likely - recorded in cleared grazing paddocks, in an adjacent property Lot 95 L34249
	Gallingo hardwickii (Latham's snipe)	Migratory/ Marine	Occurs in permanent and ephemeral wetlands up to 2000 m above sea-level. They usually inhabit open, freshwater wetlands with low, dense vegetation (e.g. swamps, flooded grasslands or heathlands, around bogs and other water bodies) (DoE 2015b).	No	Unlikely. Suitable habitat is absent.

Class	Scientific / Common Name	EPBC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
	Rostratula benghalensis (painted snipe)	Endangered/Migratory/Marine	Shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. They also use inundated or waterlogged grassland or saltmarsh, dams, rice crops, sewage farms and bore drains (DoE 2015b).	No	Unlikely. Suitable habitat is absent.
	Anthochaera phrygia (regent honeyeater)	Critically Endangered	Refer Table 14 below	Refer Table 14 below	Refer Table 14 below
	Grantiella picta (painted honeyeater)	Vulnerable	Refer Table 14 below	Refer Table 14 below	Refer Table 14 below

4.2.1.5. Marine Fauna

As detailed in Table 7: Commonwealth Environmental Matters – Field Survey Results, five (5) Listed Marine Species were recorded as a result of the field surveys. An assessment of the likelihood of occurrence of other *EPBC Act* listed marine fauna, based on field results, is summarised within Table 11.

Table 11: Field survey results for EPBC Act marine fauna with potentially suitable RE and likelihood of occurrence.

Class	Scientific / Common Name	EPBC Act Status*	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
Birds	*Anseranas semipalmata* (magpie goose)	Marine	Wetlands, mainly those on floodplains of rivers and large shallow wetlands formed by run-off; breeding can occur in both summer and winter dominated rainfall areas and is strongly influenced by water level; most breeding now occurs in monsoonal areas; nests are formed in trees over deep water; breeding is unlikely in south-eastern NSW (OEH 2014a)	No	Unlikely. Suitable habitat is absent.

Class	Scientific / Common Name	EPBC Act Status*	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
	Apus pacificus (fork-tailed swift)	Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
	Ardea alba (white egret) (*Ardea modesta*)	Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
	Ardea ibis (cattle egret)	Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
	Grallina cyanoleuca (Australian magpie-lark)	Marine	Variety of open and lightly timbered areas, grasslands, cleared areas, sheds, homesteads and towns (EHP2014c)	11.3.3, 11.3.4 and 11.3.25	Present. Individuals observed at one location within the riparian zone.
	Gallingo hardwickii (Latham's snipe)	Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
	Haliaeetus leucogaster (white-bellied sea-eagle)	Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
	Hirundapus caudacutus (white-throated needletail)	Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
	Lathamus discolor (swift parrot)	Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
	Merops ornatus (rainbow bee-eater)	Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
	Myiagra cyanoleuca (satin flycatcher)	Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
	Rhipidura rufifrons (rufous fantail)	Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above

Class	Scientific / Common Name	EPBC Act Status*	General Habitat Requirements/ Notes	Potentially Suitable Habitat at Site	Likelihood of Occurrence
	Rostratula benghalensis (painted snipe)	Endangered/ Migratory/Marine	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above

4.2.2. Queensland Environmental Matters

4.2.2.1. Field survey results

Field survey results for State environmental matters are outlined in Table 12.

Table 12: State environmental matters – field survey results

State environmental matters	Present (Y/N)	Location	Description	Biodiversity or NC Act Status	Comments
Endangered regional ecosystems (biodiversity status)	No	--	--	--	--
Of concern regional ecosystems (biodiversity status)	Yes	Lot 1494L3482 and Lot 1211L3459	RE11.3.3 - *Eucalyptus coolabah* woodland on alluvial plains	Of concern	Fringing the Condamine River. Distribution generally restricted to above watercourse high bank in areas which are irregularly flooded. Community generally in good condition with limited weed incursion.
			RE11.3.4 - *Eucalyptus tereticornis* and/or Eucalyptus spp. woodland on alluvial plains	Of concern	Fringing the Condamine River. Distribution generally restricted to above watercourse high bank in areas which are irregularly flooded. Community generally in good condition with limited weed incursion.
			RE11.3.25 - *Eucalyptus tereticornis* or *E. camaldulensis* woodland fringing drainage lines	Of concern	Fringing the Condamine River. Distribution generally restricted to at and below watercourse high bank. Community generally in good condition with some weed incursion.
NC Act listed flora (Endangered, Vulnerable, Near Threatened)	No	--	--	--	--
NC Act listed fauna (Endangered,	No	--	--	--	--

State environmental matters	Present (Y/N)	Location	Description	Biodiversity or NC Act Status	Comments
Vulnerable, Near Threatened)					
Special Least Concern plants	No	--	--	--	--

4.2.2.2. Ground Truthed Regional Ecosystems

DNRM mapping identified three REs to be present on site. This was ground truthed as correct and field verified results are presented in Table 12.

All ground truthed REs are represented schematically in Appendix H: Ground Truthed Regional Ecosystems.

4.2.2.3. Threatened Flora

No records of threatened flora were contained in a Protected Plants Flora Survey Trigger Map for the Site (EHP 2015e). No NC Act listed flora species were recorded during the field survey at the Site.

An assessment of the likelihood of occurrence, based on field inspection results, of NC Act listed threatened flora species potentially present at the Site is summarised in Table 13.

Table 13: Field survey results for NC Act EVNT flora with potentially suitable RE and likelihood of occurrence.

Family	Scientific / Common Name	NC Act Status	General Habitat Requirements/Notes	Potentially Suitable Habitat	Likelihood of Occurrence
Cyperaceae	*Fimbristylis vagans* (wandering fringe rush)	Endangered	This species is associated with clay pans, open sedge land and sparse-tussock grasslands on shallow alluvial sand plains but may also occur in other ecosystems (other species of *Fimbristylis* are common in pastures of central Queensland) (EHP 2015f).	Yes –habitat features preferred by this species are present at The Site	Likely – appropriate habitat for this species is present within The Site and there are previous records of this species within the search area.

4.2.2.1. Threatened Fauna

No NC Act listed fauna species were detected during the field survey.

An assessment of the likelihood of occurrence of all other NC Act listed threatened fauna species potentially present at the Site, based on field results, is summarised within Table 14.

Table 14: Field survey results for NC Act EVNT fauna with potentially suitable habitat and likelihood of occurrence

Scientific/ Common Name	NC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat	Likelihood of Occurrence
Acrocephalus australis (Australian reed warbler)	Special Least Concern	Widespread in eastern Australia. Inhabits reeds, cumbungi and pencil rush over water, riverine vegetation and regrowth, weeping willows, bamboo and crops near irrigation channels (Pizzey and Knight 2012)	No	Unlikely – appropriate habitat for this species is absent from The Site.

Scientific/ Common Name	NC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat	Likelihood of Occurrence
Anthochaera phrygia (regent honeyeater)	Endangered	Dry open forest and woodland, particularly Box-Ironbark woodland, and riparian forests of River Sheoak. Regent Honeyeaters inhabit woodlands that support a significantly high abundance and species richness of bird species. These woodlands have significantly large numbers of mature trees, high canopy cover and abundance of mistletoe (OEH 2010).	11.3.3, 11.3.4 and 11.3.25	Likely – suitable habitat for this species present throughout the site.
Apus pacificus (fork-tailed swift)	Special Least Concern	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
Ardea ibis (cattle egret)	Special Least Concern	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
Ardea alba (white egret) (*Ardea modesta*)	Special Least Concern	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
Calyptorhynchus lathami lathami (glossy black-cockatoo)	Vulnerable	Generally inhabits she-oak species (predominantly Allocasuarinas) in forests, woodlands and timbered watercourses. Has also been recorded in Eucalypt forests, cypress (Callitris) forests and brigalow (*Acacia harpophylla*) scrub (Pizzey and Knight 2012).	No	Unlikely – appropriate habitat for this species is absent from The Site, however previous records for this species exist within the search area.
Coracina tenuirostris (cicada bird)	Special Least Concern	Inhabits and is most commonly recorded in the canopy of rainforests, Eucalypt forests, Melaleuca woodlands and mangrove areas (Pizzey and Knight 2012).	No	Unlikely – appropriate habitat for this species is absent from The Site.
Grantiella picta (painted honeyeater)	Vulnerable	Dry, open forests and woodlands (box, ironbark, yellow gum, *melaleuca, casuarina, callitris, acacia*). The species usually occurs in areas with flowering and fruiting mistletoe and flowering eucalypts (EHP2015d).	No	Unlikely – appropriate habitat for this species is absent from The Site.

Scientific/ Common Name	NC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat	Likelihood of Occurrence
Haliaeetus leucogaster (white-bellied sea-eagle)	Special Least Concern	Coastal habitats (especially those close to the sea-shore) and around terrestrial wetlands in tropical and temperate regions of mainland Australia and its offshore islands. The habitats occupied by the sea-eagle are characterised by the presence of large areas of open water (larger rivers, swamps, lakes, the sea). Birds have been recorded in (or flying over) a variety of terrestrial habitats (DOE2015b).	No	Unlikely – appropriate habitat for this species is absent from The Site.
Hemiaspis damelii (grey snake)	Endangered	Woodlands, usually on heavier, cracking clay soils, particularly in association with water bodies or in areas with small gullies and ditches. It shelters under rocks, logs and other debris as well as in soil cracks (EHP2014c).	11.3.3, 11.3.4 and 11.3.25	Likely – suitable habitat for this species present throughout the site.
Hirundapus caudacutus (white-throated needle-tail)	Special Least Concern	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
Jalmenus eubulus (pale imperial hairstreak)	Vulnerable	Suitable habitat is dominated by *Acacia harpophylla* (brigalow) and *Casuarina cristata* (bull oak) on clay soils on flat to gently undulating plains, usually with scattered emergent eucalypts such as *Eucalyptus populnea* (poplar box) and low trees of *Geijera parviflora (*wilga) (OEH 2014b).	No	Unlikely – appropriate habitat for this species is absent from The Site.
Merops ornatus (rainbow bee-eater)	Special Least Concern	Refer Table 10 above	Refer Table 10 above	Refer Table 10 above
Phascolarctos cinereus (koala)	Special Least Concern	Refer Table 9 above	Refer Table 9 above	Refer Table 9 above
Strophurus taenicauda (golden-tailed gecko)	Near Threatened	Known to occur in open woodland and forest where it shelters under loose bark and hollow limbs (EHP2014c)	No	Unlikely – appropriate habitat for this species is absent from The Site, however previous records for this species exist within the search area

Scientific/ Common Name	NC Act Status	General Habitat Requirements/ Notes	Potentially Suitable Habitat	Likelihood of Occurrence
Tachyglossus aculeatus (short-beaked echidna)	Special Least Concern	The echidna inhabits a range of different environments from undisturbed to disturbed habitats, including forests, woodlands, shrublands and grasslands, rocky outcrops and agricultural lands. Echidnas are usually found among rocks, in hollow logs, under vegetation or piles of debris, under tree roots or sometimes in wombat or rabbit burrows (Hyett & Shaw 1980).	11.3.3, 11.3.4 and 11.3.25	Likely – appropriate habitat for this species is present throughout The Site. Previous records for this species exist within the search area.

4.2.2.2. Special Least Concern Species

No listed Special Least Concern flora or fauna species were detected during the field survey.

4.2.2.3. Pest Fauna

Distribution of pest fauna on site has been mapped based on field survey results (Appendix J: Ground Truthed Pest Fauna Present on Site). Pest fauna encountered during the field survey are listed in Table 15.

Table 15: Pest Fauna Recorded on Site

Scientific Name	Common Name	LP Act Status	Area of Occurrence
Oryctolagus cuniculus	European rabbit	Class 2 (*LP Act)*	1 individual located in Lot 1494L3482
Sus scrofa	Feral pig	Class 2 (*LP Act*)	5 individuals observed travelling from the riparian zone into the paddock.

4.2.3. Disturbance

The majority of the The Site has been cleared and is currently subject to grazing activities. Some major gully erosion is present within the southern extent of the site, adjacent to the Condamine River. In these areas, sodic sub-soils are present and have been eroded from under the surface black cracking clays.

4.2.4. Watercourses and Wetlands

Four (4) stream orders mapped across the Site were inspected as part of the field surveys. These consisted of:

- A mapped stream order 8 along the southern boundary of The Site (Condamine River);
- One (1) mapped stream order 2 within the northern paddock; and
- Two (2) mapped stream order 1s which branch off the second order stream.

The Condamine River was confirmed to constitute a watercourse as defined by the *Water Act 2000*.

The remaining stream orders have been determined to be drainage features only, as they did not meet the requirements for the definition of a watercourse contained in the *Water Act 2000.*

Water feature assessment locations are mapped at Appendix K: Ground Truthed Drainage Features, Watercourses and Wetlands Present on Site.

5. Conclusions

The following is a summary of ecological values which were recorded on Lots 1494L3482 and Lot 1211L3459 as a result of the field surveys:

- Coolibah-Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions TEC. This TEC was present as remnant RE11.3.3 fringing the Condamine River. It was recorded in association with other riverine vegetation communities including RE11.3.25 and 11.3.4. It should be noted that this TEC was declared on 1st March 2011, after EPBC Act approval for the Australia Pacific LNG Project was received on 21st February, 2011. As such, the Coolibah-Black Box Woodland TEC does not constitute a constraint to the Project.
- No EPBC Act listed threatened flora were recorded during the field survey at the Site.
- Five (5) Listed Marine Species were recorded as a result of the field surveys, being *Coracina novaehollandiae* (black-faced cuckoo-shrike), *Grallina cyanoleuca* (magpie-lark), *Pelecanus conspicillatus* (Australian pelican), *Threshkiornis spinicollis* (straw-necked ibis) and *Todiramphus sanctus (sacred kingfisher).*
- DNRM mapping identified three regional ecosystems to be present on site. This was ground truthed as correct and field verified. The ground-truthed REs included:
    - RE11.3.3 - *Eucalyptus coolabah* woodland on alluvial plains: fringing the Condamine River. Distribution generally restricted to above watercourse high bank in areas which are irregularly flooded. Community generally in good condition with limited weed incursion.
    - RE11.3.4 - *Eucalyptus tereticornis* and/or *Eucalyptus* spp. woodland on alluvial plains: fringing the Condamine River. Distribution generally restricted to above watercourse high bank in areas which are irregularly flooded. Community generally in good condition with limited weed incursion.
    - RE11.3.25 - *Eucalyptus camaldulensis* woodland fringing drainage lines: fringing the Condamine River. Distribution generally restricted to at and below watercourse high bank. Community generally in good condition with some weed incursion.
- No NC Act listed flora species were recorded during the field survey at the Site.
- No NC Act threat-listed fauna species were detected during the field survey at the Site.
- Two species of declared pest fauna were detected during the field survey including *Sus scrofa* (feral pig) and *Orytolagus cuniculus* (European rabbit).
- Four (4) stream orders mapped across the Site were inspected as part of the field surveys. One (1) of these, the Condamine River, was verified to constitute a watercourse as defined by the *Water Act 2000*. The remaining mapped stream orders were field verified to constitute drainage features as defined by the *Water Act 2000.*

It is recommended that the findings in this report are considered during detailed development planning such that disturbance to the ecological values of the site and locality may be avoided wherever practical. Where disturbance is unavoidable, impact mitigation measures are to be implemented in accordance with the approved site environmental management plan and regulatory approval conditions.

Appendix A: Site Location and Survey Points

Legend

Survey Location

- Vegetation Community Survey Point
- Habitat Survey Point

Queensland Waterways Zoning

Risk of Impact

- 1 - Low
- 2 - Moderate
- 3 - High
- 4 - Major

Boundary

- Surveyed Cadastral
- Survey Area
- Site Location

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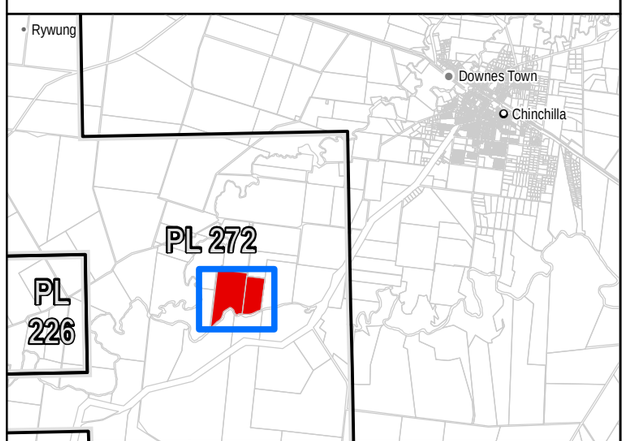

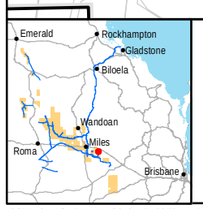

N

Scale 1:8,000 (at A3)

0 150 300 600

Metres

Coordinate System: GDA 1994 MGA Zone 56

Rev	Description	Drawn	Check	QA	Approved	Date
0	Issued For Use	ALM	CZ	TMB	CZ	17/08/2015
A	Issued For Review	ALM	CZ	PR	CZ	14/08/2015

origin

Appendix A :
Site Location and Survey Points - DA1935
Date: 17 August 2015

Map Number	Doc No	Rev
1 of 1	Q-4160-15-RP-0015	0
	Map ID GISWR_28862	

S:\Data\Work_Requests\GISWR_28501 to 29000\GISWR_28862\Rev0\GISWR_28862_A_Rev0.mxd

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Appendix B: Results of EPBC Protected Matters Search Tool

Australian Government

Department of the Environment

EPBC Act Protected Matters Report

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

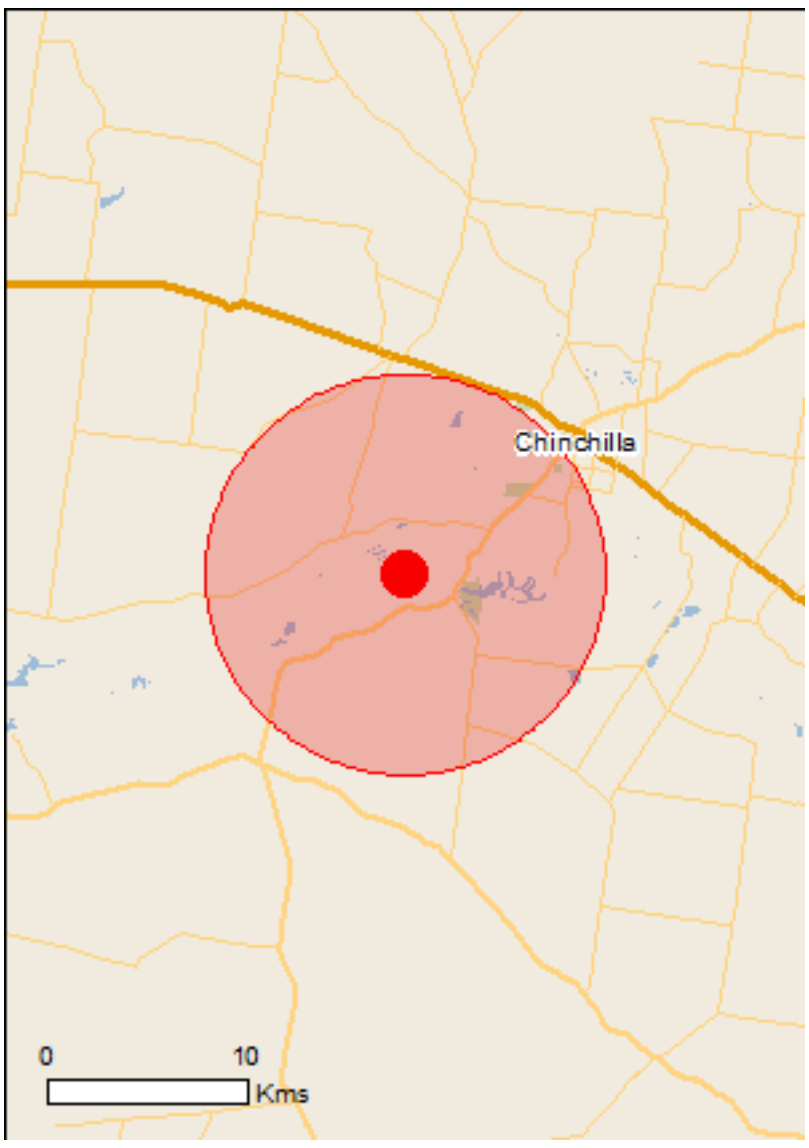
Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

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

Report created: 07/08/15 19:39:32

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

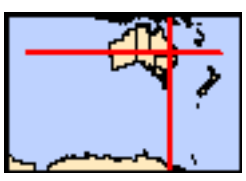
Caveat
Acknowledgements



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

Coordinates

Buffer: 10.0Km



Summary

Matters of National Environmental Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	5
Listed Threatened Species:	19
Listed Migratory Species:	8

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/index.html

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

Commonwealth Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	12
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:	None
Regional Forest Agreements:	None
Invasive Species:	23
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar) [Resource Information]

Name	Proximity
Narran lake nature reserve	Upstream from 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	Status	Type of Presence
Brigalow (Acacia harpophylla dominant and co-dominant)	Endangered	Community known to occur within area
Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	Endangered	Community likely to occur within area
Natural grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland	Critically Endangered	Community likely to occur within area
Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	Endangered	Community likely to occur within area
Weeping Myall Woodlands	Endangered	Community likely to occur within area

Listed Threatened Species [Resource Information]

Name	Status	Type of Presence
Birds		
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat known to occur within area
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat may occur within area
Lathamus discolor Swift Parrot [744]	Endangered	Species or species habitat may occur within area
Poephila cincta cincta Black-throated Finch (southern) [64447]	Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Fish		
Maccullochella peelii Murray Cod [66633]	Vulnerable	Species or species habitat may occur within area
Mammals		

Name	Status	Type of Presence
[Chalinolobus dwyeri](#)		
Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat likely to occur within area
[Nyctophilus corbeni](#)		
Corben's Long-eared Bat, South-eastern Long-eared Bat [83395]	Vulnerable	Species or species habitat likely to occur within area
[Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)](#)		
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat known to occur within area
Plants		
[Cadellia pentastylis](#)		
Ooline [9828]	Vulnerable	Species or species habitat likely to occur within area
[Denhamia parvifolia](#)		
Small-leaved Denhamia [18106]	Vulnerable	Species or species habitat likely to occur within area
[Homopholis belsonii](#)		
Belson's Panic [2406]	Vulnerable	Species or species habitat may occur within area
[Thesium australe](#)		
Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area
Reptiles		
[Anomalopus mackayi](#)		
Five-clawed Worm-skink, Long-legged Worm-skink [25934]	Vulnerable	Species or species habitat may occur within area
[Delma torquata](#)		
Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area
[Egernia rugosa](#)		
Yakka Skink [1420]	Vulnerable	Species or species habitat likely to occur within area
[Furina dunmalli](#)		
Dunmall's Snake [59254]	Vulnerable	Species or species habitat known to occur within area
[Tympanocryptis pinguicolla](#)		
Grassland Earless Dragon [66727]	Endangered	Species or species habitat may occur within area

Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
[Apus pacificus](#)		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
[Hirundapus caudacutus](#)		
White-throated Needletail [682]		Species or species habitat known to occur within area
[Merops ornatus](#)		
Rainbow Bee-eater [670]		Species or species habitat may occur within area
[Myiagra cyanoleuca](#)		
Satin Flycatcher [612]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
[Rhipidura rufifrons](#)		
Rufous Fantail [592]		Species or species habitat may occur within area
Migratory Wetlands Species		
[Ardea alba](#)		
Great Egret, White Egret [59541]		Breeding known to occur within area
[Ardea ibis](#)		
Cattle Egret [59542]		Species or species habitat may occur within area
[Gallinago hardwickii](#)		
Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		
[Anseranas semipalmata](#)		
Magpie Goose [978]		Species or species habitat may occur within area
[Apus pacificus](#)		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
[Ardea alba](#)		
Great Egret, White Egret [59541]		Breeding known to occur within area
[Ardea ibis](#)		
Cattle Egret [59542]		Species or species habitat may occur within area
[Gallinago hardwickii](#)		
Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
[Haliaeetus leucogaster](#)		
White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
[Hirundapus caudacutus](#)		
White-throated Needletail [682]		Species or species habitat known to occur within area
[Lathamus discolor](#)		
Swift Parrot [744]	Endangered	Species or species habitat may occur within area
[Merops ornatus](#)		
Rainbow Bee-eater [670]		Species or species habitat may occur within area
[Myiagra cyanoleuca](#)		
Satin Flycatcher [612]		Species or species habitat likely to occur within area
[Rhipidura rufifrons](#)		
Rufous Fantail [592]		Species or species

Name	Threatened	Type of Presence
		habitat may occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area

Extra Information

Invasive Species [Resource Information]

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

Name	Status	Type of Presence
Birds		
Acridotheres tristis Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Lonchura punctulata Nutmeg Mannikin [399]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Frogs		
Rhinella marina Cane Toad [83218]		Species or species habitat likely to occur within area
Mammals		
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]		Species or species habitat likely to occur

Name	Status	Type of Presence within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Hymenachne amplexicaulis Hymenachne, Olive Hymenachne, Water Stargrass, West Indian Grass, West Indian Marsh Grass [31754]		Species or species habitat likely to occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area
Opuntia spp. Prickly Pears [82753]		Species or species habitat likely to occur within area
Parkinsonia aculeata Parkinsonia, Jerusalem Thorn, Jelly Bean Tree, Horse Bean [12301]		Species or species habitat likely to occur within area
Parthenium hysterophorus Parthenium Weed, Bitter Weed, Carrot Grass, False Ragweed [19566]		Species or species habitat likely to occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area

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.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

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

- migratory and
- marine

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

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

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

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

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

Coordinates

-26.795 150.5509

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:

-Department of Environment, Climate Change and Water, New South Wales
-Department of Sustainability and Environment, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment and Natural Resources, South Australia
-Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts
-Environmental and Resource Management, Queensland
-Department of Environment and Conservation, Western Australia
-Department of the Environment, Climate Change, Energy and Water
-Birds Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-SA 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, Atherton and Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
-State Forests of NSW
-Geoscience Australia
-CSIRO
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

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Appendix C: Wildlife Online Database Search Results

Queensland Government

Wildlife Online Extract

Search Criteria: Species List for a Specified Point
Species: All
Type: All
Status: All
Records: All
Date: All
Latitude: -26.7950
Longitude: 150.5509
Distance: 10
Email: claud.zappone@originenergy.com.au
Date submitted: Friday 07 Aug 2015 19:54:49
Date extracted: Friday 07 Aug 2015 20:00:08

The number of records retrieved = 448

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.

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Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians	Bufonidae	*Rhinella marina*	cane toad	Y			3/1
animals	amphibians	Hylidae	*Litoria peronii*	emerald spotted treefrog		C		1
animals	amphibians	Hylidae	*Litoria rubella*	ruddy treefrog		C		1
animals	amphibians	Hylidae	*Cyclorana alboguttata*	greenstripe frog		C		1/1
animals	amphibians	Hylidae	*Litoria fallax*	eastern sedgefrog		C		1
animals	amphibians	Hylidae	*Cyclorana brevipes*	superb collared frog		C		1/1
animals	amphibians	Limnodynastidae	*Notaden bennettii*	holy cross frog		C		2/2
animals	amphibians	Myobatrachidae	*Uperoleia rugosa*	chubby gungan		C		1/1
animals	birds	Acanthizidae	*Acanthiza uropygialis*	chestnut-rumped thornbill		C		1
animals	birds	Acanthizidae	*Smicrornis brevirostris*	weebill		C		27
animals	birds	Acanthizidae	*Chthonicola sagittata*	speckled warbler		C		2
animals	birds	Acanthizidae	*Acanthiza nana*	yellow thornbill		C		7/1
animals	birds	Acanthizidae	*Acanthiza chrysorrhoa*	yellow-rumped thornbill		C		10
animals	birds	Acanthizidae	*Acanthiza pusilla*	brown thornbill		C		1
animals	birds	Acanthizidae	*Acanthiza apicalis*	inland thornbill		C		3
animals	birds	Acanthizidae	*Acanthiza reguloides*	buff-rumped thornbill		C		3
animals	birds	Acanthizidae	*Gerygone albogularis*	white-throated gerygone		C		7
animals	birds	Acanthizidae	*Gerygone fusca*	western gerygone		C		2
animals	birds	Accipitridae	*Accipiter novaehollandiae*	grey goshawk		C		1
animals	birds	Accipitridae	*Hieraaetus morphnoides*	little eagle		C		2
animals	birds	Accipitridae	*Accipiter cirrocephalus*	collared sparrowhawk		C		1
animals	birds	Accipitridae	*Aquila audax*	wedge-tailed eagle		C		6
animals	birds	Accipitridae	*Milvus migrans*	black kite		C		10
animals	birds	Accipitridae	*Elanus axillaris*	black-shouldered kite		C		3
animals	birds	Accipitridae	*Lophoictinia isura*	square-tailed kite		C		1
animals	birds	Accipitridae	*Accipiter fasciatus*	brown goshawk		C		1
animals	birds	Accipitridae	*Haliastur sphenurus*	whistling kite		C		19
animals	birds	Accipitridae	*Haliaeetus leucogaster*	white-bellied sea-eagle		SL		4
animals	birds	Acrocephalidae	*Acrocephalus australis*	Australian reed-warbler		SL		6
animals	birds	Alaudidae	*Mirafra javanica*	Horsfield's bushlark		C		1
animals	birds	Anatidae	*Anas gracilis*	grey teal		C		19
animals	birds	Anatidae	*Malacorhynchus membranaceus*	pink-eared duck		C		1
animals	birds	Anatidae	*Dendrocygna arcuata*	wandering whistling-duck		C		1
animals	birds	Anatidae	*Chenonetta jubata*	Australian wood duck		C		17
animals	birds	Anatidae	*Anas superciliosa*	Pacific black duck		C		23
animals	birds	Anatidae	*Aythya australis*	hardhead		C		2
animals	birds	Anatidae	*Anas rhynchotis*	Australasian shoveler		C		1
animals	birds	Anatidae	*Cygnus atratus*	black swan		C		1
animals	birds	Anatidae	*Biziura lobata*	musk duck		C		1
animals	birds	Anatidae	*Anas castanea*	chestnut teal		C		1
animals	birds	Anhingidae	*Anhinga novaehollandiae*	Australasian darter		C		18
animals	birds	Anseranatidae	*Anseranas semipalmata*	magpie goose		C		1
animals	birds	Apodidae	*Hirundapus caudacutus*	white-throated needletail		SL		2
animals	birds	Apodidae	*Apus pacificus*	fork-tailed swift		SL		1
animals	birds	Ardeidae	*Ixobrychus flavicollis*	black bittern		C		1
animals	birds	Ardeidae	*Ardea intermedia*	intermediate egret		C		9

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Ardeidae	*Ardea pacifica*	white-necked heron		C		12
animals	birds	Ardeidae	*Ardea modesta*	eastern great egret		SL		21
animals	birds	Ardeidae	*Ardea ibis*	cattle egret		SL		1
animals	birds	Ardeidae	*Nycticorax caledonicus*	nankeen night-heron		C		5
animals	birds	Ardeidae	*Egretta novaehollandiae*	white-faced heron		C		21
animals	birds	Ardeidae	*Egretta garzetta*	little egret		C		7
animals	birds	Artamidae	*Artamus minor*	little woodswallow		C		1
animals	birds	Artamidae	*Artamus cinereus*	black-faced woodswallow		C		1
animals	birds	Artamidae	*Cracticus tibicen*	Australian magpie		C		32
animals	birds	Artamidae	*Artamus personatus*	masked woodswallow		C		1
animals	birds	Artamidae	*Strepera graculina*	pied currawong		C		7
animals	birds	Artamidae	*Artamus cyanopterus*	dusky woodswallow		C		1
animals	birds	Artamidae	*Cracticus torquatus*	grey butcherbird		C		21
animals	birds	Artamidae	*Cracticus nigrogularis*	pied butcherbird		C		30
animals	birds	Artamidae	*Artamus superciliosus*	white-browed woodswallow		C		2
animals	birds	Artamidae	*Artamus leucorynchus*	white-breasted woodswallow		C		6
animals	birds	Cacatuidae	*Calyptorhynchus funereus*	yellow-tailed black-cockatoo		C		2
animals	birds	Cacatuidae	*Calyptorhynchus lathami lathami*	glossy black-cockatoo (eastern)		V		1
animals	birds	Cacatuidae	*Eolophus roseicapillus*	galah		C		33
animals	birds	Cacatuidae	*Nymphicus hollandicus*	cockatiel		C		14
animals	birds	Cacatuidae	*Cacatua galerita*	sulphur-crested cockatoo		C		29
animals	birds	Cacatuidae	*Cacatua sanguinea*	little corella		C		6
animals	birds	Campephagidae	*Coracina novaehollandiae*	black-faced cuckoo-shrike		C		26
animals	birds	Campephagidae	*Coracina papuensis*	white-bellied cuckoo-shrike		C		2
animals	birds	Campephagidae	*Coracina maxima*	ground cuckoo-shrike		C		1
animals	birds	Campephagidae	*Lalage sueurii*	white-winged triller		C		6
animals	birds	Campephagidae	*Coracina tenuirostris*	cicadabird		SL		1
animals	birds	Casuariidae	*Dromaius novaehollandiae*	emu		C		5
animals	birds	Charadriidae	*Vanellus miles novaehollandiae*	masked lapwing (southern subspecies)		C		6
animals	birds	Charadriidae	*Elseyornis melanops*	black-fronted dotterel		C		11
animals	birds	Charadriidae	*Vanellus miles*	masked lapwing		C		8
animals	birds	Ciconiidae	*Ephippiorhynchus asiaticus*	black-necked stork		C		3
animals	birds	Climacteridae	*Cormobates leucophaea*	white-throated treecreeper		C		1
animals	birds	Climacteridae	*Climacteris picumnus*	brown treecreeper		C		1
animals	birds	Columbidae	*Ocyphaps lophotes*	crested pigeon		C		33
animals	birds	Columbidae	*Phaps chalcoptera*	common bronzewing		C		2
animals	birds	Columbidae	*Geopelia humeralis*	bar-shouldered dove		C		6
animals	birds	Columbidae	*Streptopelia chinensis*	spotted dove	Y			7
animals	birds	Columbidae	*Columba livia*	rock dove	Y			5
animals	birds	Columbidae	*Geopelia cuneata*	diamond dove		C		3
animals	birds	Columbidae	*Geopelia striata*	peaceful dove		C		21
animals	birds	Coraciidae	*Eurystomus orientalis*	dollarbird		C		9
animals	birds	Corcoracidae	*Struthidea cinerea*	apostlebird		C		19
animals	birds	Corcoracidae	*Corcorax melanorhamphos*	white-winged chough		C		8
animals	birds	Corvidae	*Corvus sp.*					2
animals	birds	Corvidae	*Corvus coronoides*	Australian raven		C		5

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Corvidae	*Corvus orru*	Torresian crow		C		36
animals	birds	Cuculidae	*Chalcites basalis*	Horsfield's bronze-cuckoo		C		1
animals	birds	Cuculidae	*Chalcites lucidus*	shining bronze-cuckoo		C		1
animals	birds	Cuculidae	*Cacomantis pallidus*	pallid cuckoo		C		1
animals	birds	Cuculidae	*Eudynamys orientalis*	eastern koel		C		2
animals	birds	Cuculidae	*Centropus phasianinus*	pheasant coucal		C		5
animals	birds	Cuculidae	*Cacomantis flabelliformis*	fan-tailed cuckoo		C		3
animals	birds	Cuculidae	*Scythrops novaehollandiae*	channel-billed cuckoo		C		3
animals	birds	Cuculidae	*Chalcites minutillus russatus*	Gould's bronze-cuckoo		C		1
animals	birds	Estrildidae	*Neochmia modesta*	plum-headed finch		C		3
animals	birds	Estrildidae	*Taeniopygia bichenovii*	double-barred finch		C		9
animals	birds	Estrildidae	*Stagonopleura guttata*	diamond firetail		C		2
animals	birds	Estrildidae	*Taeniopygia guttata*	zebra finch		C		1
animals	birds	Falconidae	*Falco berigora*	brown falcon		C		1
animals	birds	Falconidae	*Falco longipennis*	Australian hobby		C		1
animals	birds	Falconidae	*Falco cenchroides*	nankeen kestrel		C		6
animals	birds	Halcyonidae	*Todiramphus sanctus*	sacred kingfisher		C		13
animals	birds	Halcyonidae	*Dacelo novaeguineae*	laughing kookaburra		C		18
animals	birds	Halcyonidae	*Todiramphus pyrrhopygius*	red-backed kingfisher		C		1
animals	birds	Hirundinidae	*Petrochelidon ariel*	fairy martin		C		9
animals	birds	Hirundinidae	*Hirundo neoxena*	welcome swallow		C		11
animals	birds	Hirundinidae	*Petrochelidon nigricans*	tree martin		C		2
animals	birds	Maluridae	*Malurus cyaneus*	superb fairy-wren		C		16
animals	birds	Maluridae	*Malurus lamberti*	variegated fairy-wren		C		10
animals	birds	Maluridae	*Malurus melanocephalus*	red-backed fairy-wren		C		2
animals	birds	Megaluridae	*Cincloramphus mathewsi*	rufous songlark		C		2
animals	birds	Megaluridae	*Cincloramphus cruralis*	brown songlark		C		1
animals	birds	Megaluridae	*Megalurus timoriensis*	tawny grassbird		C		1
animals	birds	Meliphagidae	*Anthochaera phrygia*	regent honeyeater		E	CE	1/1
animals	birds	Meliphagidae	*Epthianura tricolor*	crimson chat		C		2
animals	birds	Meliphagidae	*Lichmera indistincta*	brown honeyeater		C		12
animals	birds	Meliphagidae	*Melithreptus gularis*	black-chinned honeyeater		C		1
animals	birds	Meliphagidae	*Nesoptilotis leucotis*	white-eared honeyeater		C		1
animals	birds	Meliphagidae	*Philemon corniculatus*	noisy friarbird		C		9
animals	birds	Meliphagidae	*Manorina melanocephala*	noisy miner		C		36
animals	birds	Meliphagidae	*Myzomela sanguinolenta*	scarlet honeyeater		C		1
animals	birds	Meliphagidae	*Philemon citreogularis*	little friarbird		C		26
animals	birds	Meliphagidae	*Ptilotula penicillatus*	white-plumed honeyeater		C		15
animals	birds	Meliphagidae	*Acanthagenys rufogularis*	spiny-cheeked honeyeater		C		9
animals	birds	Meliphagidae	*Plectorhyncha lanceolata*	striped honeyeater		C		26
animals	birds	Meliphagidae	*Melithreptus brevirostris*	brown-headed honeyeater		C		2
animals	birds	Meliphagidae	*Manorina flavigula*	yellow-throated miner		C		10
animals	birds	Meliphagidae	*Entomyzon cyanotis*	blue-faced honeyeater		C		26
animals	birds	Meliphagidae	*Caligavis chrysops*	yellow-faced honeyeater		C		5
animals	birds	Meliphagidae	*Meliphaga lewinii*	Lewin's honeyeater		C		1
animals	birds	Meliphagidae	*Ptilotula fuscus*	fuscous honeyeater		C		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Meliphagidae	*Sugomel niger*	black honeyeater		C		1
animals	birds	Meliphagidae	*Grantiella picta*	painted honeyeater		V	V	1
animals	birds	Meropidae	*Merops ornatus*	rainbow bee-eater		SL		6
animals	birds	Monarchidae	*Grallina cyanoleuca*	magpie-lark		C		42
animals	birds	Monarchidae	*Myiagra inquieta*	restless flycatcher		C		10
animals	birds	Monarchidae	*Myiagra rubecula*	leaden flycatcher		C		3
animals	birds	Motacillidae	*Anthus novaeseelandiae*	Australasian pipit		C		2
animals	birds	Nectariniidae	*Dicaeum hirundinaceum*	mistletoebird		C		14
animals	birds	Neosittidae	*Daphoenositta chrysoptera*	varied sittella		C		3
animals	birds	Oriolidae	*Oriolus sagittatus*	olive-backed oriole		C		11
animals	birds	Oriolidae	*Sphecotheres vieilloti*	Australasian figbird		C		5
animals	birds	Otididae	*Ardeotis australis*	Australian bustard		C		1
animals	birds	Pachycephalidae	*Pachycephala rufiventris*	rufous whistler		C		16
animals	birds	Pachycephalidae	*Pachycephala pectoralis*	golden whistler		C		1
animals	birds	Pachycephalidae	*Falcunculus frontatus*	crested shrike-tit		C		1
animals	birds	Pachycephalidae	*Colluricincla harmonica*	grey shrike-thrush		C		7
animals	birds	Pardalotidae	*Pardalotus striatus*	striated pardalote		C		26
animals	birds	Pardalotidae	*Pardalotus punctatus*	spotted pardalote		C		1
animals	birds	Passeridae	*Passer domesticus*	house sparrow	Y			7
animals	birds	Pelecanidae	*Pelecanus conspicillatus*	Australian pelican		C		21
animals	birds	Petroicidae	*Microeca fascinans*	jacky winter		C		2
animals	birds	Petroicidae	*Petroica goodenovii*	red-capped robin		C		2
animals	birds	Petroicidae	*Melanodryas cucullata*	hooded robin		C		1
animals	birds	Petroicidae	*Eopsaltria australis*	eastern yellow robin		C		1
animals	birds	Phalacrocoracidae	*Phalacrocorax sulcirostris*	little black cormorant		C		14
animals	birds	Phalacrocoracidae	*Microcarbo melanoleucos*	little pied cormorant		C		10
animals	birds	Phalacrocoracidae	*Phalacrocorax varius*	pied cormorant		C		4
animals	birds	Phalacrocoracidae	*Phalacrocorax carbo*	great cormorant		C		8
animals	birds	Phasianidae	*Coturnix ypsilophora*	brown quail		C		1/1
animals	birds	Phasianidae	*Coturnix pectoralis*	stubble quail		C		1
animals	birds	Podargidae	*Podargus strigoides*	tawny frogmouth		C		1
animals	birds	Podicipedidae	*Poliocephalus poliocephalus*	hoary-headed grebe		C		1
animals	birds	Podicipedidae	*Tachybaptus novaehollandiae*	Australasian grebe		C		9
animals	birds	Pomatostomidae	*Pomatostomus temporalis*	grey-crowned babbler		C		15
animals	birds	Psittacidae	*Northiella haematogaster*	blue bonnet		C		2
animals	birds	Psittacidae	*Aprosmictus erythropterus*	red-winged parrot		C		11
animals	birds	Psittacidae	*Trichoglossus chlorolepidotus*	scaly-breasted lorikeet		C		7
animals	birds	Psittacidae	*Melopsittacus undulatus*	budgerigar		C		2
animals	birds	Psittacidae	*Psephotus haematonotus*	red-rumped parrot		C		8
animals	birds	Psittacidae	*Glossopsitta concinna*	musk lorikeet		C		1
animals	birds	Psittacidae	*Platycercus adscitus*	pale-headed rosella		C		18
animals	birds	Psittacidae	*Trichoglossus haematodus moluccanus*	rainbow lorikeet		C		1
animals	birds	Psittacidae	*Alisterus scapularis*	Australian king-parrot		C		5
animals	birds	Psittacidae	*Glossopsitta pusilla*	little lorikeet		C		3
animals	birds	Rallidae	*Gallinula tenebrosa*	dusky moorhen		C		10
animals	birds	Rallidae	*Fulica atra*	Eurasian coot		C		5

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Rallidae	*Porphyrio porphyrio*	purple swamphen		C		2
animals	birds	Recurvirostridae	*Himantopus himantopus*	black-winged stilt		C		4
animals	birds	Rhipiduridae	*Rhipidura albiscapa*	grey fantail		C		14
animals	birds	Rhipiduridae	*Rhipidura leucophrys*	willie wagtail		C		37
animals	birds	Strigidae	*Ninox boobook*	southern boobook		C		3
animals	birds	Sturnidae	*Sturnus vulgaris*	common starling	Y			7
animals	birds	Sturnidae	*Sturnus tristis*	common myna	Y			2
animals	birds	Threskiornithidae	*Platalea regia*	royal spoonbill		C		13
animals	birds	Threskiornithidae	*Platalea flavipes*	yellow-billed spoonbill		C		8
animals	birds	Threskiornithidae	*Threskiornis molucca*	Australian white ibis		C		10
animals	birds	Threskiornithidae	*Threskiornis spinicollis*	straw-necked ibis		C		5
animals	birds	Timaliidae	*Zosterops lateralis*	silvereye		C		7
animals	insects	Lycaenidae	*Jalmenus eubulus*	pale imperial hairstreak		V		10
animals	insects	Lycaenidae	*Jalmenus daemeli*	emerald hairstreak				1
animals	insects	Nymphalidae	*Junonia villida calybe*	meadow argus				1
animals	insects	Nymphalidae	*Euploea core corinna*	common crow				1
animals	insects	Papilionidae	*Papilio aegeus*					1
animals	insects	Pieridae	*Belenois java teutonia*	caper white				3
animals	insects	Pieridae	*Elodina parthia*	striated pearl-white				1
animals	malacostracans	Parastacidae	*Cherax destructor*	common yabbie				1
animals	mammals	Canidae	*Vulpes vulpes*	red fox	Y			1
animals	mammals	Leporidae	*Oryctolagus cuniculus*	rabbit	Y			1
animals	mammals	Macropodidae	*Macropus rufogriseus*	red-necked wallaby		C		1
animals	mammals	Macropodidae	*Macropus giganteus*	eastern grey kangaroo		C		2
animals	mammals	Macropodidae	*Wallabia bicolor*	swamp wallaby		C		6
animals	mammals	Muridae	*Hydromys chrysogaster*	water rat		C		1
animals	mammals	Phalangeridae	*Trichosurus vulpecula*	common brushtail possum		C		3
animals	mammals	Phascolarctidae	*Phascolarctos cinereus*	koala		SL	V	2
animals	mammals	Pteropodidae	*Pteropus alecto*	black flying-fox		C		2
animals	mammals	Pteropodidae	*Pteropus scapulatus*	little red flying-fox		C		1
animals	mammals	Pteropodidae	*Pteropus poliocephalus*	grey-headed flying-fox		C	V	1
animals	mammals	Suidae	*Sus scrofa*	pig	Y			1
animals	mammals	Tachyglossidae	*Tachyglossus aculeatus*	short-beaked echidna		SL		1
animals	ray-finned fishes	Eleotridae	*Philypnodon macrostomus*	dwarf flathead gudgeon				1
animals	ray-finned fishes	Percichthyidae	*Macquaria ambigua*	golden perch				1
animals	reptiles	Agamidae	*Pogona barbata*	bearded dragon		C		2
animals	reptiles	Agamidae	*Intellagama lesueurii*	eastern water dragon		C		2
animals	reptiles	Colubridae	*Dendrelaphis punctulatus*	green tree snake		C		1/1
animals	reptiles	Colubridae	*Boiga irregularis*	brown tree snake		C		1
animals	reptiles	Diplodactylidae	*Strophurus williamsi*	soft-spined gecko		C		3/3
animals	reptiles	Diplodactylidae	*Strophurus taenicauda*	golden-tailed gecko		NT		5/4
animals	reptiles	Diplodactylidae	*Amalosia lesueurii*	Lesueur's velvet gecko		C		1/1
animals	reptiles	Diplodactylidae	*Oedura tryoni*	southern spotted velvet gecko		C		1
animals	reptiles	Elapidae	*Pseudonaja textilis*	eastern brown snake		C		1
animals	reptiles	Elapidae	*Pseudechis porphyriacus*	red-bellied black snake		C		1/1
animals	reptiles	Elapidae	*Denisonia devisi*	De Vis' banded snake		C		2

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	reptiles	Elapidae	*Hemiaspis damelii*	grey snake		E		1
animals	reptiles	Elapidae	*Pseudechis guttatus*	spotted black snake		C		1
animals	reptiles	Elapidae	*Demansia psammophis*	yellow-faced whipsnake		C		1/1
animals	reptiles	Gekkonidae	*Heteronotia binoei*	Bynoe's gecko		C		8/5
animals	reptiles	Gekkonidae	*Gehyra dubia*			C		6/2
animals	reptiles	Scincidae	*Carlia pectoralis sensu lato*			C		2
animals	reptiles	Scincidae	*Cryptoblepharus pulcher pulcher*	elegant snake-eyed skink		C		4/3
animals	reptiles	Scincidae	*Lerista punctatovittata*			C		1
animals	reptiles	Scincidae	*Pygmaeascincus timlowi*	dwarf litter-skink		C		1
animals	reptiles	Scincidae	*Morethia boulengeri*			C		8/5
animals	reptiles	Scincidae	*Ctenotus spaldingi*			C		5/5
animals	reptiles	Scincidae	*Liopholis modesta*			C		2/2
animals	reptiles	Scincidae	*Egernia striolata*	tree skink		C		1
animals	reptiles	Scincidae	*Menetia greyii*	common dwarf skink		C		1/1
animals	reptiles	Scincidae	*Carlia munda*			C		4/4
animals	reptiles	Scincidae	*Lerista timida*			C		1/1
animals	reptiles	Varanidae	*Varanus varius*	lace monitor		C		2
fungi	club fungi	Basidiomycota	*Tulostoma album*			C		1/1
fungi	club fungi	Basidiomycota	*Tulostoma*			C		1/1
fungi	club fungi	Basidiomycota	*Tulostoma cyclophorum*			C		1/1
fungi	club fungi	Basidiomycota	*Geastrum fornicatum*			C		1/1
fungi	club fungi	Basidiomycota	*Geastrum pectinatum*			C		1/1
fungi	sac fungi	Cladiaceae	*Cladia muelleri*			C		1/1
plants	ferns	Adiantaceae	*Cheilanthes distans*	bristly cloak fern		C		1/1
plants	ferns	Ophioglossaceae	*Ophioglossum lusitanicum*	adder's tongue		C		1/1
plants	ferns	Ophioglossaceae	*Ophioglossum gramineum*			C		1/1
plants	higher dicots	Acanthaceae	*Brunoniella australis*	blue trumpet		C		1/1
plants	higher dicots	Acanthaceae	*Pseuderanthemum variabile*	pastel flower		C		2/2
plants	higher dicots	Acanthaceae	*Dipteracanthus australasicus subsp. corynothecus*			C		1/1
plants	higher dicots	Aizoaceae	*Tetragonia tetragonoides*	New Zealand spinach		C		1/1
plants	higher dicots	Aizoaceae	*Zaleya galericulata subsp. galericulata*			C		1/1
plants	higher dicots	Apiaceae	*Actinotus gibbonsii*	dwarf flannel flower		C		1/1
plants	higher dicots	Apiaceae	*Eryngium paludosum*			C		1/1
plants	higher dicots	Apocynaceae	*Marsdenia viridiflora subsp. viridiflora*			C		1/1
plants	higher dicots	Apocynaceae	*Marsdenia pleiadenia*			C		1/1
plants	higher dicots	Apocynaceae	*Cynanchum bowmanii*	bowman's milkvine		C		1/1
plants	higher dicots	Apocynaceae	*Sarcostemma viminale subsp. brunonianum*			C		1/1
plants	higher dicots	Asteraceae	*Pseudognaphalium luteoalbum*	Jersey cudweed		C		2/2
plants	higher dicots	Asteraceae	*Olearia canescens subsp. discolor*			C		1/1
plants	higher dicots	Asteraceae	*Calotis cuneata*			C		1/1
plants	higher dicots	Asteraceae	*Schkuhria pinnata*		Y			1/1
plants	higher dicots	Asteraceae	*Calotis cuneifolia*	burr daisy		C		1/1
plants	higher dicots	Asteraceae	*Helianthus debilis*		Y			2/2
plants	higher dicots	Asteraceae	*Minuria integerrima*	smooth minuria		C		2/2
plants	higher dicots	Asteraceae	*Soliva anthemifolia*	dwarf jo jo weed	Y			1/1
plants	higher dicots	Asteraceae	*Arctotheca calendula*	Cape weed	Y			1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	higher dicots	Asteraceae	*Coreopsis lanceolata*		Y			2/2
plants	higher dicots	Asteraceae	*Xanthium occidentale*		Y			1/1
plants	higher dicots	Asteraceae	*Podolepis longipedata*	tall copper-wire daisy		C		1/1
plants	higher dicots	Asteraceae	*Senecio brigalowensis*			C		1/1
plants	higher dicots	Asteraceae	*Brachyscome dalbyensis*			C		1/1
plants	higher dicots	Asteraceae	*Centipeda pleiocephala*			C		1/1
plants	higher dicots	Asteraceae	*Leiocarpa panaetioides*			C		2/2
plants	higher dicots	Brassicaceae	*Rorippa palustris*	marsh cress	Y			1/1
plants	higher dicots	Brassicaceae	*Brassica tournefortii*	wild turnip	Y			1/1
plants	higher dicots	Brassicaceae	*Capsella bursapastoris*	shepherd's purse	Y			1/1
plants	higher dicots	Caesalpiniaceae	*Senna artemisioides subsp. zygophylla*			C		1/1
plants	higher dicots	Caesalpiniaceae	*Senna phyllodinea*			C		1/1
plants	higher dicots	Capparaceae	*Capparis lasiantha*	nipan		C		1/1
plants	higher dicots	Capparaceae	*Apophyllum anomalum*	broom bush		C		1/1
plants	higher dicots	Caryophyllaceae	*Polycarpon tetraphyllum*		Y			1/1
plants	higher dicots	Caryophyllaceae	*Cerastium glomeratum*	mouse ear chickweed	Y			1/1
plants	higher dicots	Casuarinaceae	*Casuarina cristata*	belah		C		1/1
plants	higher dicots	Celastraceae	*Denhamia bilocularis*			C		1/1
plants	higher dicots	Celastraceae	*Denhamia silvestris*			C		1/1
plants	higher dicots	Chenopodiaceae	*Dysphania glomulifera subsp. glomulifera*			C		1/1
plants	higher dicots	Chenopodiaceae	*Dysphania carinata*			C		1/1
plants	higher dicots	Convolvulaceae	*Operculina aequisepala*			C		1/1
plants	higher dicots	Crassulaceae	*Bryophyllum delagoense*		Y			1/1
plants	higher dicots	Dilleniaceae	*Hibbertia stricta*			C		1/1
plants	higher dicots	Euphorbiaceae	*Monotaxis macrophylla*			C		1/1
plants	higher dicots	Euphorbiaceae	*Croton phebalioides*	narrow-leaved croton		C		1/1
plants	higher dicots	Fabaceae	*Glycine*			C		1/1
plants	higher dicots	Fabaceae	*Cullen tenax*	emu-foot		C		1/1
plants	higher dicots	Fabaceae	*Hovea longipes*	brush hovea		C		1/1
plants	higher dicots	Fabaceae	*Mirbelia pungens*			C		1/1
plants	higher dicots	Fabaceae	*Vigna unguiculata subsp. cylindrica*		Y			1/1
plants	higher dicots	Fabaceae	*Tephrosia dietrichiae*			C		1/1
plants	higher dicots	Goodeniaceae	*Dampiera adpressa*			C		1/1
plants	higher dicots	Goodeniaceae	*Goodenia glabra*			C		1/1
plants	higher dicots	Haloragaceae	*Gonocarpus urceolatus*			C		2/2
plants	higher dicots	Lamiaceae	*Prostanthera cryptandroides subsp. euphrasioides*			C		1/1
plants	higher dicots	Lamiaceae	*Prostanthera sp. (Baking Board V.Hando 135)*			C		1/1
plants	higher dicots	Lamiaceae	*Prostanthera lithospermoides*			C		1/1
plants	higher dicots	Loranthaceae	*Amyema cambagei*			C		1/1
plants	higher dicots	Meliaceae	*Owenia acidula*	emu apple		C		1/1
plants	higher dicots	Mimosaceae	*Acacia stenophylla*	belalie		C		2/2
plants	higher dicots	Mimosaceae	*Acacia omalophylla*			C		1/1
plants	higher dicots	Mimosaceae	*Acacia harpophylla*	brigalow		C		2/2
plants	higher dicots	Mimosaceae	*Acacia juncifolia*			C		1/1
plants	higher dicots	Mimosaceae	*Acacia melvillei*			C		1/1
plants	higher dicots	Mimosaceae	*Acacia everistii*			C		1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	higher dicots	Mimosaceae	*Acacia amblygona*	fan-leaf wattle		C		1/1
plants	higher dicots	Mimosaceae	*Acacia triptera*			C		1/1
plants	higher dicots	Mimosaceae	*Acacia salicina*	doolan		C		1/1
plants	higher dicots	Mimosaceae	*Acacia conferta*			C		1/1
plants	higher dicots	Mimosaceae	*Acacia pendula*	myall		C		1/1
plants	higher dicots	Mimosaceae	*Acacia excelsa subsp. excelsa*			C		1/1
plants	higher dicots	Mimosaceae	*Acacia blakei subsp. blakei*			C		1/1
plants	higher dicots	Mimosaceae	*Acacia tenuinervis*			C		4/4
plants	higher dicots	Mimosaceae	*Acacia crassa subsp. crassa*			C		1/1
plants	higher dicots	Molluginaceae	*Glinus lotoides*	hairy carpet weed		C		1/1
plants	higher dicots	Molluginaceae	*Mollugo verticillata*		Y			1/1
plants	higher dicots	Myrtaceae	*Kardomia jucunda*			C		1/1
plants	higher dicots	Myrtaceae	*Eucalyptus crebra*	narrow-leaved red ironbark		C		1/1
plants	higher dicots	Myrtaceae	*Melaleuca phratra*			C		3/3
plants	higher dicots	Myrtaceae	*Calytrix tetragona*	fringe myrtle		C		1/1
plants	higher dicots	Myrtaceae	*Eucalyptus coolabah*	coolabah		C		1/1
plants	higher dicots	Myrtaceae	*Melaleuca squamophloia*			C		1/1
plants	higher dicots	Myrtaceae	*Homoranthus melanostictus*			C		1/1
plants	higher dicots	Myrtaceae	*Leptospermum polygalifolium*	tantoon		C		1/1
plants	higher dicots	Myrtaceae	*Eucalyptus crebra x E.populnea*			C		1/1
plants	higher dicots	Myrtaceae	*Eucalyptus fibrosa subsp. nubilis*			C		1/1
plants	higher dicots	Myrtaceae	*Eucalyptus tereticornis subsp. tereticornis*			C		2/2
plants	higher dicots	Myrtaceae	*Eucalyptus camaldulensis subsp. camaldulensis*			C		4/4
plants	higher dicots	Nyctaginaceae	*Boerhavia schomburgkiana*			C		1/1
plants	higher dicots	Oleaceae	*Notelaea microcarpa var. velutina*			C		1/1
plants	higher dicots	Oleaceae	*Olea europaea subsp. europaea*		Y			1/1
plants	higher dicots	Onagraceae	*Ludwigia octovalvis*	willow primrose		C		1/1
plants	higher dicots	Onagraceae	*Oenothera indecora subsp. bonariensis*		Y			1/1
plants	higher dicots	Oxalidaceae	*Oxalis*			C		1/1
plants	higher dicots	Oxalidaceae	*Oxalis perennans*			C		1/1
plants	higher dicots	Pedaliaceae	*Josephinia eugeniae*	josephinia burr		C		1/1
plants	higher dicots	Phyllanthaceae	*Phyllanthus gunnii*			C		1/1
plants	higher dicots	Phyllanthaceae	*Phyllanthus fuernrohrii*			C		1/1
plants	higher dicots	Plantaginaceae	*Stemodia glabella*			C		2/2
plants	higher dicots	Plantaginaceae	*Callitriche sonderi*			C		1/1
plants	higher dicots	Plantaginaceae	*Bacopa monnieri*			C		1/1
plants	higher dicots	Polygonaceae	*Persicaria attenuata*			C		1/1
plants	higher dicots	Polygonaceae	*Persicaria lapathifolia*	pale knotweed		C		1/1
plants	higher dicots	Polygonaceae	*Persicaria orientalis*	princes feathers		C		2/2
plants	higher dicots	Polygonaceae	*Polygonum plebeium*	small knotweed		C		1/1
plants	higher dicots	Portulacaceae	*Portulaca australis*			C		1/1
plants	higher dicots	Portulacaceae	*Portulaca oleracea*	pigweed	Y			1/1
plants	higher dicots	Proteaceae	*Grevillea rosmarinifolia*		Y			2/2
plants	higher dicots	Proteaceae	*Hakea lorea subsp. lorea*			C		2/2
plants	higher dicots	Rubiaceae	*Psydrax longipes*			C		1/1
plants	higher dicots	Rubiaceae	*Asperula cunninghamii*	twining woodruff		C		1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	higher dicots	Rubiaceae	*Psydrax odorata forma subnitida*			C		1/1
plants	higher dicots	Rutaceae	*Boronia occidentalis*			C		1/1
plants	higher dicots	Salicaceae	*Salix babylonica*	weeping willow	Y			1/1
plants	higher dicots	Sapindaceae	*Dodonaea heteromorpha*			C		1/1
plants	higher dicots	Sapindaceae	*Cardiospermum grandiflorum*	heart seed vine	Y			1/1
plants	higher dicots	Sapindaceae	*Dodonaea viscosa subsp. spatulata*			C		1/1
plants	higher dicots	Sapotaceae	*Planchonella cotinifolia var. pubescens*			C		1/1
plants	higher dicots	Solanaceae	*Cestrum parqui*	green cestrum	Y			1/1
plants	higher dicots	Solanaceae	*Lycium ferocissimum*	African boxthorn	Y			1/1
plants	higher dicots	Solanaceae	*Solanum nodiflorum*		Y			1/1
plants	higher dicots	Solanaceae	*Solanum parvifolium subsp. parvifolium*			C		1/1
plants	higher dicots	Sparrmanniaceae	*Corchorus trilocularis*			C		1/1
plants	higher dicots	Thymelaeaceae	*Pimelea trichostachya*	flaxweed		C		1/1
plants	higher dicots	Verbenaceae	*Phyla canescens*		Y			1/1
plants	higher dicots	Viscaceae	*Viscum articulatum*	flat mistletoe		C		1/1
plants	higher dicots	Viscaceae	*Viscum whitei subsp. whitei*			C		1/1
plants	lower dicots	Lauraceae	*Cinnamomum camphora*	camphor laurel	Y			1/1
plants	lower dicots	Ranunculaceae	*Clematis*			C		1/1
plants	monocots	Amaryllidaceae	*Calostemma luteum*			C		1/1
plants	monocots	Asphodelaceae	*Bulbine alata*	native leek		C		1/1
plants	monocots	Cyperaceae	*Fimbristylis bisumbellata*			C		1/1
plants	monocots	Cyperaceae	*Cyperus iria*			C		2/2
plants	monocots	Cyperaceae	*Cyperus gymnocaulos*	spiny flatsedge		C		1/1
plants	monocots	Cyperaceae	*Eleocharis pusilla*	small spikerush		C		1/1
plants	monocots	Cyperaceae	*Cyperus betchei*			C		1/1
plants	monocots	Cyperaceae	*Carex appressa*			C		1/1
plants	monocots	Cyperaceae	*Cyperus betchei subsp. betchei*			C		3/3
plants	monocots	Cyperaceae	*Schoenoplectiella dissachantha*			C		1/1
plants	monocots	Cyperaceae	*Fimbristylis vagans*			E		1/1
plants	monocots	Hemerocallidaceae	*Dianella brevipedunculata*			C		1/1
plants	monocots	Hemerocallidaceae	*Dianella brevipedunculata x D.revoluta var. revoluta*			C		1/1
plants	monocots	Hemerocallidaceae	*Dianella revoluta var. revoluta*			C		2/2
plants	monocots	Juncaceae	*Juncus psammophilus*			C		3/3
plants	monocots	Orchidaceae	*Pterostylis*			C		1/1
plants	monocots	Poaceae	*Bromus catharticus*	prairie grass	Y			1/1
plants	monocots	Poaceae	*Chrysopogon fallax*			C		1/1
plants	monocots	Poaceae	*Digitaria ciliaris*	summer grass	Y			1/1
plants	monocots	Poaceae	*Austrostipa setacea*	corkscrew grass		C		1/1
plants	monocots	Poaceae	*Chrysopogon filipes*			C		2/2
plants	monocots	Poaceae	*Digitaria didactyla*	Queensland blue couch	Y			1/1
plants	monocots	Poaceae	*Dinebra southwoodii*			C		1/1
plants	monocots	Poaceae	*Enneapogon gracilis*	slender nineawn		C		1/1
plants	monocots	Poaceae	*Enteropogon ramosus*			C		1/1
plants	monocots	Poaceae	*Eragrostis elongata*			C		1/1
plants	monocots	Poaceae	*Panicum larcomianum*			C		1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	monocots	Poaceae	*Dimorphochloa rigida*			C		1/1
plants	monocots	Poaceae	*Rytidosperma indutum*			C		2/2
plants	monocots	Poaceae	*Sporobolus disjunctus*			C		1/1
plants	monocots	Poaceae	*Enteropogon acicularis*	curly windmill grass		C		2/2
plants	monocots	Poaceae	*Paspalidium jubiflorum*	warrego grass		C		2/2
plants	monocots	Poaceae	*Dinebra divaricatissima*			C		1/1
plants	monocots	Poaceae	*Paspalidium caespitosum*	brigalow grass		C		3/3
plants	monocots	Poaceae	*Paspalidium constrictum*			C		2/2
plants	monocots	Poaceae	*Sporobolus actinocladus*	katoora grass		C		1/1
plants	monocots	Poaceae	*Walwhalleya subxerophila*			C		1/1
plants	monocots	Poaceae	*Diplachne fusca var. fusca*			C		3/3
plants	monocots	Poaceae	*Eriochloa pseudoacrotricha*			C		3/3
plants	monocots	Poaceae	*Austrostipa scabra subsp. scabra*			C		2/2
plants	monocots	Poaceae	*Microlaena stipoides var. stipoides*			C		1/1
plants	monocots	Poaceae	*Aristida jerichoensis var. subspinulifera*			C		1/1
plants	monocots	Poaceae	*Calyptochloa gracillima subsp. gracillima*			C		1/1
plants	monocots	Poaceae	*Aristida personata*			C		1/1
plants	monocots	Poaceae	*Aristida leptopoda*	white speargrass		C		1/1
plants	monocots	Poaceae	*Anthosachne scabra*			C		1/1
plants	monocots	Poaceae	*Sporobolus caroli*	fairy grass		C		1/1
plants	monocots	Poaceae	*Eriochloa procera*	slender cupgrass		C		1/1
plants	monocots	Poaceae	*Digitaria brownii*			C		1/1
plants	monocots	Poaceae	*Cenchrus ciliaris*		Y			1/1
plants	monocots	Poaceae	*Avena ludoviciana*		Y			1/1
plants	monocots	Poaceae	*Urochloa foliosa*			C		1/1
plants	monocots	Poaceae	*Triraphis mollis*	purple plumegrass		C		1/1
plants	monocots	Poaceae	*Leersia hexandra*	swamp rice grass		C		2/2
plants	monocots	Poaceae	*Eriochloa crebra*	spring grass		C		1/1
plants	monocots	Poaceae	*Aristida obscura*			C		1/1
plants	monocots	Poaceae	*Setaria surgens*			C		1/1
plants	monocots	Poaceae	*Panicum effusum*			C		2/2
plants	monocots	Poaceae	*Perotis rara*	comet grass		C		1/1
plants	monocots	Poaceae	*Paspalidium distans*	shotgrass		C		1/1
plants	mosses	Bryophyte	*Bryophyte*			C		1/1
plants	mosses	Pottiaceae	*Barbula calycina*			C		1/1

CODES

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

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

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

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

Appendix D: DNRM Mapped Regional Ecosystems

Legend

DNRM Stream Order

Remnant Regional Ecosystems (RE) - v9 (2013) Biodiversity Status

- Endangered - Dominant
- Of Concern - Dominant

Boundary

- Surveyed Cadastral
- Survey Area
- Site Location

Source Information:
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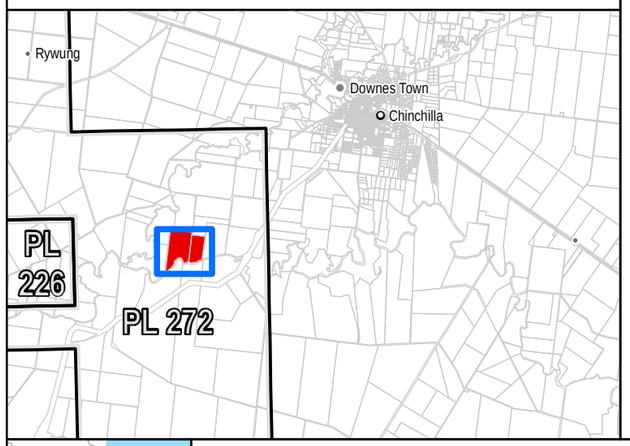

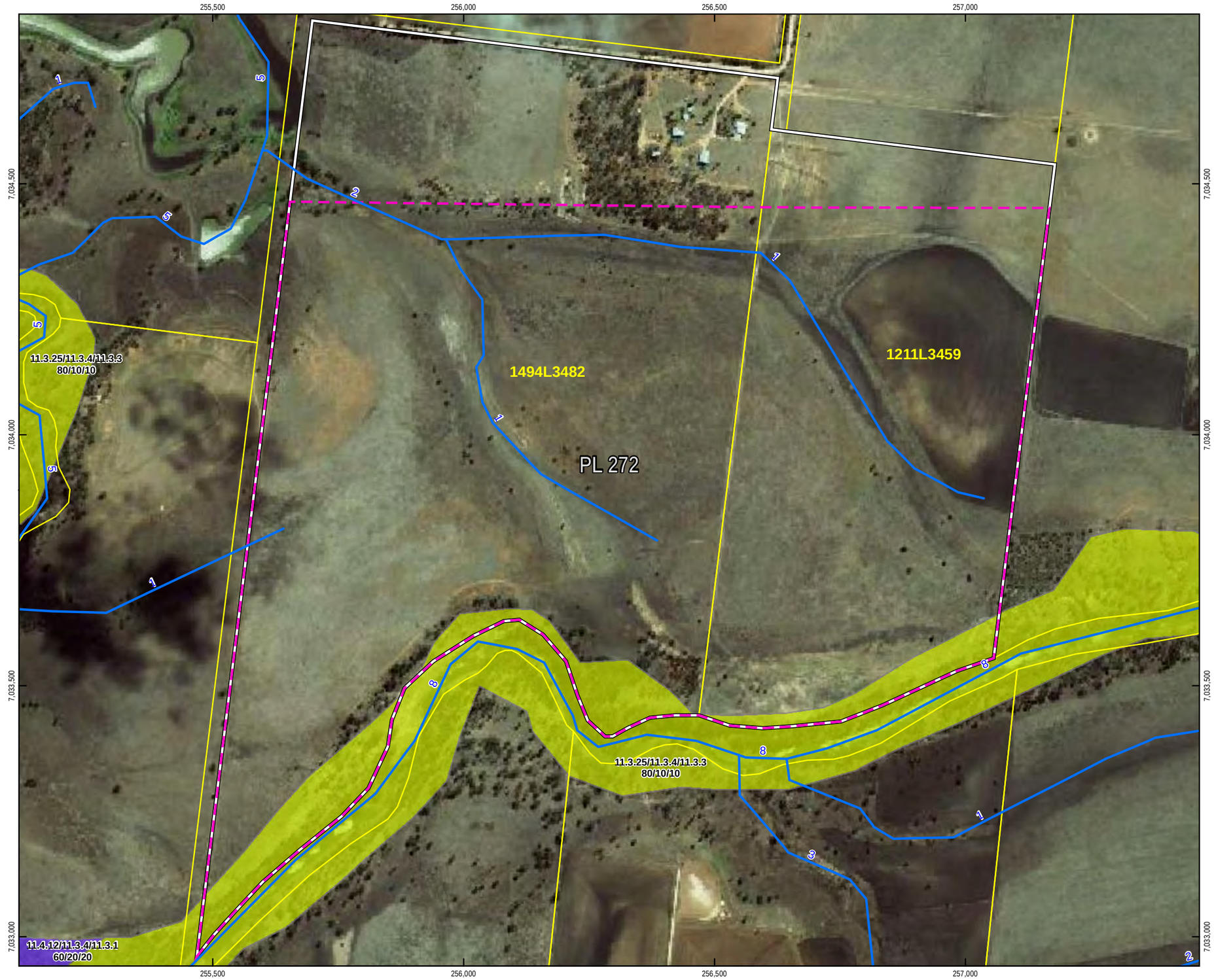

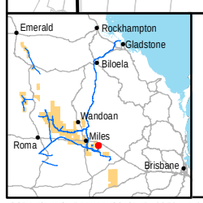

N

Scale 1:8,000 (at A3)

0 100 200 400

Metres

Coordinate System: GDA 1994 MGA Zone 56

Rev	Description	Drawn	Check	QA	Approved	Date
0	Issued For Use	ALM	CZ	TMB	CZ	17/08/2015
A	Issued For Review	ALM	CZ	PR	CZ	14/08/2015

Appendix D :
DNRM Mapped Regional Ecosystems - DA1935
Date: 17 August 2015

Map Number	Doc No	Rev
1 of 1	Q-4160-15-RP-0015	0
	Map ID GISWR_28862	

S:\Data\Work_Requests\GISWR_28501 to 29000\GISWR_28862\Rev0\GISWR_28862_D_Rev0.mxd

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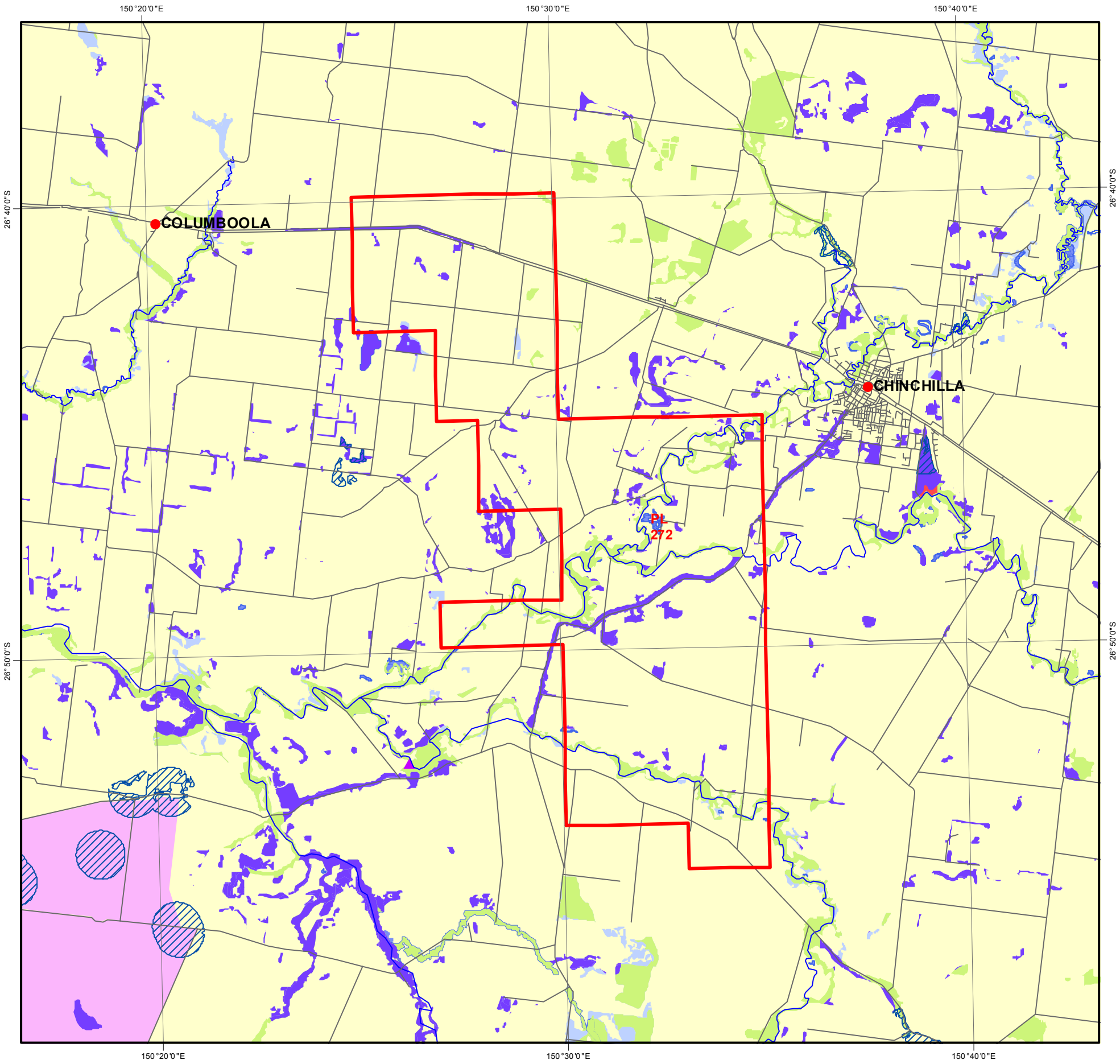
Appendix E: DEHP Mapping of ESAs and Other Environmental Values on Site (including mapped Referable Wetlands)



ENVIRONMENTALLY SENSITIVE AREAS - non-mining resource activities (EP Act)

Requested By: CLAUD.ZAPPONE@ORIGINENERGY.COM.AU
Date: 07 Aug 15 Time: 19.46.11

Centred on Tenure: PL 272

Selected Petroleum Lease

CATEGORY A
- National Parks
- Regional Parks (general)
- Forest Reserves
- Wet Tropics World Heritage Area
- Great Barrier Reef Marine Park Area
- Marine Parks other than General Use Zones

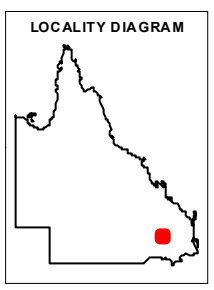
CATEGORY B
- World Heritage Areas
- Queensland Heritage Register Places
- Ramsar Sites
- Cultural Heritage Registered Areas and DLA's other than Stanbroke
- Special Forestry Areas
- Fish Habitat Areas
- Koala Plan
- Coordinated Conservation Areas
- Endangered Regional Ecosystems (remnant and mature regrowth (biodiversity status))
- Marine Parks other than General Use Zones
- Marine Plants

CATEGORY C
- Essential Habitat
- Nature Refuges
- Regional Parks (resource use area)
- State Forests
- Timber Reserves
- Of Concern Regional Ecosystems (remnant biodiversity status)

OTHERS
- Towns
- Roads
- Rivers
- Springs
- Referable Wetlands
- Dominant Wetlands (51-100%)
- Subdominant Wetlands (0-50%)
- Queensland

Queensland Government

LOCALITY DIAGRAM



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0 2300 4600 6900 9200 11500 m

This product is projected into GDA 1994 MGA Zone 56

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External contributors (non-government parties) of the data for this product are: Great Barrier Reef Marine Park Authority

Regional ecosystem mapping (remnant biodiversity status) may incorporate amendments, resulting from property level assessments, to the release version of the mapping available on QGIS.

NOTE TO USER: Themes presented in this map are indicative only. Field survey may be required to verify the 'true' spatial extent and value. Not all environmentally sensitive areas are presented in this map. A user should refer to the particular circumstances relevant to their situation to assess the 'completeness' of themes provided.

The user should note that some boundaries and indicated values are ambient or subject to change over time (e.g. regional ecosystem boundaries and conservation status, watercourse mapping etc).

The user should be aware that due to multiple overlapping themes present, some themes/layers may be obscured by others. Ordering in the Legend does not accurately reflect the order by which themes are displayed.

Mature Regrowth vegetation, depicting endangered regional ecosystems, was incorporated as of 24/07/2012.

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Map of Referable Wetlands
Wetland Protection Areas

Requested By: CLAUD.ZAPPONE@ORIGINENERGY.COM.AU
Date: 07 Aug 15 Time: 19.48.54

Centred on Lot on Plan:
1211 L3459

Selected Land Parcel

Cadastral Boundary

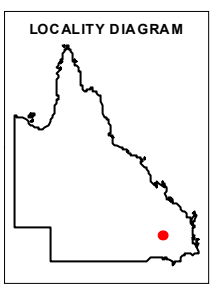
Wetland Protection Areas

Wetland

Trigger Area

Queensland Government

LOCALITY DIAGRAM



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0 100 200 300 400 500 m

Note:
This map shows the location of wetland protection areas which are defined under the Environmental Protection Regulation 2008. Within wetland protection areas, certain types of development involving high impact earthworks are made assessable under Schedule 3 of the Sustainable Planning Regulation 2009.

The Department of State Development Infrastructure and Planning is the State Assessment Referral Agency (SARA) under Schedule 7 of the Sustainable Planning Regulation 2009 for assessable development involving high impact earthworks within wetland protection areas. The Department of Environment and Heritage Protection is a technical agency.

The policy outcome and assessment criteria for assessing these applications are described in the State Development Assessment Provisions (SDAP) *Module 11: Wetlands and wild rivers*.

This map is produced at a scale relevant to the size of the lot on plan identified and should be printed at A4 size in portrait orientation. Consideration of the effects of mapped scale is necessary when interpreting data at a large scale.

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Map of Referable Wetlands
Wetland Protection Areas

Requested By: CLAUD.ZAPPONE@ORIGINENERGY.COM.AU
Date: 07 Aug 15 Time: 19.48.12

Centred on Lot on Plan:
1494 L3482

Selected Land Parcel

Cadastral Boundary

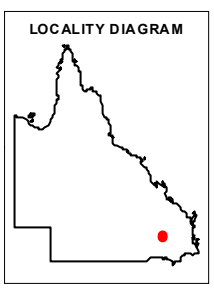
Wetland Protection Areas

Wetland

Trigger Area

Queensland Government

LOCALITY DIAGRAM



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0 160 320 480 640 800 m

Note:
This map shows the location of wetland protection areas which are defined under the Environmental Protection Regulation 2008. Within wetland protection areas, certain types of development involving high impact earthworks are made assessable under Schedule 3 of the Sustainable Planning Regulation 2009.

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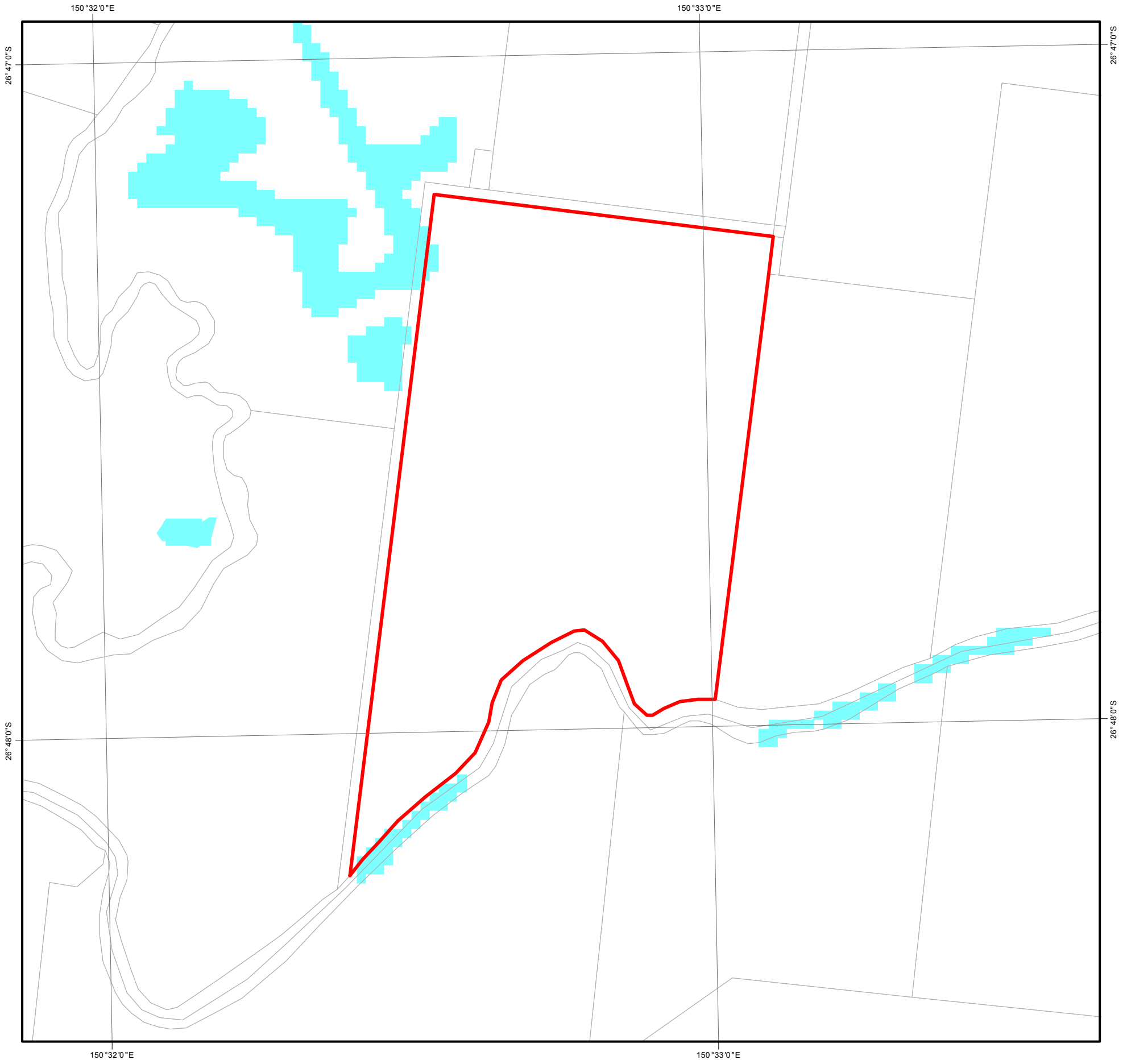


Map of Referable Wetlands for the Environmental Protection Act 1994

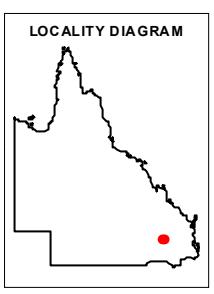
Requested By: CLAUD.ZAPPONE@ORIGINENERGY.COM.AU
Date: 07 Aug 15 Time: 19.48.14

Centred on Lot on Plan:
1494 L3482

- **Selected Land Parcel**
- **Cadastral Boundary**
- **HES Wetland**
- **GES Wetland**

Queensland Government

LOCALITY DIAGRAM



N

0 160 320 480 640 800 m

Note:
This map shows the location of wetlands on the Map of Referable Wetlands which are defined under the Environmental Protection Regulation 2008.

Wetlands are assessed for ecological significance using the environmental values for wetlands in section 81A of the Environmental Protection Regulation 2008. Wetlands are considered either High Ecological Significance (HES) or of General Ecological Significance (GES) for the purposes of the environmental values.

This map is produced at a scale relevant to the size of the lot on plan identified and should be printed at A4 size in portrait orientation. Consideration of the effects of mapped scale is necessary when interpreting data at a large scale.

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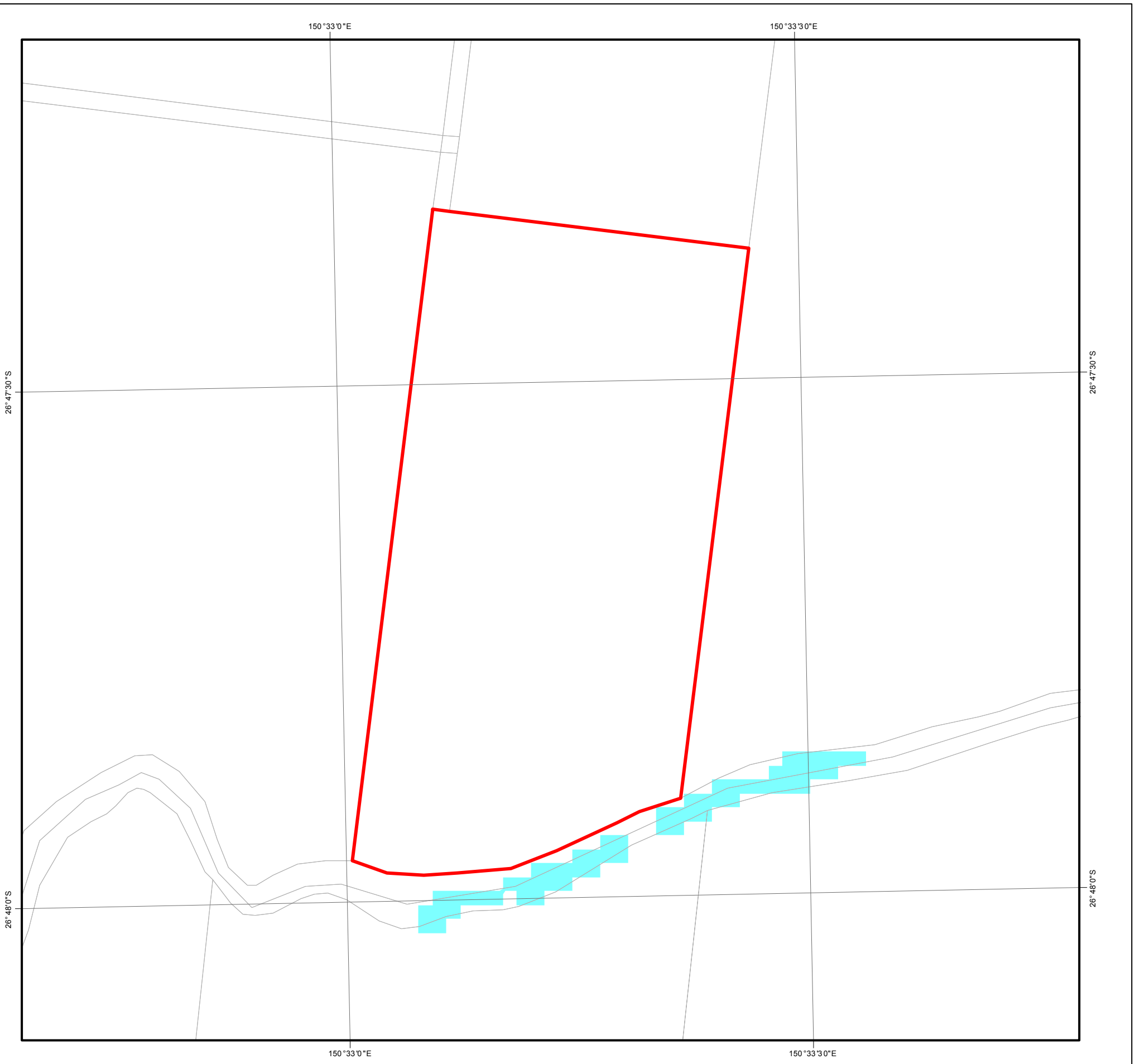


Map of Referable Wetlands for the Environmental Protection Act 1994

Requested By: CLAUD.ZAPPONE@ORIGINENERGY.COM.AU
Date: 07 Aug 15 Time: 19.48.57

Centred on Lot on Plan:
1211 L3459

Selected Land Parcel

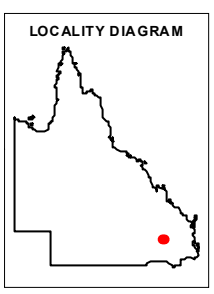
Cadastral Boundary

HES Wetland

GES Wetland

Queensland Government

LOCALITY DIAGRAM



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0 100 200 300 400 500 m

Note:
This map shows the location of wetlands on the Map of Referable Wetlands which are defined under the Environmental Protection Regulation 2008.

Wetlands are assessed for ecological significance using the environmental values for wetlands in section 81A of the Environmental Protection Regulation 2008. Wetlands are considered either High Ecological Significance (HES) or of General Ecological Significance (GES) for the purposes of the environmental values.

This map is produced at a scale relevant to the size of the lot on plan identified and should be printed at A4 size in portrait orientation. Consideration of the effects of mapped scale is necessary when interpreting data at a large scale.

For further information or assistance with interpretation of this product, please contact the Department of Environment and Heritage Protection at <www.ehp.qld.gov.au> or email <planning.support@ehp.qld.gov.au>

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This product is projected into GDA 1994 MGA Zone 56

Appendix F: List of Flora and Fauna Species Identified on Site

This Appendix provides a full list of all flora and fauna species recorded during the field surveys.

Family	Scientific name	Common name	Legislative status (*NC Act, LP Act)*°	Legislative status (*EPBC Act)*^
Flora				
Fabaceae	**Acacia farnesiana*	mimosa bush	LC	
Papaveraceae	*Argemone ochroleuca*	Mexican poppy	LC	
Asteraceae	** Bidens pilosa*	cobbler's pegs	LC	
Brassicaceae	**Capsella bursapastoris*	shepherd's purse	LC	
Asteraceae	** Cirsium vulgare*	spear thistle	LC	
Poaceae	**Cenchrus ciliaris*	buffel grass	LC	
Asteraceae	**Conyza bonariensis*	fleabane	LC	
Poaceae	**Digitaria ciliaris*	summer grass	LC	
Verbenaceae	**Glandularia aristigera*	Mayne's pest	LC	
Poaceae	**Melinis repens*	red natal grass	LC	
Cactaceae	***Opuntia stricta*	prickly pear	Class 2 (*LP Act*)	
Cactaceae	***Opuntia tomentosa*	velvety-tree pear	Class 2 (*LP Act*)	
Poaceae	**Panicum coloratum*	bambatsi grass	LC	
Brassicaceae	**Rapistrum rugosum*	turnip weed	LC	
Asteraceae	**Xanthium pungens*	noogoora burr	LC	
Mimosaceae	*Acacia excelsa*	ironwood	LC	
Mimosaceae	*Acacia salicina*	River coobah	LC	
Mimosaceae	*Acacia stenophylla*	river myall	LC	
Chenopodiaceae	*Atriplex muelleri*	Mueller's saltbush	LC	
Poaceae	*Bothriochloa decipiens*	pitted blue grass	LC	
Asteraceae	*Brachyscome whitei*	spreading daisy	LC	
Cupressaceae	*Callitris glaucophylla*	white cypress pine	LC	
Casuarinaceae	*Casuarina cristata*	belah	LC	
Casuarinaceae	*Casuarina cunninghamiana*	river sheoak	LC	
Rutaceae	*Citrus glauca*	native lime	LC	
Poaceae	*Cynodon dactylon*	couch	LC	
Sapindaceae	*Dodonaea viscosa*	sticky hopbush	LC	
Cyperaceae	*Eleocharis cylindrostachys*	a common rush	LC	
Chenopodiaceae	*Enchylaena tomentosa*	ruby saltbush	LC	
Poaceae	*Enneapogon nigricans*	nigger heads grass	LC	
Poaceae	*Eragrostis ciliensis*	a lovegrass	LC	
Poaceae	*Eragrostis sp.*	a lovegrass	LC	
Myrtaceae	*Eucalyptus camaldulensis*	river red gum	LC	

Family	Scientific name	Common name	Legislative status (*NC Act, LP Act)*°	Legislative status (*EPBC Act)*^
Myrtaceae	*Eucalyptus coolabah*	coolibah	LC	
Myrtaceae	*Eucalyptus populnea*	poplar box	LC	
Malvaceae	*Malva parviflora*	small-flowered mallow	LC	
Malvaceae	*Malvastrum americanum*	a mallow	LC	
Oxalidaceae	*Oxalis sp.*	a clover sorrel	LC	
Poaceae	*Panicum sp.*	a grass	LC	
Portulacaceae	*Portulaca oleracea*	common purslane	LC	
Chenopodaceae	*Sclerolaena anisacanthoides*	yellow copperburr	LC	
Chenopodaceae	*Sclerolaena birchii*	galvanised burr	LC	
Chenopodaceae	*Sclerolaena muricata*	black roly poly	LC	
Asteraceae	*Senecio brigalowensis*	brigalow daisy	LC	
Malvaceae	*Sida cordifolia*	flannel weed	LC	
Malvaceae	*Sida rhombifolia*	Paddy's lucerne	LC	
Malvaceae	*Sida subspicata*	spiked sida	LC	
Asteraceae	*Sonchus asper*	sow thistle	LC	
Azoaceae	*Tetragonia tetragonioides*	Warrigal greens	LC	
Fabaceae	*Vicia monantha*	spurred vetch	LC	
Fauna				
Birds				
Anhingidae	*Anhinga novaehollandiae*	Australasian darter	LC	
Accipitridae	*Aquila audax*	wedge-tailed eagle	LC	
Cacatuidae	*Cacatua galerita*	sulphur-crested cockatoo	LC	
Anatidae	*Chenonetta jubata*	Australian wood duck	LC	
Campephagidae	*Coracina novaehollandiae*	black-faced cuckoo shrike	LC	Ma
Corcoracidae	*Corcorax melanorhamphos*	white winged chough	LC	
Corvidae	*Corvus orru*	torresian crow	LC	
Artamidae	*Cracticus nigrogularis*	pied butcherbird	LC	
Artamidae	*Cracticus tibicen*	Australian magpie	LC	
Artamidae	*Cracticus torquatus*	grey butcherbird	LC	
Halcyonidae	*Dacelo novaeguineae*	laughing kookaburra	LC	
Cacatuidae	*Eolophus roseicapillus*	galah	LC	
Dicruriadae	*Grallina cyanoleuca*	magpie lark	LC	Ma
Meliphagidae	*Manorina melanocephala*	noisy miner	LC	
Cacatuidae	*Nymphicus hollandicus*	cockatiel	LC	
Columbidae	*Ocyphaps lophotes*	crested pigeon	LC	
Pardalotidae	*Pardalotus striatus*	striated pardalote	LC	

Family	Scientific name	Common name	Legislative status (*NC Act, LP Act)*°	Legislative status (*EPBC Act)*^
Pelicanidae	*Pelecanus conspicillatus*	Australian pelican	LC	Ma
Psittaculidae	*Platycercus adscitus*	pale headed rosella	LC	
Rhipiduridae	*Rhipidura leucophrys*	willie wagtail	LC	
Threskiornithidae	*Threskiornis spinicollis*	straw-necked ibis	LC	Ma
Alcedinidae	*Todiramphus sanctus*	sacred kingfisher	LC	Ma
Mammals				
Suidae	**Sus scrofa*	wild pig	LC	
Macropodidae	*Macropus giganteus*	kangaroo	LC	
Leporidae	**Oryctolagus cuniculus*	European Rabbit	LC	
Macropodidae	*Wallabia bicolor*	swamp wallaby	LC	

* denotes introduced species

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Appendix G: Ground Truthed Threatened Ecological Communities

Legend

Ground Truthed Threatened Ecological Community

- Coolibah

Boundary

- Surveyed Cadastral
- Survey Area
- Site Location

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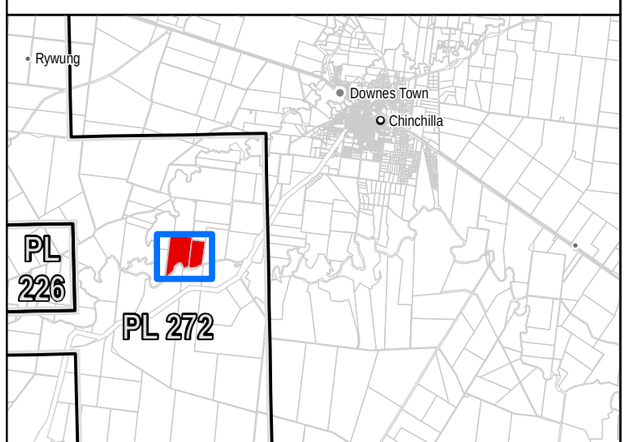

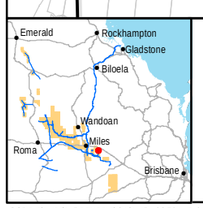

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Metres

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Appendix G :

Ground Truthed Threatened Ecological Communities - DA1935

Date: 17 August 2015

Map Number	Doc No	Rev
1 of 1	Q-4160-15-RP-0015	0
	Map ID GISWR_28862	

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Appendix H: Ground Truthed Regional Ecosystems

Legend

Ground Truthed Regional Ecosystems (RE) Biodiversity Status

Remnant Vegetation

- Of Concern Dominant

Boundary

- Surveyed Cadastral
- Survey Area
- Site Location

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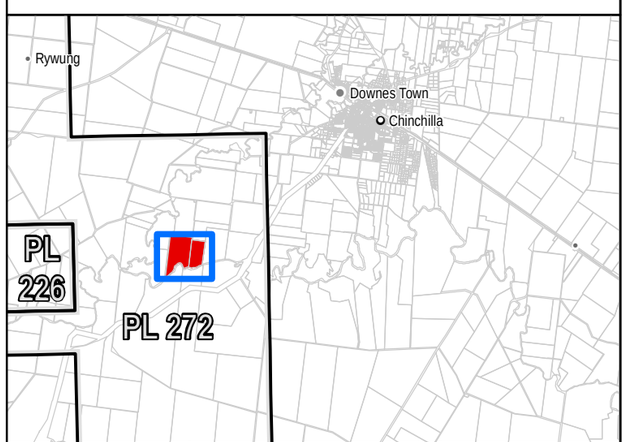

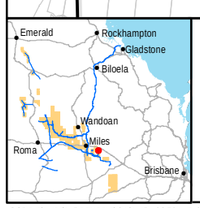

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Appendix H :
Ground Truthed Regional Ecosystems - DA1935
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Appendix I: Ground Truthed EPBC Migratory and Marine Species Present on Site

Legend

EPBC Fauna Species

- Black-Faced Cuckoo-Shrike (*Coracina novaehollandiae*)
- Straw-Necked Ibis (*Threskiornis spinicollis*)
- Sacred Kingfisher (*Todiramphus sanctus*)
- Magpie-Lark (*Grallina cyanoleuca*)
- Australian Pelican (*Pelecanus conspicillatus*)

Boundary

- Surveyed Cadastral
- Survey Area
- Site Location

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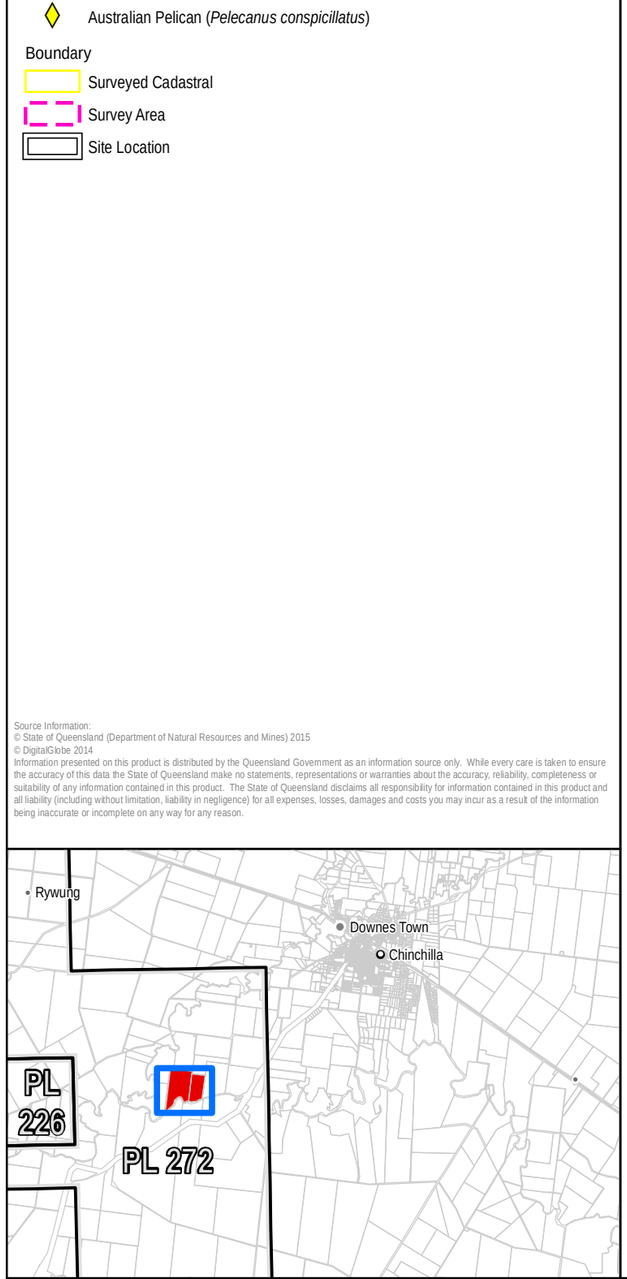

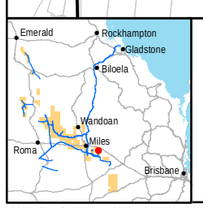

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Appendix I :
Ground Truthed EPBC Migratory and Marine Species Present on Site - DA1935

Date: 17 August 2015

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Appendix J: Ground Truthed Pest Fauna Present on Site

Legend

Pest Fauna Species

- European Rabbit (*Oryctolagus sp.*)
- Pig (*Sus scrofa*)

Boundary

- Surveyed Cadastral
- Survey Area
- Site Location

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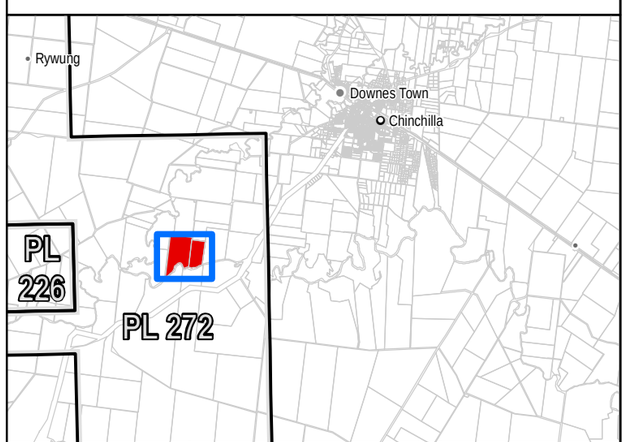

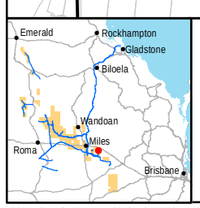

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Appendix J :
Ground Truthed Pest Fauna Present on Site - DA1935
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Appendix K: Ground Truthed Drainage Features, Watercourses and Wetlands Present on Site.

Legend

- DNRM Stream Order

Ground Truthed Water Feature

- Drainage Feature
- Waterway – Watercourse High Bank

Boundary

- Surveyed Cadastral
- Survey Area
- Site Location

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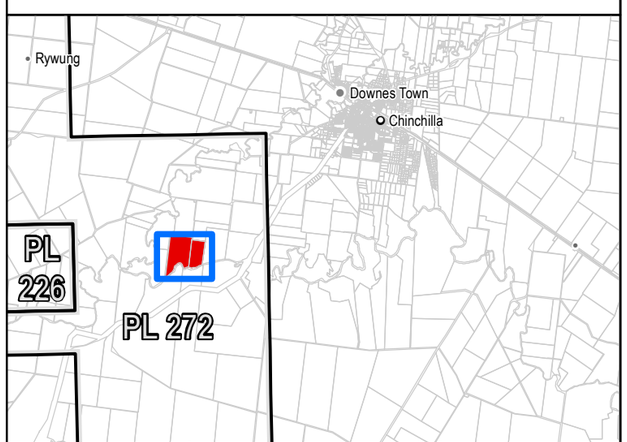

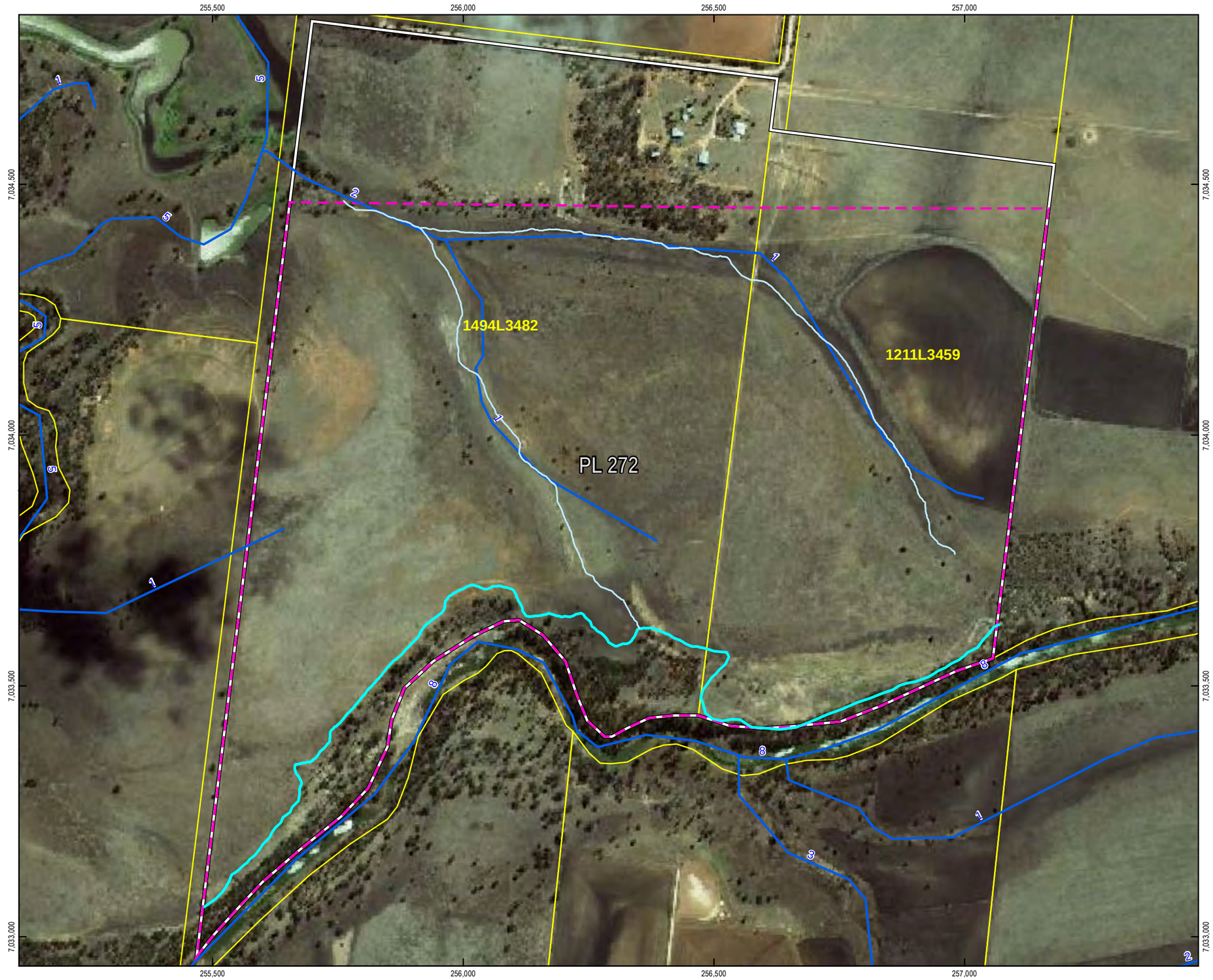

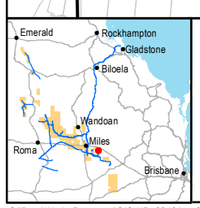

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Appendix K : Ground Truthed Drainage Features, Watercourses and Wetlands Present on Site - DA1935

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