



## Australia Pacific LNG

### Ecology Assessment Report Lot 2RP138057

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## 1. Introduction

This report has been completed by Boobook Ecological Consultants approved by the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) in writing on the 28<sup>th</sup> of June 2011.

The field surveys were conducted by a team of ecologists lead by Craig Eddie, approved by DSEWPaC in writing on the 31<sup>st</sup> of March 2011, Principal Ecologist for Boobook Ecological Consultants.

## 2. Site Context

Lot 2 on Plan RP138057 is an 863ha property in PL215 that is located approximately 18 km south west of Chinchilla and 41 km east of Condamine in southern inland Queensland. The property is accessed via Kogan-Condamine Road which borders its southern side. The bulk of 2RP138057 lies within Province 32 (Inglewood Sandstones) of the Brigalow Belt South bioregion, while the northern extremity is within Province 31 (Eastern Darling Downs).

Previous land use on the property has been agricultural, primarily grazing of domestic livestock. The majority of native vegetation on the property has been cleared; however, small patches of remnant vegetation are present, mainly in the form of isolated clumps and a narrow riparian strip. Virtually no regrowth is present.

Soils on the property range from alluvial or shallow sandy texture contrast soils to sedimentary grey black cracking clays derived from sediments. The topography is generally flat or gently undulating interspersed by occasional minor watercourses. Wambo Creek is the main watercourse at the northern end of the property, and several unnamed minor watercourses are also present within the northern portion.

The closest weather station to the site is Roma, with a climate consisting of yearly average temperatures ranging from a maximum of 34.1 in January to a minimum of 3.9 in July. The annual rainfall of Roma for 2010 was 582.5mm, with the highest rainfall occurring in February (90.3mm) and the lowest occurring in July (24.2mm).

## 3. Methodology

### 3.1 Desktop and Literature Review

Sources used to obtain information for the desktop and literature review are as follows:

- *Nature Conservation Act 1992* (NCA) Protected Species Lists
- *Environmental Protection Biodiversity and Conservation 1999* (EPBC) Protected Matters Search Tool
- Department of Environment and Resource Management Regional Ecosystem Mapping
- Geosciences Australia Waterways mapping
- Department of Environment and Resource Management Regional Ecosystem version 6.0b digital GIS layer

- Department of Environment and Resource Management Wildnet database
- Department of Environment and Resource Management Referrable Wetlands database
- Queensland Herbarium HERBRECS database
- Queensland Museum database
- Hando and Hando (1997).

Data searches were conducted using a 3.0km radius around the approximate centre point of the property.

## **3.2 Field Survey**

Scouting surveys were conducted in general accordance with the *BioCondition – A Condition Assessment Framework for Terrestrial Biodiversity in Queensland – Assessment Manual – Version 2.1* (Biocondition Manual) (Eyre et al, 2011) and the *Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland* (Neldner et al 2005).

### **3.2.1 Vegetation Community Surveys**

General 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 *Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland* (Neldner et al, 2005).

Vegetation community polygons were confirmed, mapped and identified in accordance with Queensland Regional Ecosystem (Biodiversity Status) and EPBC Threatened Ecological Community criteria. Areas of remnant vegetation were clearly distinguished from areas of regrowth vegetation that does not satisfy remnant regional ecosystem or EPBC Threatened Ecological Community criteria.

### **3.2.2 Habitat Survey**

Habitat surveys were conducted within each Vegetation Community Survey location within the aforementioned Vegetation Community Area. A range of habitat features, such as log abundance, hollow tree size class and abundance were noted.

### **3.2.3 Threatened Flora and Fauna surveys**

‘Threatened’ species are those listed under the *Environment Protection Biodiversity Conservation Act 1999* and the *Nature Conservation (Wildlife) Regulation 2006*.

Targeted flora and fauna searches were undertaken within the vicinity of a Vegetation Community Survey/Habitat Feature plot should field ecologists deem the given area to be of sufficient potential value to a threatened species to warrant such a search.

Targeted threatened species surveys were also conducted in additional locations based on incidental field observations of high quality habitat or identification of distinct ecological features through preliminary review of mapping and other background information for the property.

### **3.2.4 Exotic Flora and Fauna Surveys**

Environmental and declared pest (as defined by the *Land Protection (Pest and Stock Route Management) Act 2002*) populations were noted and abundance recorded at the time of the survey.

### **3.2.5 Disturbance Surveys**

Evidence of disturbance at each Vegetation Community/Habitat Feature was recorded for type, severity and estimated time of most recent occurrence. The recording of disturbance was also conducted at opportunistic level where appropriate.

## **4. Results and Discussion**

In order to develop an understanding of the ecology at 2RP138057, a detailed Desktop and Literature Review and Field Ecological Scouts has been performed by an approved ecologist. The results are detailed below.

### **4.1 Desktop and Literature Review**

Data sources used for desktop searches for 2RP138057 are listed in section 3.1. A summary of results follows.

#### **4.1.1 Matters of National Environmental Significance**

A search for Matters of National Environmental Significance under the *Environment Protection and Biodiversity Conservation Act 1999* (hereafter EPBC) was most recently performed on Wednesday, 15 July 2011. This search lists Threatened Ecological Communities, EPBC Listed Flora, EPBC Listed Fauna, Migratory Species, Pest Fauna, Weeds of National Significance (WONS) and RAMSAR sites. The results of these searches can be seen below. For raw data see Appendix A.

##### **4.1.1.1 Threatened Ecological Communities**

The results of the EPBC Protected Matters search for Threatened Ecological Communities and their likelihood of occurrence at this site can be seen below in Table 1.

**Table 1 EPBC Protected Matters search tool results for Threatened Ecological Communities predicted to occur at 2RP138057 and their Likelihood of Occurrence**

Name	Status	Likelihood of Occurrence
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
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and derived Native Grassland	Critically Endangered	Community may occur within area
Brigalow ( <i>Acacia harpophylla</i> dominant and co-dominant)	Endangered	Community known to occur within area
Weeping Myall Woodlands	Endangered	Community likely to occur within area

#### 4.1.1.2 Listed Flora

The results of the EPBC Protected Matters search for Listed Flora Species and their likelihood of occurrence at this property can be seen below in Table 2.

**Table 2 EPBC Protected Matters search tool results for Listed Flora predicted to occur at 2RP138057 and their Likelihood of Occurrence**

Scientific Name	Common Name	Status	Likelihood of Occurrence
<i>Cadellia pentastylis</i>	Ooline	Vulnerable	Species or species habitat likely to occur within area
<i>Homopholis belsonii</i>	Belson's Panic	Vulnerable	Species or species habitat may occur within area

#### 4.1.1.3 Listed Fauna

The results of the EPBC Protected Matters search for Listed Fauna Species and their likelihood of occurrence at this site can be seen below in Table 3.

**Table 3 EPBC Protected Matters search tool results for Listed Fauna predicted to occur at 2RP138057 and their Likelihood of Occurrence**

Class	Scientific Name	Common Name	Status	Likelihood of Occurrence
Birds	<i>Erythrotriorchis radiatus</i>	Red Goshawk	Vulnerable	Species or species habitat likely to occur within area



	<i>Geophaps scripta scripta</i>	Squatter Pigeon (southern)	Vulnerable	Species or species habitat likely to occur within area
	<i>Neochmia ruficauda ruficauda</i>	Star Finch	Endangered	Species or species habitat likely to occur within area
	<i>Rostratula australis</i>	Australian Painted Snipe	Vulnerable	Species or species habitat may occur within area
Fish	<i>Maccullochella peelii peelii</i>	Murray Cod, Cod, Goodoo	Vulnerable	Species or species habitat may occur within area
Mammals	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat, Large Pied Bat	Vulnerable	Species or species habitat may occur within area
	<i>Nyctophilus corbeni</i> (as <i>N. timoriensis</i> south-eastern form)	South-eastern Long-eared Bat	Vulnerable	Species or species habitat may occur within area
Reptiles	<i>Furina dunmali</i>	Dunmall's Snake	Vulnerable	Species or species habitat may occur within area

#### 4.1.1.4 Migratory Species

The results of the EPBC Protected Matters search for Listed Migratory Species and their likelihood of occurrence at this property can be seen below in Table 4.

**Table 4 EPBC Protected Matters search tool results for Migratory Species predicted to occur at 2RP138057 and their Likelihood of Occurrence**

Scientific Name	Common Name	Likelihood of Occurrence
<i>Apus pacificus</i>	Fork-tailed Swift	Species or species habitat may occur within area
<i>Ardea modesta</i> (as <i>A. alba</i> )	Eastern Great Egret (as Great Egret, White Egret)	Species or species habitat may occur within area
<i>Ardea ibis</i>	Cattle Egret	Species or species habitat may occur within area
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	Species or species habitat likely to occur within area
<i>Hirundapus caudacutus</i>	White-throated Needletail	Species or species habitat may occur within area

<i>Merops ornatus</i>	Rainbow Bee-eater	Species or species habitat may occur within area
<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	Species or species habitat may occur within area
<i>Nettapus coromandelianus albipennis</i>	Australian Cotton Pygmy-goose	Species or species habitat may occur within area
<i>Rostratula australis</i> (as <i>R. benghalensis</i> s. lat.)	Australian Painted Snipe	Species or species habitat may occur within area

#### 4.1.1.5 Marine Species

Listed marine species that were identified during the desktop analysis and their likelihood of occurrence can be found below in Table 5. This data was sourced from the EPBC Protected Matters Search Tool.

**Table 5 EPBC Protected Matters search tool results for Marine Species predicted to occur at 2RP138057 and their Likelihood of Occurrence**

Class	Scientific Name	Common Name	Likelihood of Occurrence
Bird	<i>Apus pacificus</i>	Fork-tailed swift	Species or species habitat may occur within area
	<i>Ardea modesta</i> (as <i>A. alba</i> )	Eastern Great Egret (as Great Egret, White Egret)	Species or species habitat may occur within area
	<i>Ardea Ibis</i>	Cattle Egret	Species or species habitat may occur within area
	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	Species or species habitat may occur within area
	<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	Species or species habitat likely to occur within area
	<i>Hirundapus caudacutus</i>	White-throated Needletail	Species or species habitat may occur within area
	<i>Merops ornatus</i>	Rainbow Bee-eater	Species or species habitat may occur within area
	<i>Nettapus coromandelianus albipennis</i>	Australian Cotton Pygmy-goose	Species or species habitat may occur within area
	<i>Rostratula australis</i> (as <i>R. benghalensis</i> s. lat.)	Australian Painted Snipe	Species or species habitat may occur within area

#### 4.1.1.6 Weeds of National Significance

All Weeds of National Significance and other non-native plants that are considered to pose a particularly significant threat to biodiversity identified from the EPBC Protected Matters Search Tool are listed in Table 6 below.

**Table 6 EPBC Protected Matters search tool results for weeds predicted to occur at 2RP138057 and their Likelihood of Occurrence**

Scientific Name	Common Name	Likelihood of Occurrence
<i>Alternanthera philoxeroides</i>	Alligator Weed	Species or species habitat may occur within area
<i>Lycium ferocissimum</i>	African Boxthorn	Species or species habitat may occur within area
<i>Parthenium hysterophorus</i>	Parthenium weed	Species or species habitat likely to occur within area
<i>Pinus radiata</i>	Radiata Pine	Species or species habitat may occur within area
<i>Rubus fruticosus</i> aggregate	Blackberry	Species or species habitat may occur within area

#### 4.1.1.7 Pest Fauna

All pest fauna identified from the EPBC Protected Matters Search Tool are listed in Table 7 below.

**Table 7 EPBC Protected Matters search tool results for Pest Fauna species predicted to occur at 2RP138057 and their Likelihood of Occurrence**

Scientific Name	Common Name	Likelihood of Occurrence
<i>Rhinella marina</i> (as <i>Bufo marinus</i> )	Cane toad	Species or species habitat likely to occur within area
<i>Capra hircus</i>	Goat	Species or species habitat may occur within area
<i>Felis catus</i>	Cat	Species or species habitat likely to occur within area
<i>Oryctolagus cuniculus</i>	Rabbit	Species or species habitat likely to occur within area
<i>Sus scrofa</i>	Pig	Species or species habitat may occur within area
<i>Vulpes vulpes</i>	Red Fox	Species or species habitat likely to occur within area

#### 4.1.1.8 Wetland Ecosystems

Internationally significant wetlands that were identified through desktop analysis (EPBC Protected Matters Search) include a Ramsar listed wetland known as Narran Lake Nature Reserve. This wetland has been assessed as having a low risk of impact during operation as it is located approximately 500km downstream (over 450km south west) of the proposed site (see Volume 5, Attachment 17 of the APLNG EIS, Aquatic Ecology, Water Quality and Geomorphology Impact Assessment).

#### 4.1.2 Nature Conservation Act

A desktop search for species protected under the *Nature Conservation Act 1992* that may be present on 2RP138057 was also performed. The results can be seen below. For raw data see Appendix B.

##### 4.1.2.1 Listed Flora

No flora listed as endangered, vulnerable or near threatened were identified within the search area containing 2RP138057. Two species of least concern native flora were identified within the search area (see Appendix B).

##### 4.1.2.2 Listed Fauna

No fauna listed as endangered or vulnerable were identified within the search area containing 2RP138057. One species scheduled as near threatened was identified within the search area (see Table 8). Thirty-nine species of least concern native fauna were identified within the search (see Appendix B).

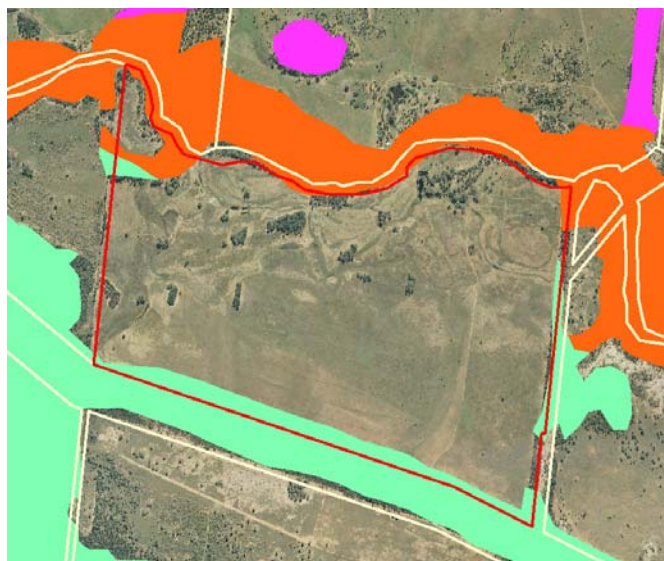
**Table 8 NCA Listed fauna identified during desktop assessment of 2RP138057**

Class	Family	Scientific Name	Common Name	Conservation Status
Reptiles	Gekkonidae	<i>Strophurus taenicauda</i>	Golden-tailed Gecko	Near Threatened

#### 4.1.3 Environmental sensitive areas – Of Concern and Endangered Regional Ecosystems

Environmentally Sensitive Areas assessed and confirmed in this field ecology assessment report comprise Endangered Regional Ecosystems (Category B Environmentally Sensitive Area) and Of Concern Regional Ecosystems (Category C Environmentally Sensitive Area)

A search of the DERM RE Mapping was most recently performed on Friday, 1 July 2011. A schematic detailing the location of RE polygons associated with the site can be seen below in Figure 1.



**Figure 1 Regional Ecosystems identified for the 2RP138057 utilising DERM RE mapping**

Orange: Of Concern Remnant Regional ecosystem (11.3.4/11.3.2/11.3.25)

Green: Not of Concern Remnant Regional Ecosystem (11.5.1)

#### 4.1.3.1 Endangered Regional Ecosystems

No endangered regional ecosystems identified during the desktop analysis (using the DERM RE version 6.0b GIS layer)

#### 4.1.3.2 Of Concern Regional Ecosystems

All Of Concern regional ecosystems identified during the desktop analysis (using the DERM RE version 6.0b GIS layer) and their description can be found below in Table 9.

**Table 9 Of Concern Regional Ecosystems mapped as present on 2RP138057 through desktop analysis**

RE code	General description	Description
11.3.2	<i>Eucalyptus populnea</i> woodland on alluvial plains	<i>Eucalyptus populnea</i> woodland to open-woodland. <i>E. melanophloia</i> may be present and locally dominant. There is sometimes a distinct low tree layer dominated by species such as <i>Geijera parviflora</i> , <i>Eremophila mitchellii</i> , <i>Acacia salicina</i> , <i>Acacia pendula</i> , <i>Lysiphillum</i> spp., <i>Cassia brewsteri</i> , <i>Callitris glaucophylla</i> and <i>Acacia excelsa</i> . The ground layer is grassy dominated by a range of species depending on soil and management conditions. Species include <i>Bothriochloa decipiens</i> , <i>Enteropogon acicularis</i> , <i>Aristida ramosa</i> and <i>Tripogon loliiformis</i> . Occurs on Cainozoic alluvial plains with variable soil types including texture contrast, deep uniform clays, massive earths and sometimes cracking clays.

11.3.25	<i>Eucalyptus tereticornis</i> or <i>E. camaldulensis</i> woodland fringing drainage lines	<i>Eucalyptus camaldulensis</i> or <i>E. tereticornis</i> open-forest to woodland. Other tree species such as <i>Casuarina cunninghamiana</i> , <i>E. coolabah</i> , <i>Melaleuca bracteata</i> , <i>Melaleuca viminalis</i> , <i>Livistona</i> spp. (in north), <i>Melaleuca</i> spp. and <i>Angophora floribunda</i> are commonly present and may be locally dominant. An open to sparse, tall shrub layer is frequently present dominated by species including <i>Acacia salicina</i> , <i>A. stenophylla</i> or <i>Lysiphyllum carronii</i> . Low shrubs are present, but rarely form a conspicuous layer. The ground layer is open to sparse and dominated by perennial grasses, sedges or forbs such as <i>Imperata cylindrica</i> , <i>Bothriochloa bladhii</i> , <i>B. ewartiana</i> , <i>Chrysopogon fallax</i> , <i>Cyperus dactyloides</i> , <i>C. difformis</i> , <i>C. exaltatus</i> , <i>C. gracilis</i> , <i>C. iria</i> , <i>C. rigidellus</i> , <i>C. victoriensis</i> , <i>Dichanthium sericeum</i> , <i>Leptochloa digitata</i> , <i>Lomandra longifolia</i> or <i>Panicum</i> spp. Occurs on fringing levees and banks of major rivers and drainage lines of alluvial plains throughout the region. Soils are very deep, alluvial, grey and brown cracking clays with or without some texture contrast. These are usually moderately deep to deep, soft or firm, acid, neutral or alkaline brown sands, loams or black cracking or non-cracking clays, and may be sodic at depth.
11.3.4	<i>Eucalyptus tereticornis</i> and/or <i>Eucalyptus</i> spp. Tall woodland on alluvial plains	<i>Eucalyptus tereticornis</i> woodland to open-forest. Other tree species that may be present and locally dominant include <i>E. camaldulensis</i> , <i>Corymbia tessellaris</i> , <i>E. coolabah</i> , <i>C. clarksoniana</i> , <i>E. populnea</i> or <i>E. brownii</i> , <i>E. melanophloia</i> , <i>E. platyphylla</i> or <i>Angophora floribunda</i> . <i>E. crebra</i> and <i>Lophostemon suaveolens</i> may be locally dominant (subregion 14). A shrub layer is usually absent, and a tall grassy ground layer is often prominent, and may include any of <i>Bothriochloa bladhii</i> subsp. <i>bladhii</i> , <i>Aristida</i> spp., <i>Heteropogon contortus</i> , <i>Dichanthium</i> spp. and <i>Themeda triandra</i> . Heavily grazed areas tend to have shorter or annual grasses such as <i>Dactyloctenium radulans</i> or <i>Bothriochloa</i> spp. Occurs on Cainozoic alluvial plains and terraces. Occurs on variety of soils, including deep cracking clays, medium to fine textured soils, and deep texture-contrast soils.

#### 4.1.3.3 Not Of Concern Regional Ecosystem

All Not Of Concern regional ecosystems identified during the desktop analysis (using the DERM RE version 6.0b GIS layer) and their description can be found below in Table 10.

**Table 10 Not Of Concern Regional Ecosystems mapped as present on 2RP138057 through desktop analysis**

RE code	General description	Description
11.5.1	<i>Eucalyptus crebra</i> , <i>Callitris glaucophylla</i> , <i>Angophora leiocarpa</i> , <i>Allocasuarina luehmannii</i> woodland on Cainozoic sand plains/remnant surfaces	<i>Eucalyptus crebra</i> and/or <i>E. populnea</i> +/- <i>Angophora leiocarpa</i> +/- <i>E. woollsiana</i> (in south of bioregion) dominate the woodland (to open-woodland) canopy. A low tree layer dominated by <i>Allocasuarina luehmannii</i> +/- <i>Melaleuca decora</i> +/- <i>Callitris glaucophylla</i> +/- <i>C. endlicheri</i> is usually present. In some areas <i>Allocasuarina luehmannii</i> low woodland is the dominant layer. The ground cover is usually sparse and dominated by perennial grasses. Occurs on Cainozoic sandplains, especially outwash from weathered sandstones. Duplex soils with sandy surfaces.
11.5.1a	Sub-Category of 11.5.1	<i>Eucalyptus populnea</i> woodland with <i>Allocasuarina luehmannii</i> low tree layer.

## 4.2 Field Survey

The field survey was conducted on 9 December 2010 and was conducted by a team of ecologists lead by Craig Eddie, the Principal Ecologist for Boobook Ecological Consulting. The results of these surveys have been summarised below.

### 4.2.1 Matters of National Environmental Significance

Field survey results concerning MNES (protected under the EPBC Act) such as threatened ecological communities, listed flora, listed fauna, migratory species, weeds and pest fauna can be seen below.

#### 4.2.1.1 Threatened Ecological Communities

No Threatened Ecological Communities were identified during the field survey.

#### 4.2.1.2 Listed Flora

No flora listed under the EPBC Act 1999 was detected during the field survey. None of the species listed in Table 2 are expected to occur due to the lack of suitable habitat.

#### 4.2.1.3 Listed Fauna

No fauna listed as threatened under the EPBC Act 1999 was detected during the field survey. Potentially suitable habitat was confirmed as being present for seven EPBC listed fauna species. These are listed below in Table 11.

**Table 11 EPBC protected fauna species potentially occurring at 2RP138057 based on field survey results**

Scientific Name	Common Name	Status	Likelihood of Occurrence
<i>Egernia rugosa</i>	Yakka Skink	Vulnerable	Possible, within species known range but suitable habitat is limited to areas of RE 11.3.19 with large hollow logs
<i>Furina dunmalli</i>	Dunmall's Snake	Vulnerable	Possible, within species known range and suitable habitat present along Condamine-Kogan Road (RE 11.5.1) and within patches of RE 11.3.19
<i>Paradelma orientalis</i>	Brigalow Scaly-foot	Vulnerable	Possible, within species known range and suitable habitat present along Condamine-Kogan Road (RE 11.5.1) and within patches of RE 11.3.19
<i>Rostratula australis</i>	Australian Painted Snipe	Vulnerable	Possible, within species known range and suitable habitat present (e.g. wetland at Boobook site O15)
<i>Delma torquata</i>	Collared Delma	Vulnerable	Possible, within species known range but suitable habitat is limited to areas of RE 11.3.2 and 11.3.25
<i>Erythrotriorchis radiata</i>	Red Goshawk	Vulnerable	Possible, suitable habitat present and may overfly site on an opportunistic basis; not known to breed at site
<i>Nyctophilus corbeni</i>	South-Eastern Long-eared Bat	Vulnerable	Possible, within species known range and suitable habitat present (e.g. tree hollows within intact vegetation along Wambo Creek)

#### 4.2.1.4 Migratory Species

Fauna listed as migratory species under the EPBC Act 1999 detected during the field survey can be found below in Table 12.



**Table 12 EPBC listed migratory species identified at 2RP138057 during field survey**

Scientific Name	Common Name	Likelihood of Occurrence
<i>Merops ornatus</i>	Rainbow Bee-eater	Confirmed, one flew over Boobook site O14 & single individuals heard at O17 & O12

Based on the presence of suitable habitat and known distributions, potential exists for seven additional species of EPBC migratory fauna species to occur at 2RP138057. These are listed below in Table 13.

**Table 13 EPBC protected fauna species occurring or potentially occurring at 2RP138057 based on field survey results**

Scientific Name	Common Name	Likelihood of Occurrence
<i>Apus pacificus</i>	Fork-tailed Swift	Possible, may overfly site between September-March
<i>Ardea ibis</i>	Cattle Egret	Possible, in pasture but generally uncommon in Miles-Condamine area
<i>Ardea modesta</i>	Eastern Great Egret	Possible, at temporary puddles/pools in watercourses and along Wambo Creek
<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	Possible, some suitable habitat features identified (e.g. wetland at Boobook site O15)
<i>Haliaeetus leucogaster</i>	White-bellied Sea-eagle	Possible, some suitable habitat features identified (e.g. Wambo Creek)
<i>Hirundapus caudacutus</i>	White-throated Needletail	Possible, may overfly site between September-March
<i>Rostratula australis</i>	Australian Painted Snipe	Possible, some suitable habitat features identified (e.g. wetland at Boobook site O15)

#### 4.2.1.5 Weeds

No Weeds of National Significance were encountered during the field survey. All other non-native flora encountered during the field survey is listed in Table 14 below.

**Table 14 Non-native flora recorded during the ecological field survey at 2RP138057**

Scientific Name	Common Name	Likelihood of Occurrence
<i>Anagallis arvensis</i>	Blue Pimpernel	Confirmed
<i>Alternanthera pungens</i>	Khaki Burr	Confirmed
<i>Bidens pilosa</i>	Cobbler's Pegs	Confirmed
<i>Bryophyllum delagoense</i>	Mother of Millions	Confirmed

<i>Chloris gayana</i>	Rhodes Grass	Confirmed
<i>Cirsium vulgare</i>	Spear Thistle	Confirmed
<i>Conyza bonariensis</i>	Fleabane	Confirmed
<i>Conyza canadensis</i>	Canadian Fleabane	Confirmed
<i>Cyclosporum leptophyllum</i>	Slender Celery	Confirmed
<i>Cynodon dactylon</i>	Couchgrass	Confirmed
<i>Echinochloa colona</i>	Awnless Barnyard Grass	Confirmed
<i>Emex australis</i>	Goathead, Spiny Emex	Confirmed
<i>Eragrostis curvula</i>	African Lovegrass	Confirmed
<i>Froelichia floridana</i>	Cotton-tails, Snake Cotton	Confirmed
<i>Gamochaeta pensylvanica</i>	Cudweed	Confirmed
<i>Gomphrena celosioides</i>	Gomphrena Weed, Soft Khaki Burr	Confirmed
<i>Gomphocarpus physocarpus</i>	Balloon Cotton-bush	Confirmed
<i>Hypochaeris glabra</i>	Smooth Catsear	Confirmed
<i>Opuntia tomentosa</i>	Velvety Tree Pear	Confirmed
<i>Opuntia stricta</i>	Common Pest Pear	Confirmed
<i>Lactuca serriola</i>	Prickly Lettuce	Confirmed
<i>Lepidium bonariense</i>	Argentine Peppergrass	Confirmed
<i>Megathyrsus maximus</i>	Green Panic	Confirmed
<i>Melinis repens</i>	Red Natal Grass	Confirmed
<i>Oenothera mollissima</i>	Argentine Evening Primrose	Confirmed
<i>Paspalum dilatatum</i>	Paspalum	Confirmed
<i>Pennisetum ciliare</i>	Buffel Grass	Confirmed
<i>Polycarpon tetraphyllum</i>	Four-leaved Allseed	Confirmed
<i>Portulaca oleracea</i>	Pigweed	Confirmed
<i>Portulaca pilosa</i>	Hairy Pigweed	Confirmed
<i>Richardia brasiliensis</i>	Mexican Clover, White-eye	Confirmed

<i>Schkuhria pinnata</i>	Dwarf Marigold	Confirmed
<i>Sida rhombifolia</i>	Paddy's Lucerne	Confirmed
<i>Solanum nigrum</i>	Blackberry Nightshade	Confirmed
<i>Sonchus oleraceus</i>	Common Sowthistle	Confirmed
<i>Urochloa mosambiciensis</i>	Sabi Grass	Confirmed
<i>Verbena aristigera</i>	Mayne's Pest	Confirmed
<i>Verbena bonariensis</i>	Purpletop	Confirmed
<i>Verbesina encelioides</i>	Crownbeard	Confirmed
<i>Xanthium occidentale</i>	Noogoora Burr	Confirmed
<i>Xanthium spinosum</i>	Bathurst Burr	Confirmed

Of the 41 species of non-native plant recorded during the field survey at 2RP138057, three species are listed as Class 2 pests under the *Land Protection (Pest and Stock Route) Act 2002*, these being Mother of Millions *Bryophyllum delagoense*, Velvety Tree Pear *O. tomentosa* and Common Pest Pear *O. stricta*. Velvety Tree Pear and Common Pest Pear occur throughout the property in low abundance while Mother of Millions was observed at Boobook sites OI6, OI6A and OI12 beside Wambo Creek.

#### 4.2.1.6 Pest Fauna

Pest fauna species identified during the field survey are listed in Table 15 below.

**Table 15 Pest fauna species identified during the ecological field survey at 2RP138057**

Scientific Name	Common Name	Occurrence
<i>Oryctolagus cuniculus</i>	Rabbit	Confirmed, diggings and scats at Boobook site OI2
<i>Sus scrofa</i>	Pig	Confirmed, tracks at Boobook site OI6
<i>Sturnus tristis</i>	Common Mynah	Confirmed, single bird at Boobook site OI4

House Mouse and Cane Toad were recorded within the Wildnet search area surrounding the property. Cat, Red Fox, Brown Hare and Black Rat are expected to occur on the property but they were not detected during the field survey.

#### 4.2.2 Nature Conservation Act

Field survey results concerning Nature Conservation Act listed flora and fauna can be seen below.

#### 4.2.2.1 Listed Flora

Flora scheduled as threatened under the *Nature Conservation Act 1992* and recorded during the field survey are listed below in Table 16.

**Table 16 Nature Conservation Act Listed flora identified during the field survey at 2RP138057**

Class	Family	Scientific Name	Common Name	Conservation Status	Likelihood of Occurrence	Quantity
Higher dicots	Cyperaceae	<i>Eleocharis blakeana</i>	Blake's Spike-rush	NT	Confirmed	90-100

NT = Near Threatened

One population of Blake's Spike-rush *Eleocharis blakeana* was located at a small lagoon within an ephemeral watercourse near the northern end of 2RP138057 (Boobook site OI5). The population was growing with *Cyperus betchei*, *C. difformis*, other *Cyperus* spp., *Ottellia ovalifolia*, *Marsilea* sp., *Ludwigia peploides*, *Monochoria cyanea* and *Paspalum distichum*.



**Figure 2 Locations of *Eleocharis blakeana* confirmed from field scout of 2RP138057**

Targeted searches were undertaken for *Zornia pallida*, *Rutidosia lanata* and *Gonocarpus urceolatus*, which are known from the broader Chinchilla-Condamine area (Queensland herbarium, HerbreCs data), however, no populations of these species were detected at 2RP138057.

#### 4.2.2.2 Listed Fauna

No fauna scheduled as endangered, vulnerable or near threatened under the *Nature Conservation Act 1992* was identified during the field survey at 2RP138057. However, potentially suitable habitat was recorded for 14 species that are listed in Table 17 below.

**Table 17 Nature Conservation Act scheduled threatened fauna potentially occurring at 2RP138057 based on field survey results**

Scientific Name	Common Name	Status	Likelihood of Occurrence
<i>Accipiter novaehollandiae</i>	Grey Goshawk	Near threatened	Possible, within species known distribution and may overfly site
<i>Chalinolobus picatus</i>	Little Pied Bat	Near threatened	Probable, within species known range and suitable habitat present (e.g. tree hollows in RE 11.3.25 and 11.3.19)
<i>Cyclorana verrucosa</i>	Rough Frog	Near threatened	Probable, within species known range and suitable habitat present along watercourses
<i>Delma torquata</i>	Collared Delma	Vulnerable	Possible, within species known range but suitable habitat is limited to areas of RE 11.3.2 and 11.3.25
<i>Egernia rugosa</i>	Yakka Skink	Vulnerable	Possible, within species known range but suitable habitat is limited to areas of RE 11.3.19 with large hollow logs
<i>Erythroriorchis radiata</i>	Red Goshawk	Near Threatened	Possible, suitable habitat present and may overfly site opportunistically; not known to breed at site
<i>Furina dunmalli</i>	Dunmall's Snake	Vulnerable	Possible, within species known range and suitable habitat present along Condamine-Kogan Road (RE 11.5.1) and within patches of RE 11.3.19
<i>Hemiaspis damelii</i>	Grey Snake	Endangered	Probable, suitable habitat present along watercourse.
<i>Lophoictinia isura</i>	Square-tailed Kite	Near threatened	Probable, suitable habitat present along Wambo Creek (RE 11.3.25) including potential nesting habitat
<i>Melithreptus gularis</i>	Black-chinned Honeyeater	Near threatened	Possible, within known range and suitable habitat present (e.g. RE 11.3.25 along Wambo Creek)
<i>Nyctophilus corbeni</i>	South-eastern Long –	Vulnerable	Possible, within species

	eared Bat		known range and suitable habitat present (e.g. tree hollows within intact vegetation along Wambo Creek)
<i>Paradelma orientalis</i>	Brigalow Scaly-foot	Vulnerable	Possible, within species known range and suitable habitat present along Condamine-Kogan Road (RE 11.5.1) and within patches of RE 11.3.19
<i>Rostratula australis</i>	Australian Painted Snipe	Vulnerable	Possible, within species known range and suitable habitat present (e.g. wetland at Boobook site O15)
<i>Strophurus taenicauda</i>	Golden-tailed Gecko	Near threatened	Possible, within species known range, but suitable habitat is limited (e.g. areas of RE 11.3.19 with loose bark)

#### 4.2.2.3 Other Significant Flora and Fauna

Fauna of regional conservation significance recorded during the field survey included Grey-crowned Babbler. Two individuals were observed at Boobook site OI12 and they were heard at Boobook site OI7. This species was identified as being of regional significance within the APLNG EIS (see Volume 2 Gas Fields, Chapter 8, Terrestrial Ecology).

No significant invertebrates were recorded during the field survey; however, exhaustive targeted searches have not been undertaken. The Brigalow Woodland Snail *Adclarkia cameroni* has been recorded from the Condamine River within relatively close proximity to 2RP138057. This species is pending listing as Critically Endangered under the *EPBC Act 1999*. Although none were detected during this preliminary field survey, it is possible that the species could occur in the remnants of RE 11.3.25 along and adjoining Wambo Creek on the property.

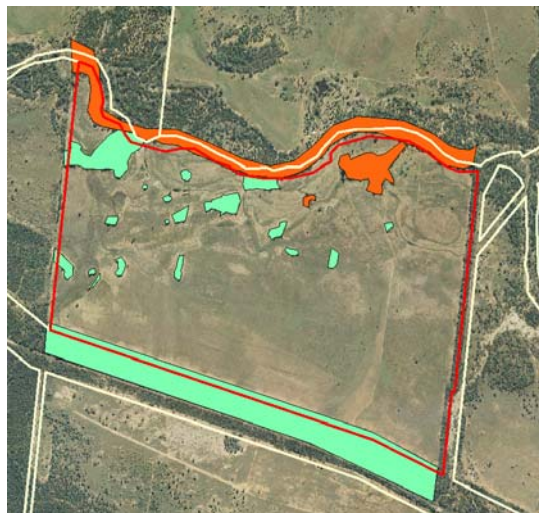
Flora of local significance recorded during the field survey included *Lobelia stenophylla* from Boobook site OI10 which is known from relatively few collections for the Darling Downs pastoral district (Herbrechs data).

Three species of Type A Restricted Plant were recorded, these being Kurrajong *Brachychiton populneus* at Boobook sites OI8 and OI15A, Forest Grass Tree *Xanthorrhoea johnsonii* at site OI15A and Black Orchid *Cymbidium canaliculatum* at site OI1.

#### 4.2.3 Environmentally Sensitive Areas – Of Concern and Endangered Regional Ecosystems

Distribution of Regional Ecosystems (RE) on site have been remapped based on detailed site level assessment. Several RE polygons have been confirmed as different to those shown for the site on DERM mapping.

All regional ecosystems confirmed during the field survey and their biodiversity status can be found below. A schematic of the field updated RE polygons can be seen below in Figure 3.



**Figure 3 Field validated regional ecosystems present at 2RP138057**

Orange: Of Concern Remnant Regional Ecosystem

Green: Not Of Concern Remnant Regional Ecosystem

#### 4.2.3.1 Endangered Regional Ecosystems

No endangered regional ecosystems were identified during the field survey.

#### 4.2.3.2 Of Concern Regional Ecosystems

All Of Concern regional ecosystems identified and mapped during the field survey and a description of these sites can be found below in Table 18.

**Table 18 Of Concern regional ecosystems identified on 2RP138057 through ecological field survey**

RE Code	General description	Description
11.3.2	<i>Eucalyptus populnea</i> woodland on alluvial plains	<i>Eucalyptus populnea</i> woodland to open-woodland. <i>E. melanophloia</i> may be present and locally dominant. There is sometimes a distinct low tree layer dominated by species such as <i>Geijera parviflora</i> , <i>Eremophila mitchellii</i> , <i>Acacia salicina</i> , <i>Acacia pendula</i> , <i>Lysiphillum</i> spp., <i>Cassia brewsteri</i> , <i>Callitris glaucophylla</i> and <i>Acacia excelsa</i> . The ground layer is grassy dominated by a range of species depending on soil and management conditions. Species include <i>Bothriochloa decipiens</i> , <i>Enteropogon acicularis</i> , <i>Aristida ramosa</i> and <i>Tripogon loliiformis</i> . Occurs on Cainozoic alluvial plains with variable soil types including texture contrast, deep uniform clays, massive earths and sometimes cracking clays.

11.3.25	<i>Eucalyptus tereticornis</i> or <i>E. camaldulensis</i> woodland fringing drainage lines	<i>Eucalyptus camaldulensis</i> or <i>E. tereticornis</i> open-forest to woodland. Other tree species such as <i>Casuarina cunninghamiana</i> , <i>E. coolabah</i> , <i>Melaleuca bracteata</i> , <i>Melaleuca viminalis</i> , <i>Livistona</i> spp. (in north), <i>Melaleuca</i> spp. and <i>Angophora floribunda</i> are commonly present and may be locally dominant. An open to sparse, tall shrub layer is frequently present dominated by species including <i>Acacia salicina</i> , <i>A. stenophylla</i> or <i>Lysiphillum carronii</i> . Low shrubs are present, but rarely form a conspicuous layer. The ground layer is open to sparse and dominated by perennial grasses, sedges or forbs such as <i>Imperata cylindrica</i> , <i>Bothriochloa bladhii</i> , <i>B. ewartiana</i> , <i>Chrysopogon fallax</i> , <i>Cyperus dactylotes</i> , <i>C. difformis</i> , <i>C. exaltatus</i> , <i>C. gracilis</i> , <i>C. iria</i> , <i>C. rigidellus</i> , <i>C. victoriensis</i> , <i>Dichanthium sericeum</i> , <i>Leptochloa digitata</i> , <i>Lomandra longifolia</i> or <i>Panicum</i> spp. Occurs on fringing levees and banks of major rivers and drainage lines of alluvial plains throughout the region. Soils are very deep, alluvial, grey and brown cracking clays with or without some texture contrast. These are usually moderately deep to deep, soft or firm, acid, neutral or alkaline brown sands, loams or black cracking or non-cracking clays, and may be sodic at depth.
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#### 4.2.3.3 Not Of Concern Regional Ecosystems

All Not Of Concern regional ecosystems identified and mapped during the field survey and a description of these sites can be found below in Table 19.

**Table 19 Not of Concern regional ecosystems identified on 2RP138057 through ecological field survey**

RE code	General description	Description
11.3.19	<i>Callitris glaucophylla</i> , <i>Corymbia</i> spp. and/or <i>Eucalyptus melanophloia</i> open-forest to woodland on Cainozoic alluvial plains	<i>Callitris glaucophylla</i> woodland usually with codominant eucalypts including <i>Corymbia tessellaris</i> , <i>C. clarksoniana</i> form a well-defined but discontinuous open-forest to woodland canopy (10-14m high). Other trees such as <i>Eucalyptus melanophloia</i> , <i>Angophora melanoxylon</i> or <i>E. populnea</i> may also occur in the canopy as an emergent tree layer (12-25m high). Scattered tall shrubs, such as <i>Acacia excelsa</i> , <i>Alstonia constricta</i> and <i>Callitris glaucophylla</i> are often present. The ground layer is sparse to dense, depending on the tree density, and is dominated by grasses. Dominant or common grasses include <i>Heteropogon contortus</i> , <i>Eriachne helmsii</i> , <i>Aristida holathera</i> , <i>Aristida calycina</i> var. <i>praealta</i> and <i>Perotis rara</i> . <i>Setaria surgens</i> may become locally prominent in badly disturbed areas. The forb diversity is relatively low but may become seasonally prominent. Occurs on rises associated with the levees and higher alluvial plains and terraces of major river systems. The soils are deep to very deep, earthy sands and associated sandy-surfaced texture contrast soils and siliceous sands.
11.5.1	<i>Eucalyptus crebra</i> , <i>Callitris glaucophylla</i> , <i>Angophora leiocarpa</i> , <i>Allocasuarina luehmannii</i> woodland on Cainozoic sandplains/remnant surfaces	<i>Eucalyptus crebra</i> and/or <i>E. populnea</i> +/- <i>Angophora leiocarpa</i> +/- <i>E. woollsiana</i> (in south of bioregion) dominate the woodland (to open-woodland) canopy. A low tree layer dominated by <i>Allocasuarina luehmannii</i> +/- <i>Melaleuca decora</i> +/- <i>Callitris glaucophylla</i> +/- <i>C. endlicheri</i> is usually present. In some areas <i>Allocasuarina luehmannii</i> low woodland is the dominant layer. The ground cover is usually sparse and dominated by perennial



		grasses. Occurs on Cainozoic sandplains, especially outwash from weathered sandstones. Duplex soils with sandy surfaces.
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#### 4.2.3.4 Regrowth

No mappable regrowth was observed on 2RP138057.

#### 4.2.3.5 Sensitive Areas

As the majority of native vegetation on 2RP138057 has been cleared, all remnants are important for retaining native fauna and flora habitat on the property. The bulk of native vegetation occurs at the extreme northern end of the property in association with Wambo Creek. Vegetation in this area is connected to other riparian vegetation associated with Wambo Creek, giving it local value as a corridor for the movement of wildlife and dispersal of flora. This area of the property is likely to provide significant habitat for some fauna groups e.g. woodland birds, frogs, arboreal mammals and reptiles.

In summary, the field survey demonstrated that 2RP138057 contains locally significant vegetated and non-remnant areas having value to flora and fauna, which include but are not limited to, the following:

- riparian vegetation fringing Wambo Creek and the associated woodland patches on the adjoining floodplain and levees;
- white Cypress Pine clumps scattered throughout cleared parts of the property;
- an ephemeral wetland and the associated watercourse channel at Boobook site O15 which contains a population of the near threatened Blake's Spike-rush.

#### 4.2.4 Wetland Ecosystems

Wambo Creek is the main watercourse and forms the northern boundary of the property. It is fringed by Queensland Blue Gum *Eucalyptus tereticornis* and/or River Red Gum *E. camaldulensis* woodland with scattered White Cypress Pine *Callitris glaucophylla*, Poplar Box *E. populnea* and Rough-barked Apple *Angophora floribunda*. At the time of the survey the creek was flowing, hence, the presence of ephemeral waterholes could not be determined. An area with rocky substrate within the creek bed was observed at Boobook site O16.

Several other minor watercourses drain into Wambo Creek at the northern end of the property. These have had most of the woody vegetation removed, however, the ground flora (including wetland species) is generally intact. A small lagoon (c. 70m long x 10m wide) was noted within one of these watercourses at Boobook site O15. Other swampy areas were noted at Boobook sites O110 and O112.

No gilgais, springs or other wetland types were observed on the property. There are no DERM referable wetlands mapped for the property.

#### 4.2.5 Disturbance

Existing disturbances on 2RP138057 include substantial areas of cleared land, which have been entirely grazed. Internal vehicle tracks and fence lines are present. Other infrastructure associated with grazing is present including stock yards. Virtually all regrowth on the property has been previously treated.

### 5. Recommendations

- Where possible infrastructure should be sited in existing clearings and avoid clearing of remnant vegetation.
- Where there is no reasonable alternative to siting proposed infrastructure in remnant vegetation, clearing should proceed in accordance with relevant statutory conditions.
- Clearing of vegetation along Wambo Creek and any vegetated parts of minor watercourses should be avoided where possible; existing crossings should be utilised for positioning of linear infrastructure. Where unavoidable, clearing or other disturbances should be minimised and limited to that which is in accordance with applicable regulatory approvals. Disturbance to the rocky bed of Wambo Creek should especially be avoided at Boobook site O16.
- Where possible the entrance to the property should utilise existing clearings along the road corridor (Condamine-Kogan Road) and avoid disturbance to habitat features such as hollow bearing trees and large logs.
- Should infrastructure be required to be placed with remnant vegetation along Wambo Creek more detailed targeted surveys should be undertaken for the Brigalow Woodland Snail *Adclarkia cameroni*.
- Any disturbance should be avoided to the population of Blake's Spike-rush *Eleocharis blakeana* at Boobook site O15.
- A fauna spotter should be engaged prior to and during construction to identify potential habitat features of significance to fauna (e.g. large hollow logs and hollow trees) including within existing clearings.

### 6. References

Eyre, T.J., Kelly, A.L., Neldner, V.J., Wilson, B.A., Ferguson, D.J., Laidlaw, M.J. and Franks, A.J. (2011) *BioCondition – A Condition Assessment Framework for Terrestrial Biodiversity in Queensland. Assessment Manual. Version 2.1*. DERM, Brisbane.

Hando, R. and Hando, V. (eds) (1997) *Going Bush With Chinchilla Nats*. Second Edition. Chinchilla Field Naturalists' Club, Chinchilla.

Neldner, V.J., Wilson, B. A., Thompson, E.J. and Dillewaard, H.A. (2005) *Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland. Version 3.1*. Queensland Herbarium, Environmental Protection Agency, Brisbane.



## **7. Attachments**

### **Appendix A - Results of EPBC Protected Matters Search Tool conducted on 15 July 2011**



Australian Government

Department of Sustainability, Environment,  
Water, Population and Communities

# EPBC Act Protected Matters Report: Coordinates

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 about the EPBC Act including significance guidelines, forms and application process details can be found at <http://www.environment.gov.au/epbc/assessmentsapprovals/index.html>

**Report created: 15/07/11 13:48:43**



## [Summary](#)

## [Details](#)

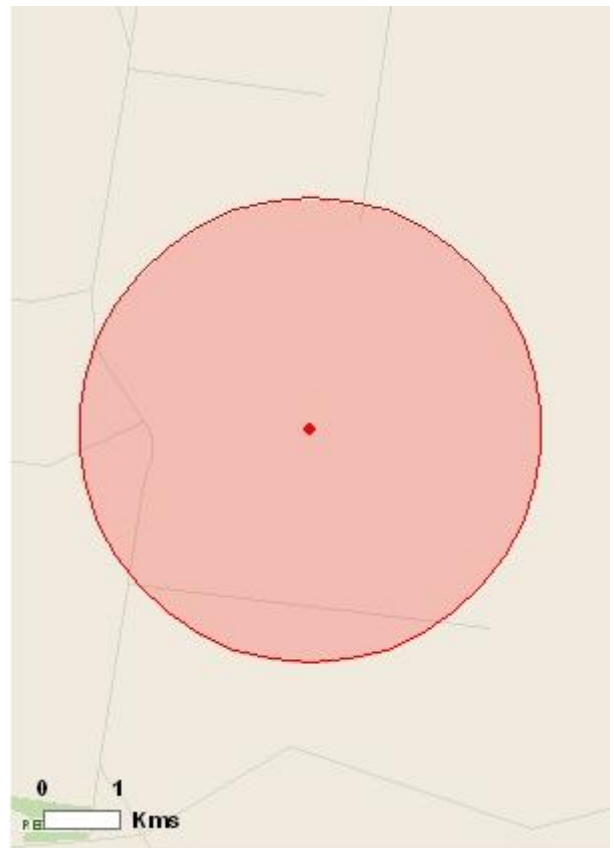
[Matters of NES](#)

[Other matters protected by  
the EPBC Act](#)

[Extra Information](#)

## [Caveat](#)

## [Acknowledgements](#)



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Buffer: 3.0Km

# 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 - see <http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html>.

<a href="#">World Heritage Properties:</a>	None
<a href="#">National Heritage Places:</a>	None
<a href="#">Wetlands of International Significance (Ramsar Wetlands):</a>	1
<a href="#">Great Barrier Reef Marine Park:</a>	None
<a href="#">Commonwealth Marine Areas:</a>	None
<a href="#">Threatened Ecological Communities:</a>	4
<a href="#">Threatened Species:</a>	10
<a href="#">Migratory Species:</a>	11

## 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 and the heritage values of a place on the Register of the National Estate. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage/index.html>

Please note that the current dataset on Commonwealth land is not complete. Further information on Commonwealth land would need to be obtained from relevant sources including Commonwealth agencies, local agencies, and land tenure maps.

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. Information on EPBC Act permit requirements and application forms can be found at <http://www.environment.gov.au/epbc/permits/index.html>.

<a href="#">Commonwealth Lands:</a>	None
<a href="#">Commonwealth Heritage Places:</a>	None
<a href="#">Listed Marine Species:</a>	9
<a href="#">Whales and Other Cetaceans:</a>	None

<a href="#">Critical Habitats:</a>	None
<a href="#">Commonwealth Reserves:</a>	None

## Report Summary for Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

<a href="#">Place on the RNE:</a>	None
<a href="#">State and Territory Reserves:</a>	None
<a href="#">Regional Forest Agreements:</a>	None
<a href="#">Invasive Species:</a>	11
<a href="#">Nationally Important Wetlands:</a>	None

## Details

### Matters of National Environmental Significance

#### Wetlands of International Significance (RAMSAR Sites) [\[ Resource Information \]](#)

Name	Proximity
<a href="#">Narran lake nature reserve</a>	Upstream from Ramsar site

#### 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
<a href="#">Natural grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland</a>	Critically Endangered	Community likely to occur within area
<a href="#">White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland</a>	Critically Endangered	Community may occur within area
<a href="#">Brigalow (Acacia harpophylla dominant and co-dominant)</a>	Endangered	Community known to occur within area
<a href="#">Weeping Myall Woodlands</a>	Endangered	Community likely to occur within area

#### Threatened Species [\[ Resource Information \]](#)

Name	Status	Type of Presence
<b>BIRDS</b>		
<a href="#">Erythroriorchis radiatus</a> Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Geophaps scripta scripta</a> Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Neochmia ruficauda ruficauda</a>		

Star Finch (eastern), Star Finch (southern) [26027] Endangered Species or species habitat likely to occur within area

[Rostratula australis](#)

Australian Painted Snipe [77037] Vulnerable Species or species habitat may occur within area

## FISH

[Maccullochella peelii peelii](#)

Murray Cod, Cod, Goodoo [68443] Vulnerable Species or species habitat may occur within area

## MAMMALS

[Chalinolobus dwyeri](#)

Large-eared Pied Bat, Large Pied Bat [183] Vulnerable Species or species habitat may occur within area

[Nyctophilus timoriensis \(South-eastern form\)](#)

Greater Long-eared Bat, South-eastern Long-eared Bat [66888] Vulnerable Species or species habitat may occur within area

## PLANTS

[Cadellia pentastylis](#)

Ooline [9828] Vulnerable Species or species habitat likely to occur within area

[Homopholis belsonii](#)

[2406] Vulnerable Species or species habitat may occur within area

## REPTILES

[Furina dunmalli](#)

Dunmall's Snake [59254] Vulnerable Species or species habitat may occur within area

## Migratory Species

[\[ Resource Information \]](#)

Name	Status	Type of Presence
------	--------	------------------

### Migratory Marine Birds

[Apus pacificus](#)

Fork-tailed Swift [678] Species or species habitat may occur within area

[Ardea alba](#)

Great Egret, White Egret [59541] Species or species habitat may occur within area

[Ardea ibis](#)

Cattle Egret [59542] Species or species habitat may occur within area

### Migratory Terrestrial Species

[Haliaeetus leucogaster](#)

White-bellied Sea-Eagle [943] Species or species habitat likely to occur within area

[Hirundapus caudacutus](#)

White-throated Needletail [682] Species or species habitat may occur within area

[Merops ornatus](#)

Rainbow Bee-eater [670] Species or species habitat may occur within area

### Migratory Wetlands Species

[Ardea alba](#)

Great Egret, White Egret [59541] Species or species habitat may occur within area

[Ardea ibis](#)

Cattle Egret [59542] Species or species habitat may occur within area

[Gallinago hardwickii](#)

Latham's Snipe, Japanese Snipe Species or species habitat may occur within area

[863]

[Nettapus coromandelianus albigularis](#)

Australian Cotton Pygmy-goose  
[25979]

Species or species habitat may occur within area

[Rostratula benghalensis s. lat.](#)

Painted Snipe [889]

Species or species habitat may occur within area

## Other Matters Protected by the EPBC Act

### Listed Marine Species [ [Resource Information](#) ]

Name	Status	Type of Presence
<b>Birds</b>		
<a href="#">Apus pacificus</a>		
Fork-tailed Swift [678]		Species or species habitat may occur within area
<a href="#">Ardea alba</a>		
Great Egret, White Egret [59541]		Species or species habitat may occur within area
<a href="#">Ardea ibis</a>		
Cattle Egret [59542]		Species or species habitat may occur within area
<a href="#">Gallinago hardwickii</a>		
Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
<a href="#">Haliaeetus leucogaster</a>		
White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
<a href="#">Hirundapus caudacutus</a>		
White-throated Needletail [682]		Species or species habitat may occur within area
<a href="#">Merops ornatus</a>		
Rainbow Bee-eater [670]		Species or species habitat may occur within area
<a href="#">Nettapus coromandelianus albigularis</a>		
Australian Cotton Pygmy-goose [25979]		Species or species habitat may occur within area
<a href="#">Rostratula benghalensis s. lat.</a>		
Painted Snipe [889]		Species or species habitat may 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 Resources Audit, 2001.

Name	Status	Type of Presence
<b>Frogs</b>		
<a href="#">Bufo marinus</a>		
Cane Toad [1772]		Species or species habitat likely to occur within area
<b>Mammals</b>		
<a href="#">Capra hircus</a>		
Goat [2]		Species or species habitat may occur within area
<a href="#">Felis catus</a>		
Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area



[Oryctolagus cuniculus](#)

Rabbit, European Rabbit [128]

Species or species habitat likely to occur within area

[Sus scrofa](#)

Pig [6]

Species or species habitat may occur within area

[Vulpes vulpes](#)

Red Fox, Fox [18]

Species or species habitat likely to occur within area

## Plants

[Alternanthera philoxeroides](#)

Alligator Weed [11620]

Species or species habitat may occur within area

[Lycium ferocissimum](#)

African Boxthorn, Boxthorn [19235]

Species or species habitat may 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

[Rubus fruticosus aggregate](#)

Blackberry, European Blackberry [68406]

Species or species habitat may 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 Heritage and Register of National Estate properties, Wetlands of International 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

-26.95869 150.52087

## 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](#)

-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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Last updated: Thursday, 16-Sep-2010 09:13:25 EST

[Department of Sustainability, Environment, Water, Population and Communities](#)

GPO Box 787

Canberra ACT 2601 Australia

+61 2 6274 1111 [ABN](#)

| [Australian Government](#) |

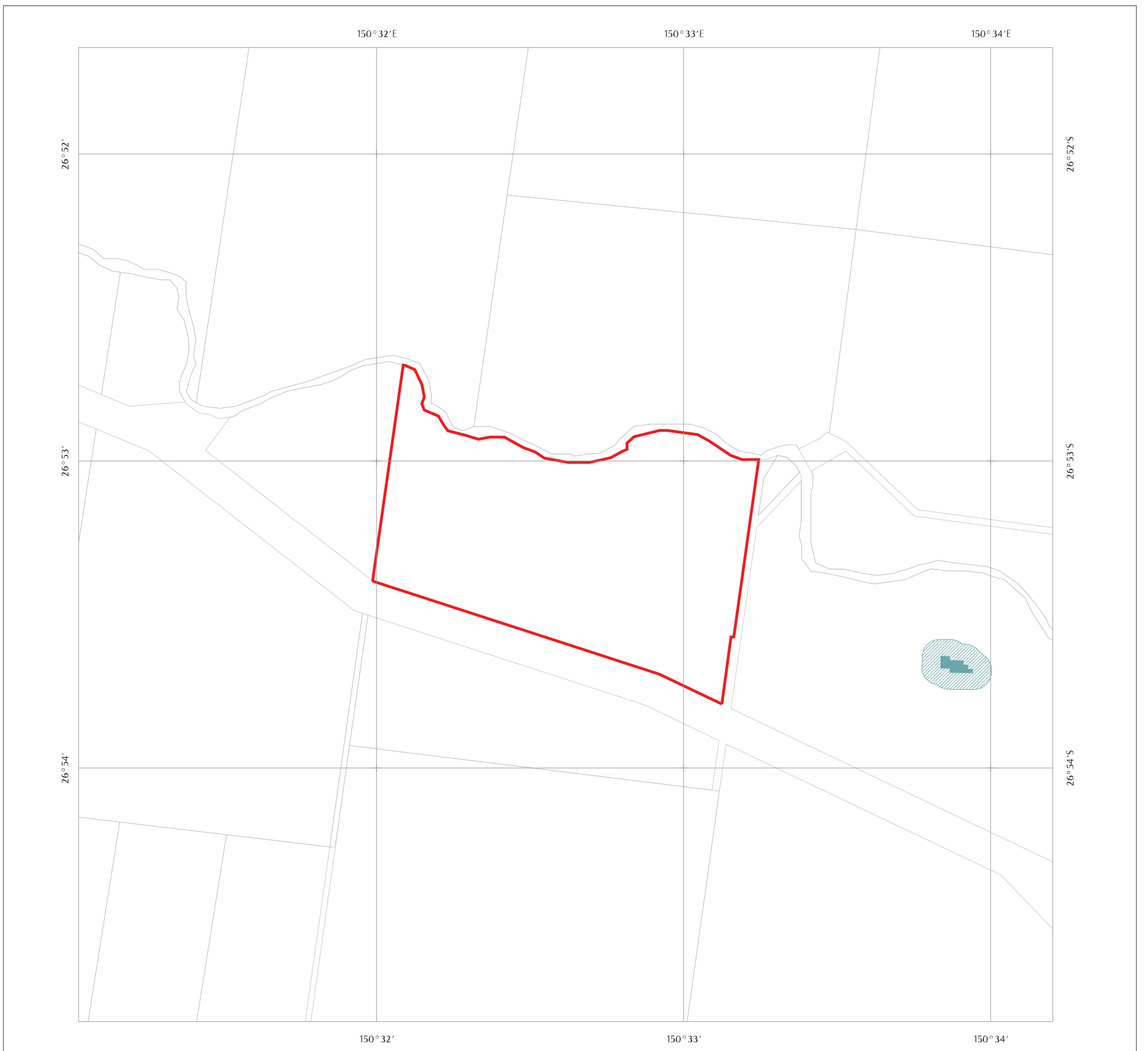
## Appendix B - Results of Wildnet Search conducted on 19 July 2011

Class	Family	Scientific Name	Common Name	Conservation Status
amphibians	Bufonidae	<i>Rhinella marina</i>	cane toad	
amphibians	Hylidae	<i>Litoria caerulea</i>	common green treefrog	C
amphibians	Hylidae	<i>Litoria latopalmata</i>	broad palmed rocketfrog	C
amphibians	Hylidae	<i>Cyclorana novaehollandiae</i>	eastern snapping frog	C
amphibians	Limnodynastidae	<i>Platyplectrum ornatum</i>	ornate burrowing frog	C
amphibians	Limnodynastidae	<i>Limnodynastes tasmaniensis</i>	spotted grassfrog	C
amphibians	Limnodynastidae	<i>Limnodynastes terraereginae</i>	scarlet sided pobblebonk	C
birds	Acanthizidae	<i>Gerygone fusca</i>	western gerygone	C
birds	Acanthizidae	<i>Acanthiza reguloides</i>	buff-rumped thornbill	C
birds	Acanthizidae	<i>Acanthiza uropygialis</i>	chestnut-rumped thornbill	C
birds	Acanthizidae	<i>Smicromis brevirostris</i>	weebill	C
birds	Artamidae	<i>Strepera graculina</i>	pieb currawong	C
birds	Artamidae	<i>Cracticus torquatus</i>	grey butcherbird	C
birds	Charadriidae	<i>Vanellus tricolor</i>	banded lapwing	C
birds	Cuculidae	<i>Chalcites lucidus</i>	shining bronze-cuckoo	C
birds	Falconidae	<i>Falco cenchroides</i>	nankeen kestrel	C
birds	Meliphagidae	<i>Philemon corniculatus</i>	noisy friarbird	C
birds	Meliphagidae	<i>Lichenostomus leucotis</i>	white-eared honeyeater	C
birds	Meliphagidae	<i>Lichenostomus chrysops</i>	yellow-faced honeyeater	C
birds	Meliphagidae	<i>Melithreptus brevirostris</i>	brown-headed honeyeater	C
birds	Pachycephalidae	<i>Pachycephala rufiventris</i>	rufous whistler	C
birds	Petroicidae	<i>Eopsaltria australis</i>	eastern yellow robin	C
birds	Pomatostomidae	<i>Pomatostomus temporalis</i>	grey-crowned babbler	C
mammals	Dasyuridae	<i>Sminthopsis murina</i>	common dunnart	C
mammals	Dasyuridae	<i>Planigale tenuirostris</i>	narrow-nosed planigale	C
mammals	Dasyuridae	<i>Sminthopsis macroura</i>	stripe-faced dunnart	C
mammals	Muridae	<i>Mus musculus</i>	house mouse	
mammals	Tachyglossidae	<i>Tachyglossus aculeatus</i>	short-beaked echidna	C
reptiles	Agamidae	<i>Pogona barbata</i>	bearded dragon	C

reptiles	Elapidae	<i>Suta suta</i>	myall snake	C
reptiles	Elapidae	<i>Rhinoplocephalus boschmai</i>	Carpentaria whip snake	C
reptiles	Elapidae	<i>Suta dwyeri</i>		C
reptiles	Elapidae	<i>Denisonia devisi</i>	De Vis' banded snake	C
reptiles	Elapidae	<i>Hoplocephalus bitorquatus</i>	pale-headed snake	C
reptiles	Gekkonidae	<i>Heteronotia binoei</i>	Bynoe's gecko	C
reptiles	Gekkonidae	<i>Strophurus taenicauda</i>	golden-tailed gecko	NT
reptiles	Gekkonidae	<i>Diplodactylus vittatus</i>	wood gecko	C
reptiles	Gekkonidae	<i>Lucasium steindachneri</i>	Steindachner's gecko	C
reptiles	Pygopodidae	<i>Pygopus schraderi</i>		C
reptiles	Scincidae	<i>Carlia pectoralis</i>		C
reptiles	Typhlopidae	<i>Ramphotyphlops ligatus</i>		C
reptiles	Varanidae	<i>Varanus panoptes</i>	yellow-spotted monitor	C
higher dicots	Mimosaceae	<i>Acacia chinchillensis</i>		C
higher dicots	Picrodendraceae	<i>Petalostigma pubescens</i>	quinine tree	C



## **Appendix C - Results of DERM Referrable Wetland search conducted on 26 July 2011**



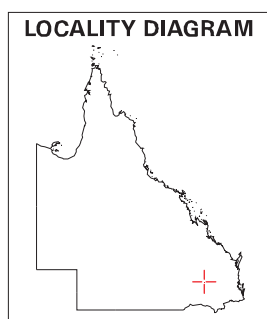
### Map of Referable Wetlands

Requested By: BOOBOOK1@BIGPOND.COM  
Date: 26 Jul 11 Time: 16.00.13

Centered on Lot on Plan:  
2 RP138057



Queensland  
Government



This scale bar is approximate only  
Horizontal Datum: Geocentric Datum of Australia 1994 (GDA94)  
This product is unprojected and is not suitable for measuring distances

#### Legend

- Selected Land Parcel
- Property Boundary

#### GBR Wetland Protection Area

- Wetland
- Trigger Area

#### Wetland Management Area

- Wetland
- Trigger Area

This map should only be used to apply policies outlined in the Temporary State Planning Policy: Protecting Wetlands of High Ecological Significance in Great Barrier Reef Catchments (SPP for GBR Wetlands).

Information shown on the map includes multiple spatial datasets that define policies stated in the Temporary State Planning Policy: Protecting Wetlands of High Ecological Significance in Great Barrier Reef Catchments (SPP for GBR Wetlands). Datasets include wetlands, roads, rail lines and cadastral boundaries.

All datasets are current as at 30 April 2010.

The maps are produced at a scale relevant to the size of the lot on plan identified and should be printed as A4 size in portrait orientation. Consideration of the effects of mapped scale is necessary when interpreting data at a large scale i.e. property level. For property assessment, digital linework should be used as a guide only.

The Wetlands Regulatory Map is A4 portrait and should be printed at this size.

For further information or assistance with interpretation of this product, please contact the Department of Environment and Resource Management at [planning.support@derm.qld.gov.au](mailto:planning.support@derm.qld.gov.au)

## Appendix D - Fauna recorded at the 2RP138057 during field survey

**Key:** LC = least concern; M = migratory; NT = near threatened.

CLASS	FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
Amphibians	Hylidae	<i>Litoria rubella</i>	Red Tree frog	LC	
Amphibians	Myobatrachidae	<i>Pseudophryne major</i>	Great Brown Broodfrog	LC	
Amphibians	Myobatrachidae	<i>Uperoleia</i> sp.	A red-groined toadlet	LC	
Birds	Acanthizidae	<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill	LC	
Birds	Alaudidae	<i>Mirafra javanica</i>	Horsfield's Bushlark	LC	
Birds	Artamidae	<i>Cracticus tibicen</i>	Australian Magpie	LC	
Birds	Artamidae	<i>Cracticus torquatus</i>	Grey Butcherbird	LC	
Birds	Cacatuidae	<i>Cacatua galerita</i>	Sulphur-crested Cockatoo	LC	
Birds	Cacatuidae	<i>Cacatua sanguinea</i>	Little Corella	LC	
Birds	Cacatuidae	<i>Eolophus roseicapillus</i>	Galah	LC	
Birds	Cacatuidae	<i>Nymphicus hollandicus</i>	Cockatiel	LC	
Birds	Campephagidae	<i>Coracina maxima</i>	Ground Cuckoo-shrike	LC	



CLASS	FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
Birds	Campephagidae	<i>Coracina papuensis</i>	White-bellied Cuckoo-shrike	LC	
Birds	Columbidae	<i>Geopelia striata</i>	Peaceful Dove	LC	
Birds	Coraciidae	<i>Eurystomus orientalis</i>	Dollarbird	LC	
Birds	Corcoracidae	<i>Struthidea cinerea</i>	Apostlebird	LC	
Birds	Corvidae	<i>Corvus orru</i>	Torresian Crow	LC	
Birds	Cuculidae	<i>Eudynamis scolopaceus</i>	Eastern Koel	LC	
Birds	Cuculidae	<i>Centropus phasianinus</i>	Pheasant Coucal	LC	
Birds	Estrildidae	<i>Taeniopygia bichenovii</i>	Double-barred Finch	LC	
Birds	Halcyonidae	<i>Dacelo novaeguineae</i>	Laughing Kookaburra	LC	
Birds	Halcyonidae	<i>Todiramphus sanctus</i>	Sacred Kingfisher	LC	
Birds	Meliphagidae	<i>Manorina melanocephala</i>	Noisy Miner	LC	
Birds	Meliphagidae	<i>Philemon citreogularis</i>	Little Friarbird	LC	
Birds	Meliphagidae	<i>Plectorhyncha lanceolata</i>	Striped Honeyeater	LC	
Birds	Meropidae	<i>Merops ornatus</i>	Rainbow Bee-eater	LC	M
Birds	Monarchidae	<i>Grallina</i>	Magpie-lark	LC	

CLASS	FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
		<i>cyanoleuca</i>			
Birds	Motacillidae	<i>Anthus novaeseelandiae</i>	Australasian Pipit	LC	
Birds	Nectariniidae	<i>Dicaeum hirundinaceum</i>	Mistletoebird	LC	
Birds	Oriolidae	<i>Oriolus sagittatus</i>	Olive-backed Oriole	LC	
Birds	Pachycephalidae	<i>Colluricincla harmonica</i>	Grey Shrike-thrush	LC	
Birds	Pachycephalidae	<i>Pachycephala rufiventris</i>	Rufous Whistler	LC	
Birds	Pardalotidae	<i>Pardalotus striatus</i>	Striated Pardalote	LC	
Birds	Petroicidae	<i>Microeca fascinans</i>	Jacky Winter	LC	
Birds	Pomatostomidae	<i>Pomatostomus temporalis</i>	Grey-crowned Babbler	LC	
Birds	Psittacidae	<i>Platycercus adscitus</i>	Pale-headed Rosella	LC	
Birds	Psittacidae	<i>Psephotus haematonotus</i>	Red-rumped Parrot	LC	
Birds	Psittacidae	<i>Trichoglossus chlorolepidotus</i>	Scaly-breasted Lorikeet	LC	
Birds	Rhipiduridae	<i>Rhipidura albiscapa</i>	Grey Fantail	LC	
Birds	Rhipiduridae	<i>Rhipidura leucophrys</i>	Willie Wagtail	LC	
Birds	Sturnidae	<i>Sturnus tristis</i>	Common		

CLASS	FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
			Mynah*		
Insects	Nymphalidae	<i>Danaus chrysippus petilia</i>	Lesser Wanderer		
Insects	Nymphalidae	<i>Euploea core corinna</i>	Common Crow		
Insects	Nymphalidae	<i>Hypocysta</i> sp.	A Ringlet		
Insects	Nymphalidae	<i>Junonia villida calybe</i>	Meadow Argus		
Insects	Nymphalidae	<i>Tirumala hamata</i>	Blue Tiger		
Insects	Nymphalidae	<i>Vanessa itea</i>	Yellow Admiral		
Insects	Papilionidae	<i>Papilio aegeus aegeus</i>	Orchard Swallowtail		
Insects	Papilionidae	<i>Papilio anactus</i>	Dainty Swallowtail		
Insects	Pieridae	<i>Belenois java teutonia</i>	Caper White		
Insects	Pieridae	<i>Catopsilia pomona pomona</i>	Lemon Migrant		
Mammals	Leporidae	<i>Oryctolagus cuniculus</i>	Rabbit*		
Mammals	Macropodidae	<i>Wallabia bicolor</i>	Swamp Wallaby	LC	
Mammals	Suidae	<i>Sus scrofa</i>	Pig*		
Reptiles	Gekkonidae	<i>Heteronotia binoei</i>	Bynoe's Gecko	LC	
Reptiles	Scincidae	<i>Carlia pectoralis</i>	A Rainbow Skink	LC	

CLASS	FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
Reptiles	Scincidae	<i>Cryptoblepharus pulcher pulcher</i>	Elegant Snake-eyed Skink	LC	
Reptiles	Scincidae	<i>Lygisaurus foliorum</i>	Burnett's Skink	LC	

## Appendix E - Flora recorded at 2RP138057 during field survey

**Key:** LC = least concern; NT = near threatened; TAR = Type A restricted plant.

FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
Acanthaceae	<i>Brunoniella australis</i>	Blue Trumpet	LC	
Acanthaceae	<i>Rostellularia adscendens</i>	A Justicia	LC	
Adiantaceae	<i>Cheilanthes distans</i>	A Fern	LC	
Adiantaceae	<i>Cheilanthes sieberi</i>	Mulga Fern	LC	
Aizoaceae	<i>Tetragonia tetragonioides</i>	Warrigal Greens, Native Spinach	LC	
Alismataceae	<i>Damasonium minus</i>	Starfruit	LC	
Amaranthaceae	<i>Nyssanthus</i> sp. (infertile)	A Barbed-wire Weed	LC	
Apiaceae	<i>Centella asiatica</i>	Indian Pennywort	LC	
Apiaceae	<i>Daucus glochidiatus</i>	Native Carrot	LC	
Apocynaceae	<i>Carissa ovata</i>	Currantbush	LC	
Araliaceae	<i>Hydrocotyle acutiloba</i>	A Pennywort	LC	
Asphodelaceae	<i>Bulbine alata</i>	Bulbine Lily, Native Onion	LC	
Asteraceae	<i>Calotis cuneifolia</i>	Purple Burr Daisy	LC	
Asteraceae	<i>Centipeda minima</i>	Desert Sneezeweed	LC	
Asteraceae	<i>Chrysocephalum apiculatum</i>	Yellow Buttons	LC	
Asteraceae	<i>Eclipta platyglossa</i>	Yellow Twin-	LC	

FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
		heads		
Asteraceae	<i>Epaltes australis</i>	Spreading Nut-heads	LC	
Asteraceae	<i>Ozothamnus diotophyllus</i>	Heath Everlasting	LC	
Asteraceae	<i>Podolepis arachnoides</i>	Clustered Copper-Wire Daisy	LC	
Asteraceae	<i>Podolepis longipedata</i>	Tall Copper-Wire Daisy	LC	
Asteraceae	<i>Senecio</i> sp. (infertile)	A Fireweed	LC	
Asteraceae	<i>Sigesbeckia orientalis</i>	Indian Weed	LC	
Asteraceae	<i>Vittadinia</i> sp. (infertile)	A Fuzzweed	LC	
Boraginaceae	<i>Cynoglossum australe</i>	Australian Hound's Tongue	LC	
Brassicaceae	<i>Lepidium</i> sp.	A Peppercross	LC	
Campanulaceae	<i>Lobelia stenophylla</i>	A Lobelia	LC	
Campanulaceae	<i>Wahlenbergia</i> sp. (infertile)	A Bluebell	LC	
Casuarinaceae	<i>Allocasuarina luehmannii</i>	Bulloak	LC	
Chenopodiaceae	<i>Chenopodium</i> sp. (infertile)	A Goosefoot	LC	
Chenopodiaceae	<i>Einadia</i> sp. (infertile)	A Saltbush	LC	
Chenopodiaceae	<i>Enchylaena tomentosa</i>	Ruby Saltbush	LC	

FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
Chenopodiaceae	<i>Maireana microphylla</i>	Cotton Bush	LC	
Chenopodiaceae	<i>Sclerolaena birchii</i>	Galvanised Burr	LC	
Commelinaceae	<i>Commelina</i> sp.	A Scurvy Weed	LC	
Commelinaceae	<i>Murdannia graminea</i>	Slug Herb	LC	
Convolvulaceae	<i>Cuscuta</i> sp.	A Dodder	LC	
Convolvulaceae	<i>Dichondra repens</i>	Kidney Weed	LC	
Convolvulaceae	<i>Evolvulus alsinoides</i>	Tropical Speedwell	LC	
Cupressaceae	<i>Callitris glaucophylla</i>	White Cypress Pine	LC	
Cyperaceae	<i>Carex appressa</i>	Tall Sedge	LC	
Cyperaceae	<i>Cyperus betchei</i>	A Sedge	LC	
Cyperaceae	<i>Cyperus difformis</i>	Rice Sedge, Dirty Dora	LC	
Cyperaceae	<i>Cyperus gracilis</i>	Whisker Grass	LC	
Cyperaceae	<i>Cyperus sanguinolentus</i>	A Sedge	LC	
Cyperaceae	<i>Cyperus</i> (infertile) sp.	A Sedge	LC	
Cyperaceae	<i>Eleocharis blakeana</i>	Blake's Spike rush	NT	
Cyperaceae	<i>Eleocharis plana</i>	Ribbed Spike rush	LC	
Cyperaceae	<i>Fimbristylis dichotoma</i>	Common Fringe-rush	LC	
Cyperaceae	<i>Gahnia aspera</i>	Rough Saw-	LC	

FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
		sedge		
Fabaceae	<i>Aeschynomene indica</i>	Budda Pea	LC	
Fabaceae	<i>Cullen tenax</i>	Tough Scurf-pea, Emu-foot	LC	
Fabaceae	<i>Glycine</i> sp.	A Glycine	LC	
Fabaceae	<i>Glycine tomentella</i>	Woolly Glycine	LC	
Fabaceae	<i>Vigna</i> sp.	A Pea	LC	
Gentianaceae	<i>Schenkia australis</i>	Spike Centaury	LC	
Goodeniaceae	<i>Goodenia delicata</i>	A Goodenia	LC	
Goodeniaceae	<i>Goodenia glabra</i>	Smooth Goodenia	LC	
Goodeniaceae	<i>Goodenia gracilis</i>	Slender Goodenia	LC	
Hemerocallidaceae	<i>Dianella longifolia</i>	Smooth Flax-lily	LC	
Hydrocharitaceae	<i>Ottelia ovalifolia</i>	Swamp Lily, Water Poppy	LC	
Juncaceae	<i>Juncus</i> sp. (infertile)	A Rush	LC	
Juncaceae	<i>Juncus usitatus</i>	Common Rush	LC	
Lamiaceae	<i>Plectranthus parviflorus</i>	Cockspur Flower	LC	
Laxmanniaceae	<i>Lomandra longifolia</i>	Long-leaved Matrush	LC	
Loranthaceae	<i>Amyema linophylla</i>	Buloke Mistletoe	LC	
Loranthaceae	<i>Lysiana exocarpi</i> subsp. <i>tenuis</i>	Harlequin Mistletoe	LC	



FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
Malvaceae	<i>Sida hackettiana</i>	High Sida	LC	
Malvaceae	<i>Sida</i> sp. (infertile)	A Flannel Weed	LC	
Marsileaceae	<i>Marsilea</i> sp.	Nardoo	LC	
Mimosaceae	<i>Acacia excelsa</i>	Ironwood	LC	
Mimosaceae	<i>Acacia salicina</i>	Doolan	LC	
Myoporaceae	<i>Myoporum montanum</i>	Western Boobiolla	LC	
Myrtaceae	<i>Angophora floribunda</i>	Rough-barked Apple	LC	
Myrtaceae	<i>Angophora leiocarpa</i>	Smooth-barked Apple, Rusty Gum	LC	
Myrtaceae	<i>Eucalyptus camaldulensis</i>	River Red Gum	LC	
Myrtaceae	<i>Eucalyptus chloroclada</i>	Baradine Red Gum	LC	
Myrtaceae	<i>Eucalyptus populnea</i>	Poplar Box	LC	
Myrtaceae	<i>Eucalyptus tereticornis</i>	Forest Red Gum, Queensland Blue Gum	LC	
Myrtaceae	<i>Leptospermum polygalifolium</i>	Tantoon	LC	
Nyctaginaceae	<i>Boerhavia dominii</i>	Tar Vine	LC	
Onagraceae	<i>Ludwigia peploides</i>	Water Primrose	LC	
Orchidaceae	<i>Cymbidium canaliculatum</i>	Black Orchid	LC/TAR	
Oxalidaceae	<i>Oxalis</i> sp.	A Wood Sorrel	LC	

FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
Pittosporaceae	<i>Pittosporum angustifolium</i>	Weeping Pittosporum, Gumbi Gumbi	LC	
Poaceae	<i>Alloteropsis semialata</i>	Cockatoo Grass	LC	
Poaceae	<i>Aristida caput-medusae</i>	Many-headed Wiregrass	LC	
Poaceae	<i>Aristida echinata</i>	A wiregrass	LC	
Poaceae	<i>Aristida jerichoensis</i> var. <i>subspinulifera</i>	Jericho Wiregrass	LC	
Poaceae	<i>Aristida</i> sp. (infertile)	A Wiregrass	LC	
Poaceae	<i>Arundinella nepalensis</i>	Reedgrass	LC	
Poaceae	<i>Austrostipa verticillata</i>	Slender Bamboo Grass	LC	
Poaceae	<i>Bothriochloa bladhii</i>	Forest Blue Grass	LC	
Poaceae	<i>Chrysopogon fallax</i>	Golden Beard Grass	LC	
Poaceae	<i>Chrysopogon filipes</i>	River Grass	LC	
Poaceae	<i>Cymbopogon refractus</i>	Barbed-wire Grass	LC	
Poaceae	<i>Dichanthium sericeum</i>	Queensland Blue Grass	LC	
Poaceae	<i>Eragrostis brownii</i>	Brown's Lovegrass	LC	
Poaceae	<i>Eragrostis elongata</i>	Clustered Lovegrass	LC	
Poaceae	<i>Eragrostis parviflora</i>	Weeping	LC	

FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
		Lovegrass		
Poaceae	<i>Eremochloa bimaclata</i>	Poverty Grass	LC	
Poaceae	<i>Eriochloa crebra</i>	Cup Grass	LC	
Poaceae	<i>Heteropogon contortus</i>	Black Speargrass	LC	
Poaceae	<i>Imperata cylindrica</i>	Blady Grass	LC	
Poaceae	<i>Leptochloa digitata</i>	Umbrella Canegrass	LC	
Poaceae	<i>Panicum queenslandicum</i>	Yabila Grass	LC	
Poaceae	<i>Paspalidium</i> sp. (infertile)	A Grass	LC	
Poaceae	<i>Paspalum distichum</i>	Water Couch	LC	
Poaceae	<i>Perotis rara</i>	Comet Grass	LC	
Poaceae	<i>Sporobolus elongatus</i>	Slender Rat's Tail Grass	LC	
Poaceae	<i>Tragus australianus</i>	Small Burr Grass	LC	
Polygonaceae	<i>Rumex</i> sp.	A Docks	LC	
Pontederiaceae	<i>Monochoria cyanea</i>	Native Water Hyacinth	LC	
Portulacaceae	<i>Calandrinia eremaea</i>	Small Purslane	LC	
Portulacaceae	<i>Portulaca bicolor</i>	A Pigweed	LC	
Portulacaceae	<i>Portulaca filifolia</i>	Slender Pigweed	LC	
Proteaceae	<i>Grevillea striata</i>	Beefwood	LC	

FAMILY	SCIENTIFIC NAME	COMMON NAME	NC ACT STATUS	EPBC ACT STATUS
Rutaceae	<i>Geijera parviflora</i>	Wilga	LC	
Santalaceae	<i>Santalum lanceolatum</i>	Sandalwood	LC	
Sapindaceae	<i>Dodonaea viscosa</i> subsp. <i>spatulata</i>	Sticky Hopbush	LC	
Solanaceae	<i>Solanum ellipticum</i>	Potato Bush	LC	
Sterculiaceae	<i>Brachychiton populneus</i>	Kurrajong	LC/TAR	
Thymelaeaceae	<i>Pimelea</i> sp.	A Rice-flower	LC	
Viscaceae	<i>Viscum articulatum</i>	Leafless Jointed Mistletoe	LC	
Xanthorrhoeaceae	<i>Xanthorrhoea johnsonii</i>	Forest Grass Tree	LC/TAR	

**Appendix F - Map of field survey sites at 2RP138057**

