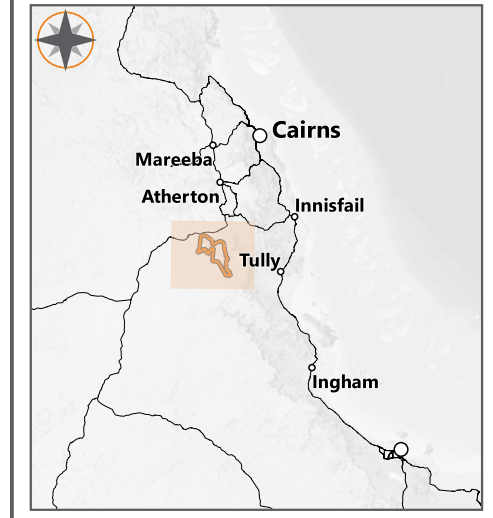


## Chalumbin Wind Farm Threatened Flora Records within the Study Area

Figure 5.3

- ⋯ Study Area
- Wind Turbine
- ◆ Met-mast
- Project Footprint
- Threatened Flora Records (WildNET)**
- ★ *Alloxylon flammeum*
- ★ *Dansiea elliptica*
- ★ *Dodonaea uncinata*
- ★ *Firmiana papuana*
- ★ *Homoranthus porteri*
- ★ *Melaleuca sylvana*
- ★ *Oenanthe javanica*
- ★ *Prostanthera clotteniana*
- ★ *Scleromitron polycladum*
- ★ *Solanum hamulosum*
- ★ *Triplarina nitchaga*
- World Heritage Area Boundary
- Protected Areas Estate
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

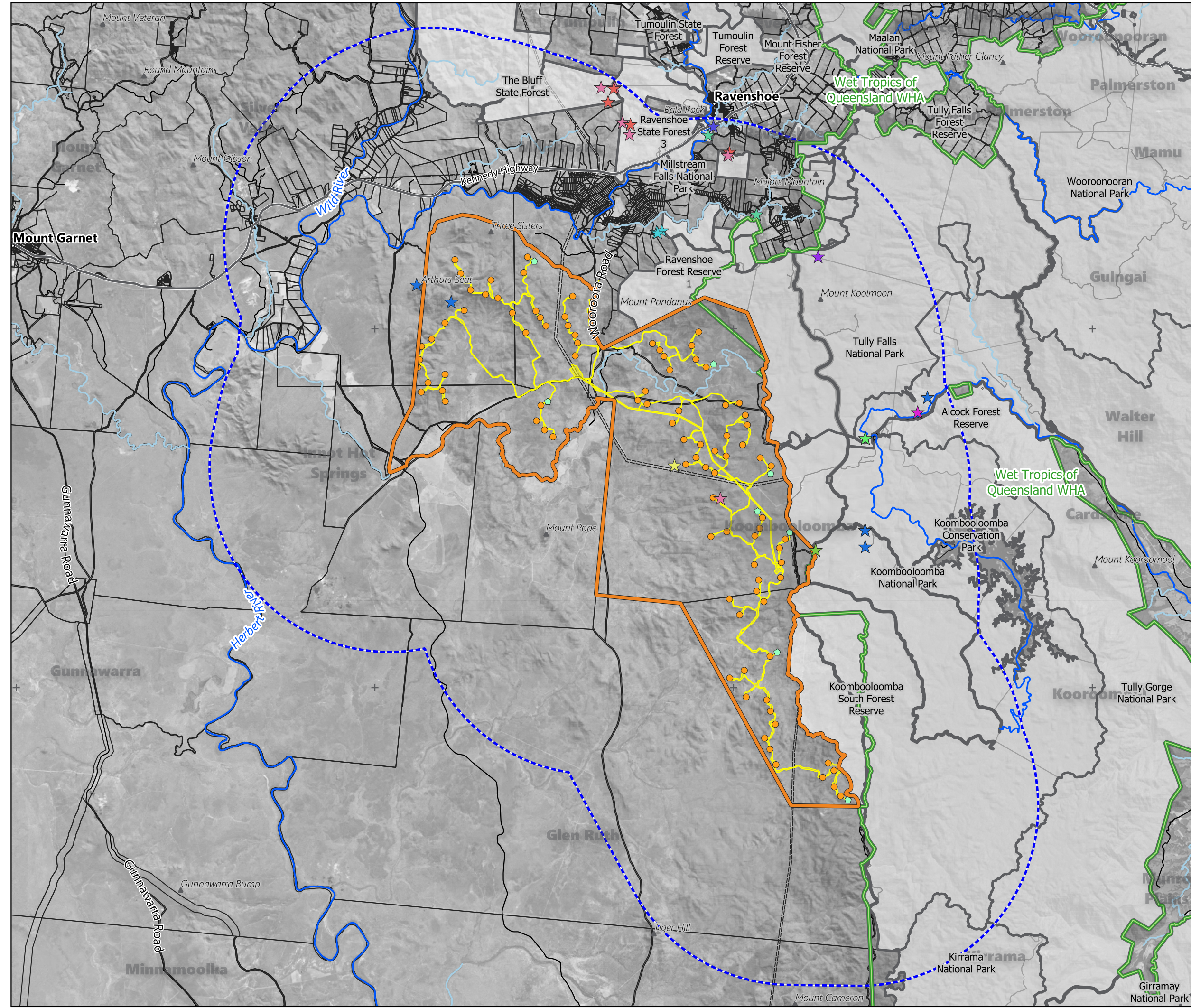
Date: 2021-12-11      Reviewed: CC  
 Author: TOD              Project: EPU-004



0      5      10 km

1:200000 @ A3

**Data Source(s):**  
 Digital Cadastral Database - Department of Natural Resources, Mines and Energy (2021)  
 Queensland Imagery Whole Of State  
 Satellite Public Basemap Service





## 5.7 Threatened Fauna Species

A list of threatened fauna species with potential to occur within the study area (the Project area plus a 10 km buffer) based on the desktop assessment is provided in **Table 5-4**. Threatened fauna records within the study area are shown on **Figure 5-4**.

**Table 5-4 Threatened Fauna Species Potentially Occurring within the Study Area**

Species Name	EPBC Act Status	NC Act Status	Species Recorded in Study Area (Wildlife Online)
<b>Amphibians</b>			
<i>Litoria dayi</i> , Australian lace-lid	Vulnerable	Vulnerable	✓ (record from 1974)
<i>Litoria nyakalensis</i> , mountain mistfrog	Critically endangered	Critically endangered	
<i>Pseudophryne covacevichae</i> , magnificent brood frog	Vulnerable	Vulnerable	✓
<b>Birds</b>			
<i>Calidris ferruginea</i> , curlew sandpiper	Critically endangered	Critically endangered	
<i>Casuarius casuarius johnsonii</i> , Southern cassowary – southern population	Endangered	Endangered	✓
<i>Erythrotriorchis radiatus</i> , red goshawk	Vulnerable	Endangered	✓
<i>Falco hypoleucos</i> , grey falcon	Vulnerable	Vulnerable	
<i>Hirundapus caudacutus</i> , white-throated needletail	Vulnerable	Vulnerable	
<i>Numenius madagascariensis</i> , Eastern curlew	Critically endangered	Endangered	
<i>Rostratula australis</i> , Australian painted snipe	Endangered	Endangered	
<i>Turnix olivii</i> , buff-breasted button-quail	Endangered	Endangered	
<i>Tyto novaehollandiae Kimberli</i> , masked owl	Vulnerable	Vulnerable	
<b>Mammals</b>			
<i>Bettongia tropica</i> , northern bettong	Endangered	Endangered	✓
<i>Dasyurus hallucatus</i> , northern quoll	Endangered	Least concern	✓
<i>Dasyurus maculatus gracilis</i> , spotted-tailed quoll – northern subspecies	Endangered	Endangered	✓
<i>Hipposideros semoni</i> , Semon's leaf-nosed bat	Vulnerable	Endangered	
<i>Macroderma gigas</i> , ghost bat	Vulnerable	Endangered	
<i>Mesembriomys gouldii rattoides</i> , black-footed tree-rat – north Queensland	Vulnerable	Least concern	
<i>Petauroides Volans minor</i> , Northern greater glider	Vulnerable	Vulnerable	✓



Species Name	EPBC Act Status	NC Act Status	Species Recorded in Study Area (Wildlife Online)
<i>Petaurus australis</i> unnamed subsp., yellow-bellied glider – Wet Tropics subspecies	Endangered	Endangered	✓
<i>Phascolarctus cinereus</i> , koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	Vulnerable	Vulnerable	✓
<i>Pteropus conspicillatus</i> , spectacled flying-fox	Endangered	Endangered	✓
<i>Pteropus poliocephalus</i> , grey-headed flying-fox	Vulnerable	Least concern	
<i>Rhinolophus robertsi</i> , large-eared horseshoe bat	Vulnerable	Endangered	
<i>Saccolaimus saccolaimus nudicluniatus</i> , bare-rumped sheath-tailed bat	Vulnerable	Endangered	
<b>Reptiles</b>			
<i>Delma mitella</i> , Atherton delma, legless lizard	Vulnerable	Near threatened	
<i>Egernia rugosa</i> , yakka skink	Vulnerable	Vulnerable	

### 5.7.1.1 Target Fauna Species

Based on the results of the desktop assessment (historical records, species' ranges and habitat requirements) and fauna reconnaissance survey (confirming the presence of potential habitat), the following threatened species were identified as the primary target species for the field surveys:













- Koala (*Phascolarctus cinereus*) - diurnal searches were undertaken for animals and traces (scats and scratches), and spotlighting was undertaken along riparian areas supporting suitable food trees such as *Eucalyptus tereticornis*;
- Yellow-bellied (Wet Tropics subspecies) (*Petaurus australis* unnamed subsp) and northern greater glider (*Petauroides volans minor*) – habitat assessments (including assessments of hollow bearing trees) and diurnal searches for traces were undertaken, as well as spotlighting in riparian areas;
- Northern (*Dasyurus hallucatus*) and spotted-tailed quoll (northern subspecies) (*Dasyurus maculatus gracilis*), black-footed tree-rat (*Mesembriomys gouldii rattoides*) and northern bettong (*Bettongia tropica*) - camera traps were deployed in areas of suitable habitat;
- Microbats including ghost bat (*Macroderma gigas*) - Anabat recording devices were placed at dams and in suitable flyways;
- Spectacled flying-fox (*Pteropus conspicillatus*) – habitat assessments and searches for roosts in suitable habitat were undertaken;
- Southern cassowary (*Casuarius casuarius johnsonii*) – searches were undertaken for animals and traces, and camera traps deployed within or near suitable rainforest habitat;
- Red goshawk (*Erythrorhynchus radiatus*) – diurnal bird counts and searches for nests within tall riparian vegetation were undertaken;



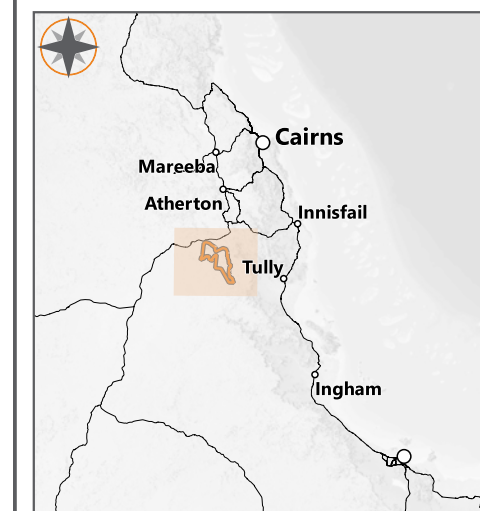
- 
- White-throated needletail (*Hirundapus caudacutus*) – diurnal bird counts were undertaken from ridgelines;
  - Masked owl (*Tyto novaehollandiae Kimberli*) – spotlighting and call playback surveys were undertaken;
  - Magnificent brood frog (*Pseudophryne covacevichae*) – nocturnal searches and call playback were undertaken along first order streams at altitudes > 800 m within eucalypt forest; and
  - Rainforest creek frogs including mountain mistfrog (*Litoria nyakalensis*) and Australian lace-lid (*Litoria dayi*) – nocturnal searches were undertaken along fast-flowing watercourses with rocky substrate within rainforest patches.

## Chalumbin Wind Farm Threatened Fauna Records within the Study Area

Figure 5.4

-  Project Area
-  Wind Turbine
-  Met-mast
-  Project Footprint
-  Study Area
-  World Heritage Area Boundary
-  Protected Areas Estate
-  Major Road
-  River
-  Creek
-  Lot Type Parcel
-  Easement

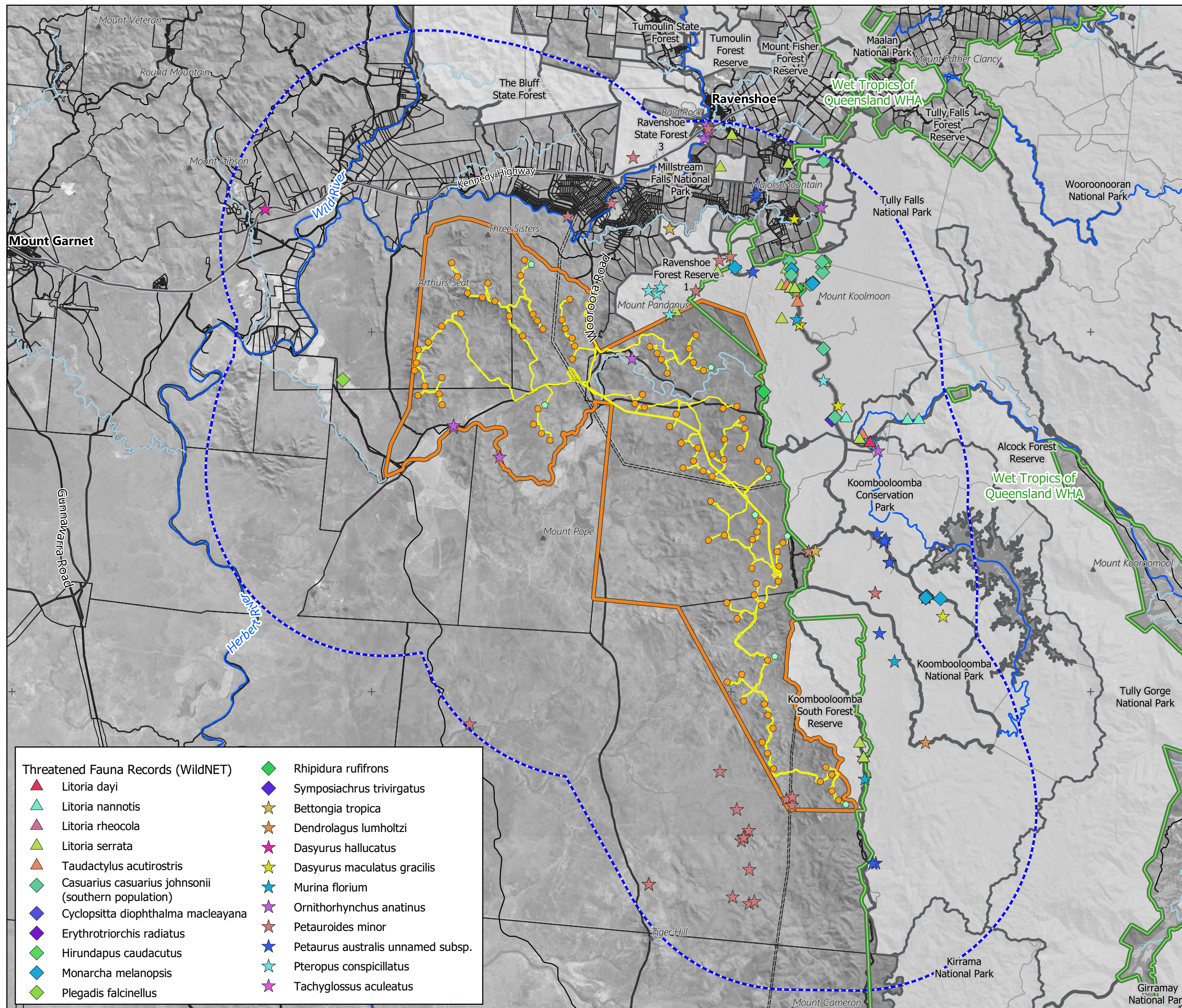
Date: 2021-12-12  
 Author: TOD  
 Reviewed: CC  
 Project: EPU-004


























0 5 10 km

1:200000 @ A3

Data Source(s):  
 Digital Cadastral Database - Department of Natural Resources,  
 Mines and Energy (2021)  
 Queensland Imagery Whole Of State  
 Satellite Public Basemap Service



- | Threatened Fauna Records (WildNET)  |  |   |                                   |
|---|--|---|-----------------------------------|
|  | Litoria dayi   |  | Rhipidura rufifrons               |
|  | Litoria nannotis                                     |  | Symposiachrus trivirgatus         |
|  | Litoria rheocola                                     |  | Bettongia tropica                 |
|  | Litoria serrata                                      |  | Dendrolagus lumholtzi             |
|  | Taudactylus acutirostris                             |  | Dasyurus hallucatus               |
|  | Casuaris casuaris johnsonii<br>(southern population) |  | Dasyurus maculatus gracilis       |
|  | Cyclopsitta diophthalma macleayana                   |  | Murina florium                    |
|  | Erythrorhynchus radiatus                             |  | Ornithorhynchus anatinus          |
|  | Hirundapus caudacutus                                |  | Petauroides minor                 |
|  | Monarcha melanopsis                                  |  | Petaurus australis unnamed subsp. |
|  | Plegadis falcinellus                                 |  | Pteropus conspicillatus           |
|   |  |  | Tachyglossus aculeatus            |



## 5.8 Migratory Species

**Table 5-5** presents a list of the migratory and marine species that potentially occur within the study area (Project area plus a 10 km buffer) based on the desktop assessment.

**Table 5-5 Migratory Species Potentially Occurring within the Study Area**

Species Name	EPBC Act Status	NC Act Status	Species Recorded in Study Area (Wildlife Online)
<i>Apus pacificus</i> , fork-tailed swift	Marine migratory, marine	Special concern least	
<i>Crocodylus porosus</i> , salt-water crocodile	Marine migratory, marine	Least concern	
<i>Cuculus optatus</i> , Oriental cuckoo	Migratory	Least concern	
<i>Hirundapus caudacutus</i> , white-throated needletail	Vulnerable	Vulnerable	
<i>Hirundo rustica</i> , barn swallow	Migratory, marine	Least concern	
<i>Monarcha melanopsis</i> , black-faced monarch	Migratory, marine	Special concern least	✓
<i>Monarcha trivirgatus</i> , spectacled monarch	Migratory, marine	Special concern least	✓
<i>Motacilla cinerea</i> , grey wagtail	Migratory, marine	Least concern	
<i>Motacilla flava</i> , yellow wagtail	Migratory, marine	Least concern	
<i>Myiagra cyanoleuca</i> , satin flycatcher	Migratory, marine	Least concern	
<i>Rhipidura rufifrons</i> , rufous fantail	Migratory, marine	Special concern least	✓
<i>Actitis hypoleucos</i> , common sandpiper	Migratory, marine	Least concern	
<i>Calidris acuminata</i> , sharp-tailed sandpiper	Migratory, marine	Least concern	
<i>Calidris ferruginea</i> , curlew sandpiper	Critically endangered	Critically endangered	
<i>Calidris melanotos</i> , pectoral sandpiper	Migratory, marine	Least concern	
<i>Gallinago hardwickii</i> , Latham's snipe	Wetlands migratory, marine	Special concern Least	✓
<i>Numenius madagascariensis</i> , eastern curlew	Critically endangered	Endangered	



Species Name	EPBC Act Status	NC Act Status	Species Recorded in Study Area (Wildlife Online)
<i>Pandion haliaetus</i> , osprey	Migratory, marine	Least concern	
<i>Tringa nebularia</i> , common greenshank	Migratory, marine	Least concern	

## 5.9 Pest Flora and Fauna

Database searches of the study area (including the PMST) found records of 54 introduced flora and 19 introduced fauna species (see **Table 5-6**). Many of these are listed as Restricted Matters under the Queensland *Biosecurity Act 2014* (13 flora species and 7 fauna species), and 10 of the weed species are listed as Weeds of National Significance (WoNS).

Under the *Biosecurity Act 2014*, a person who has control over a Restricted Matter must not do the following:

- Category 3 – a person who has, or has a thing infested with, the Restricted Matter in the person’s possession or under the person’s control must not distribute or dispose of the restricted matter unless the distribution or disposal is carried out via the methods set out in the *Biosecurity Act 2014*;
- Category 4 – move the Restricted Matter, or cause or allow it to be moved;
- Category 5 – keep in the person’s possession or under the person’s control; and
- Category 6 – give food to the Restricted Matter.

**Table 5-6 Pest Flora and Fauna Species with Potential to Occur within the Study Area**

Species Name	Biosecurity Act Category	WoNS	PMST Record	Wildlife Record	Online
<b>Flora</b>					
<i>Acacia nilotica</i> subsp. <i>indica</i> , prickly acacia		Yes	May occur		
<i>Aeschynomene villosa</i>				Recorded in the Project area	
<i>Ageratum conyzoides</i> , billygoat weed				Recorded in the Project area	
<i>Annona glabra</i> , pond apple	3	Yes	Likely to occur		
<i>Axonopus compressus</i>				Recorded in the Project area	
<i>Axonopus fissifolius</i>				Recorded in the Project area	



Species Name	Biosecurity Act Category	WoNS	PMST Record	Wildlife Record	Online
<i>Bidens pilosa</i>				Recorded in the Project area	
<i>Cabomba caroliniana</i> , fanwort	3	Yes	Likely to occur		
<i>Cenchrus ciliaris</i> , buffel-grass			May occur		
<i>Cestrum elegans</i>				Recorded in the Project area	
<i>Chamaecrista rotundifolia</i> var. <i>rotundifolia</i>				Recorded in the Project area	
<i>Chromolaena odorata</i> , Siam weed	3			Recorded in the Project area	
<i>Cirsium vulgare</i> , spear thistle				Recorded in the Project area	
<i>Crassocephalum crepidioides</i> , thickhead				Recorded in the Project area	
<i>Cryptostegia grandiflora</i> , rubber vine	3	Yes	Likely to occur		
<i>Cyperus profler</i> , dwarf papyrus				Recorded in the Project area	
<i>Dichrocephala integrifolia</i>				Recorded in the Project area	
<i>Dolichandra unguis-cati</i> , cat's claw creeper	3	Yes		Recorded in the Project area	
<i>Eragrostis Mexicana</i> , Mexican lovegrass				Recorded in the Project area	
<i>Erechtites valerianifolius</i> forma <i>valerianifolius</i>				Recorded in the Project area	
<i>Erigeron bonariensis</i>				Recorded in the Project area	
<i>Erigeron pussilus</i>				Recorded in the Project area	
<i>Euphorbia hirta</i>				Recorded in the Project area	
<i>Hymenachne amplexicaulis</i> , olive hymenachne	3	Yes	Likely to occur		





Species Name	Biosecurity Act Category	WoNS	PMST Record	Wildlife Record	Online
<i>Hyparrhenia rufa subsp. altissima</i>				Recorded in the Project area	
<i>Hypoestes phyllostachya</i>				Recorded in the Project area	
<i>Impatiens walleriana</i> , balsam				Recorded in the Project area	
<i>Lantana camara</i> , lantana	3	Yes	Likely to occur	Recorded in the Project area	
<i>Leucas zeylanica</i>				Recorded in the Project area	
<i>Mecardonia procumbens</i>				Recorded in the Project area	
<i>Parthenium hysterophorus</i> , parthenium weed	3	Yes	Likely to occur		
<i>Paspalum paniculatum</i> , Russell River grass				Recorded in the Project area	
<i>Paspalum urvillei</i> , vasey grass				Recorded in the Project area	
<i>Plantago major</i> , greater plantain				Recorded in the Project area	
<i>Praxelis clematidea</i>				Recorded in the Project area	
<i>Pyllanthus tenellus</i>				Recorded in the Project area	
<i>Phyllostachys bambusoides</i>				Recorded in the Project area	
<i>Richardia brasiliensis</i> , white eye				Recorded in the Project area	
<i>Salvinia molesta</i> , salvinia	3	Yes	Likely to occur		
<i>Scoparia dulcis</i> , scoparia				Recorded in the Project area	
<i>Senecio madagascariensis</i> , fireweed*	3	Yes	Likely to occur		



Species Name	Biosecurity Act Category	WoNS	PMST Record	Wildlife Record	Online
<i>Senna septemtrionalis</i>				Recorded in the Project area	
<i>Setaria pulia subsp. subtesselata</i>				Recorded in the Project area	
<i>Sida rhombifolia</i>				Recorded in the Project area	
<i>Solanum americanum</i>				Recorded in the Project area	
<i>Solanum lasiocarpum</i>				Recorded in the Project area	
<i>Solanum mauritianum</i> , wild tobacco				Recorded in the Project area	
<i>Sporobolus fertilis</i> , giant Parramatta grass	3			Recorded in the Project area	
<i>Sporobolus pyramidalis</i>	3			Recorded in the Project area	
<i>Stachytarpheta jamaicensis</i> , Jamaica snakeweed				Recorded in the Project area	
<i>Stevia ovata</i>	3			Recorded in the Project area	
<i>Urena lobata</i> , urena weed				Recorded in the Project area	
<i>Urochloa decumbrens</i>				Recorded in the Project area	
<i>Verbena incompta</i>				Recorded in the Project area	
<b>Fauna</b>					
<i>Acridotheres tristis</i> , common myna			Likely to occur		
<i>Anas platyrhynchos</i> , mallard			Likely to occur		
<i>Bos taurus</i> , domestic cattle			Likely to occur		
<i>Canis lupus dingo</i> , dingo	3, 4, 5, 6			Recorded in the Project area	



Species Name	Biosecurity Act Category	WoNS	PMST Record	Wildlife Record	Online
<i>Canis lupus familiaris</i> , domestic dog	3, 4, 6		Likely to occur	Recorded in the Project area	
<i>Columba livia</i> , rock pigeon			Likely to occur		
<i>Felis catus</i> , domestic cat	3, 4, 6		Likely to occur	Recorded in the Project area	
Feral deer	3, 4, 6		Likely to occur		
<i>Hemidactylus frenatus</i> , Asian house gecko			Likely to occur		
<i>Lonchura punctulate</i> , nutmeg mannikin			Likely to occur		
<i>Mus musculus</i> , house mouse			Likely to occur	Recorded in the Project area	
<i>Oryctolagus cuniculus</i> , rabbit	3, 4, 5, 6		Likely to occur	Recorded in the Project area	
<i>Passer domesticus</i> , house sparrow			Likely to occur		
<i>Rattus rattus</i> , black rat			Likely to occur	Recorded in the Project area	
<i>Rhinella marina</i> , cane toad			Known to occur	Recorded in the Project area	
<i>Streptopelia chinensis</i> , spotted turtle-dove			Likely to occur		
<i>Sturnus vulgaris</i> , common starling			Likely to occur		
<i>Sus scrofa</i> , pig	3, 4, 6		Likely to occur	Recorded in the Project area	
<i>Vulpes vulpes</i> , red fox	3, 4, 5, 6		Likely to occur		

## 5.10 Watercourses and Wetlands

Watercourses within the Project area consist primarily of small ephemeral drainage lines (stream orders 1 and 2) on slopes which typically gain size with decreasing elevation. These watercourses eventually drain into Blunder Creek which then joins the Herbert River approximately 9 km downstream. Stream orders are mapped on **Figure 5-5**.

There are a number of small man-made farm dams across both properties, with evidence of frequent use by cattle (low to no vegetation cover, high turbidity).



---

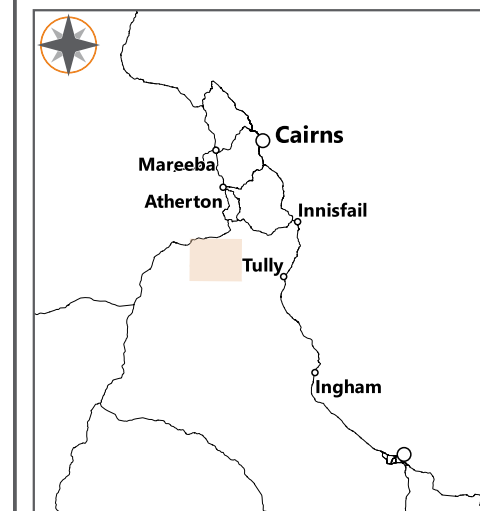
There are no nationally important wetlands within the Project area; however, there are a number Great Barrier Reef Wetland Protection Areas (Qld) as illustrated in **Figure 5-5**. The Project footprint has been designed to avoid these wetland protection areas.

## Chalumbin Wind Farm Watercourses and wetlands

Figure 5.5

-  Project Area
-  Wind Turbine
-  Met-mast
-  Project Footprint
-  Dam
-  River
-  Creek
-  GBR Wetland
-  Wetland (Regulated vegetation)
-  Major Road
-  Lot Type Parcel
-  Easement

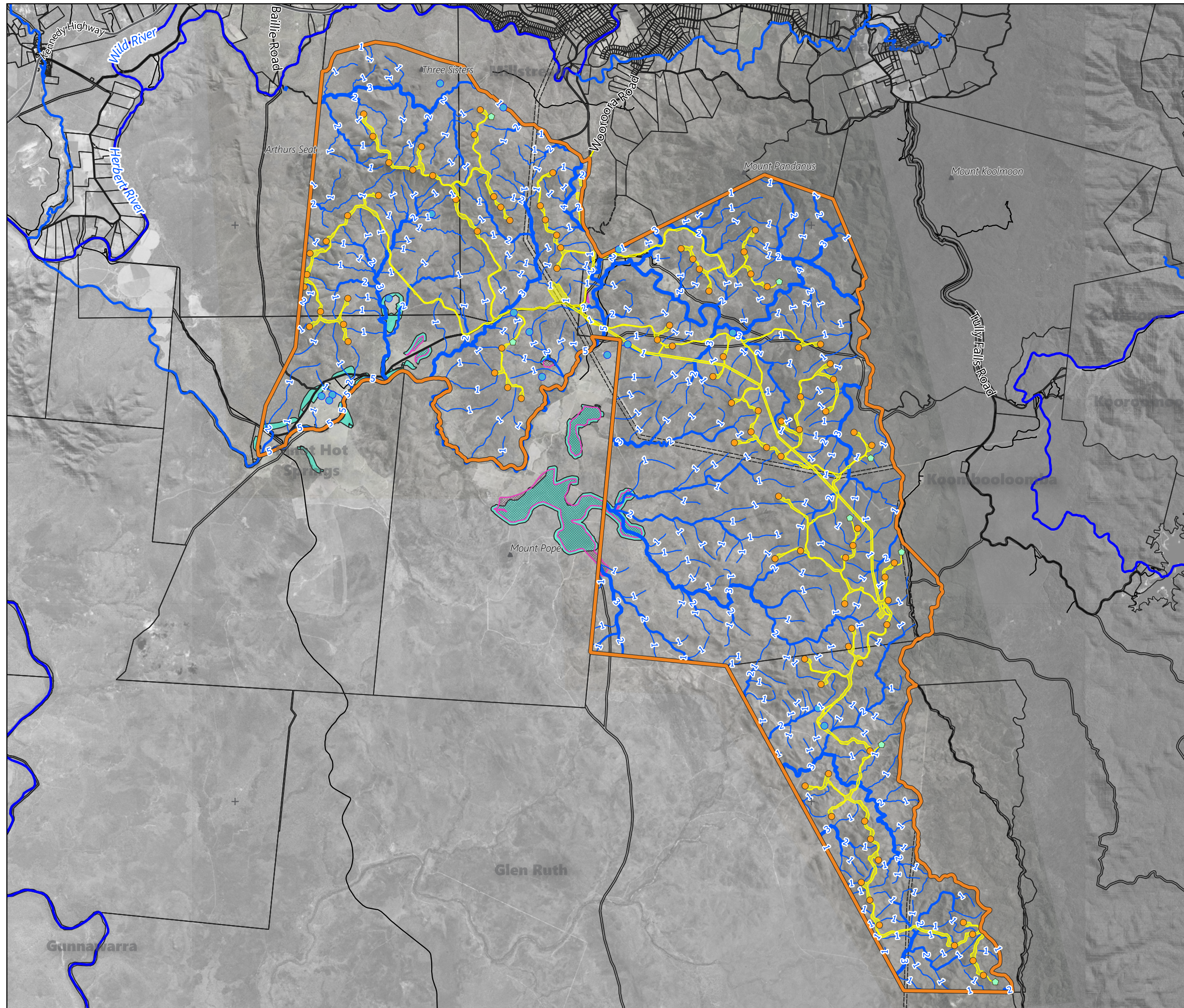
Date: 2021-12-12  
 Author: TOD  
 Reviewed: CC  
 Project: EPU-004



0 1 2 3 4 5 km

1:125000 @ A3

**Data Source(s):**  
 Digital Cadastral Database - Department of Natural Resources, Mines and Energy (2021)  
 Queensland Imagery Whole Of State  
 Satellite Public Basemap Service





---

## 5.11 Connectivity and Context

A State significant biodiversity corridor is mapped in a north-south direction through the centre of the Project area, with a second north-south corridor following the eastern boundary of the Project area where it abuts the Wet Tropics World Heritage Area (**Figure 5-6**). The eastern corridor encompasses several protected areas estates including Tully Falls National Park, Koombooloomba National Park and Koombooloomba South Forest Reserve.

In conjunction with large tracts of remnant vegetation, both types of corridors are important in maintaining continuity and facilitating ecological processes at the landscape scale.

The Project area is almost entirely composed of remnant vegetation that is a part of a larger intact area of remnant vegetation and is recognised as containing local, regional and state biodiversity significance. The Project area currently provides north-south and east-west connectivity across the landscape.

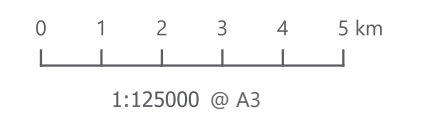
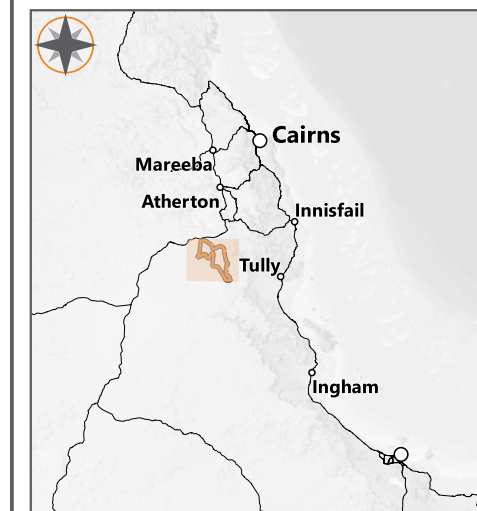
Large tracts of remnant vegetation will remain within the Project area, maintaining connectivity between the Project area and adjacent remnant vegetation.

## Chalumbin Wind Farm Biodiversity Context

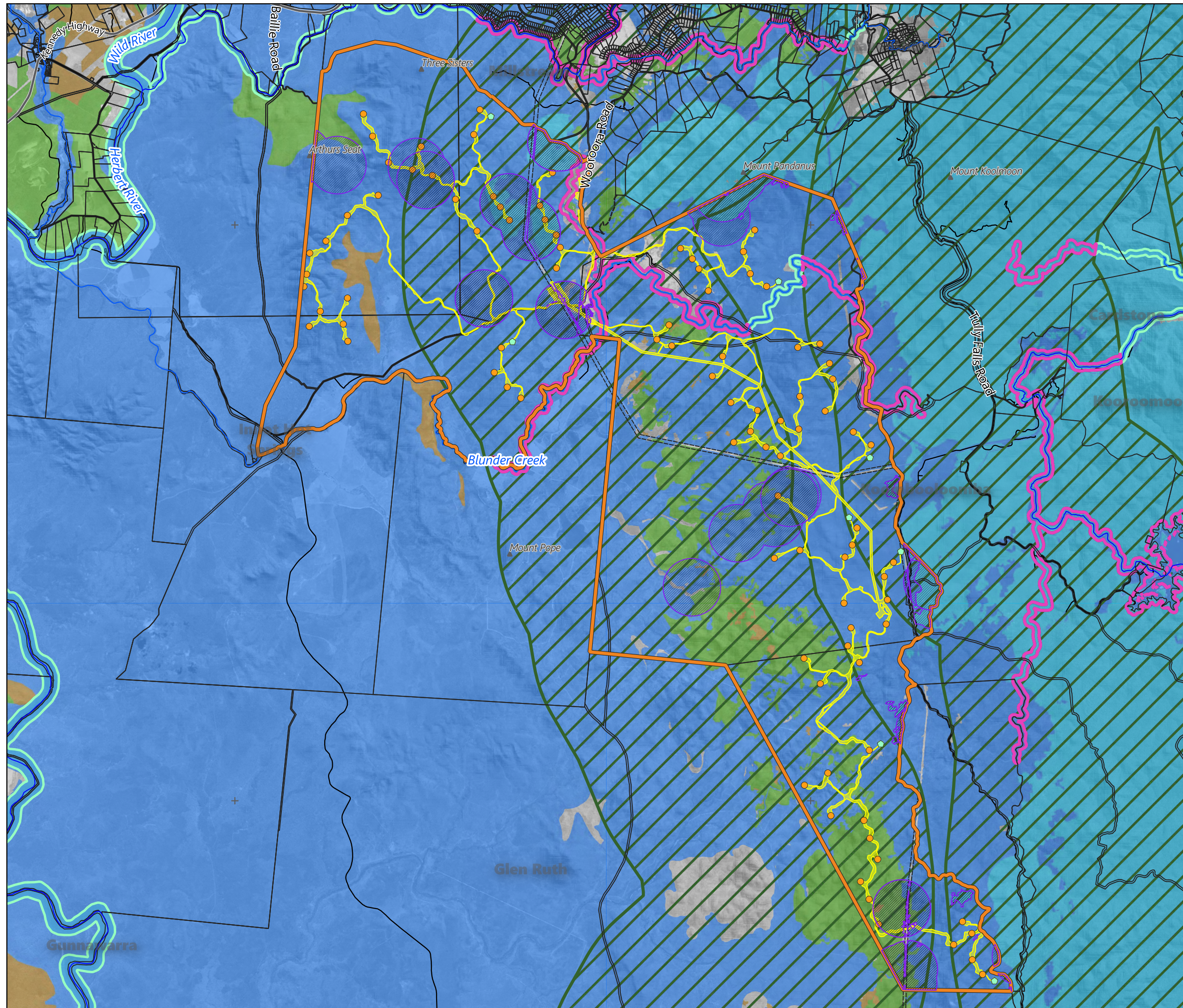
Figure 5.6

-  Project Area
-  Wind Farm
-  Met-mast
-  Project Footprint
-  Essential Habitat
- State Corridor Buffers**
-  Riparian
-  Riparian/Terrestrial
-  Terrestrial
- Biodiversity significance**
-  State Habitat for EVNT Taxa
-  State
-  Regional
-  Local or other Values
-  Major Road
-  River
-  Creek
-  Lot Type Parcel
-  Easement

Date: 2021-12-12    Reviewed: CC  
 Author: TOD    Project: EPU-004



**Data Source(s):**  
 Digital Cadastral Database - Department of Natural Resources, Mines and Energy (2021)  
 Queensland Imagery Whole Of State  
 Satellite Public Basemap Service





## 6.0 Field Survey Results

### 6.1 Flora Survey Results

#### 6.1.1 Vegetation Communities

The Project area is primarily composed of remnant vegetation, with approximately 4% categorised as non-remnant. Ground-truthed vegetation within the Project area largely comprises mixed woodlands dominated by white mahogany (*Eucalyptus portuensis*) and spotted gum (*Corymbia citriodora* subsp. *citriodora*) (27.6%), white mahogany with co-dominant turpentine tree (*Syncarpia glomulifera*) (16.58%), red mahogany (*Eucalyptus resinifera*) (10.63%) and Queensland stringybark (*Eucalyptus reducta*) (9.53%) woodland communities, primarily on igneous hills, or granite or rhyolitic soils. Creeks and other alluvial areas typically consist of forest red gum (*Eucalyptus tereticornis*) communities with long-fruited bloodwood (*Corymbia clarksoniana*) and poplar gum (*Eucalyptus platyphylla*).

In total, 25 REs were ground-truthed within the Project footprint, as mapped in **Figure 6-1** and described in **Table 6-1**.

**Table 6-1 Ground-truthed REs within the Project Footprint**

RE	Description	Status (VM Act)
7.3.8a	<i>Melaleuca viridiflora</i> open forest to open woodland. Includes areas of natural invasion onto former grasslands. Alluvial plains	Least concern
7.3.16	<i>Eucalyptus platyphylla</i> woodland to open forest on alluvial plains. Gently sloping to flat, moderately to poorly drained alluvial lowlands, foot slopes and piedmont fans.	Least concern
7.3.26	<i>Casuarina cunninghamiana</i> woodland to open forest on alluvium fringing streams.	Of concern
7.3.43	<i>Eucalyptus tereticornis</i> open forest to woodland on uplands on well-drained alluvium	Of concern
7.3.43a	<i>Eucalyptus tereticornis</i> open forest, tall open forest and woodland including communities ranging from those dominated by <i>E. tereticornis</i> to mixtures of that species with <i>Corymbia intermedia</i> , <i>E. drepanophylla</i> , <i>Lophostemon suaveolens</i> and <i>Allocasuarina torulosa</i> . Uplands on alluvium.	Of concern
7.8.7	<i>Eucalyptus tereticornis</i> (forest red gum) open forest, and associated grasslands. Uplands and highlands on basaltic krasnozems and prairie soils, of the moist rainfall zone.	Of concern
7.8.10	<i>Eucalyptus tereticornis</i> , <i>E. drepanophylla</i> (or <i>E. granitica</i> ), <i>E. portuensis</i> , <i>Corymbia intermedia</i> woodland to open forest, or <i>E. moluccana</i> woodland to open forest, of uplands and highlands on basalt.	Of concern
7.8.18	<i>Corymbia intermedia</i> (pink bloodwood) and/or <i>Lophostemon suaveolens</i> (swamp mahogany) +/- <i>Allocasuarina torulosa</i> (forest sheoak) open forest to woodland. Basalt.	Of concern
7.8.19	<i>Corymbia clarksoniana</i> open forest to woodland on basalt.	Endangered
7.12.27a	<i>Eucalyptus reducta</i> medium open forest and woodland. Uplands and highlands on shallow granitic and rhyolitic soils, of the moist rainfall zone.	Least concern
7.12.27c	<i>Eucalyptus resinifera</i> and <i>Syncarpia glomulifera</i> open woodland. Uplands and highlands on shallow granitic and rhyolitic soils, of the moist rainfall zone.	Least concern





RE	Description	Status (VM Act)
7.12.29a	<i>Corymbia intermedia</i> , <i>Eucalyptus tereticornis</i> , <i>E. drepanophylla</i> open forest to low open forest and woodland with <i>Allocasuarina torulosa</i> , <i>A. littoralis</i> , <i>Lophostemon suaveolens</i> , <i>Acacia cincinnata</i> , <i>A. flavescens</i> , <i>Banksia aquilonia</i> and <i>Xanthorrhoea johnsonii</i> . Uplands, on granite and rhyolite.	Least concern
7.12.30a	<i>Corymbia citriodora</i> , <i>Eucalyptus portuensis</i> , <i>C. intermedia</i> , <i>Syncarpia glomulifera</i> woodland to low woodland to open forest with <i>Callitris intratropica</i> , <i>Acacia calyculata</i> and <i>Xanthorrhoea johnsonii</i> . Uplands and highlands, of the moist and dry rainfall zones.	Least concern
7.12.34	<i>Eucalyptus portuensis</i> and/or <i>E. drepanophylla</i> +/- <i>C. intermedia</i> +/- <i>C. citriodora</i> , +/- <i>E. granitica</i> open woodland to open forest on uplands on granite	Least concern
7.12.52	<i>Eucalyptus resinifera</i> , <i>Corymbia intermedia</i> , <i>Allocasuarina littoralis</i> , <i>Syncarpia glomulifera</i> , <i>E. drepanophylla</i> +/- <i>E. reducta</i> woodland on granite and rhyolite in the dry to moist rainfall zone	Of concern
7.12.57	Shrubland and low woodland mosaic with <i>Syncarpia glomulifera</i> , <i>Corymbia abergiana</i> , <i>Eucalyptus portuensis</i> , <i>Allocasuarina littoralis</i> and <i>Xanthorrhoea johnsonii</i> on uplands and highlands on granite	Of concern
7.12.57a	Shrubland and low woodland mosaic with <i>Syncarpia glomulifera</i> , <i>Corymbia abergiana</i> , <i>Eucalyptus portuensis</i> , <i>Allocasuarina littoralis</i> and <i>Xanthorrhoea johnsonii</i> . Uplands and highlands on granite and rhyolite, of the moist and dry rainfall zones.	Of concern
7.12.65	Rock pavement or areas of skeletal soil on granite and rhyolite of dry western or southern areas +/- shrublands to closed forests of <i>Acacia</i> spp. and/or <i>Lophostemon suaveolens</i> and/or <i>Allocasuarina littoralis</i> and/or <i>Eucalyptus lockyeri</i> subsp. <i>exuta</i> .	Least concern
7.12.65k	Granite and rhyolite rock outcrop, of dry western areas, associated with shrublands to closed forests of <i>Acacia</i> spp. and/or <i>Lophostemon</i> spp. and/or <i>Allocasuarina</i> spp. In the Mount Emerald area, shrubs may include <i>Acacia umbellata</i> , <i>Melaleuca borealis</i> , <i>Homoranthus porteri</i> , <i>Leptospermum neglectum</i> , <i>Melaleuca recurva</i> , <i>Melaleuca uxorum</i> , <i>Grevillea glossadenia</i> , <i>Corymbia abergiana</i> , <i>Eucalyptus lockyeri</i> , <i>Sannantha angusta</i> , <i>Pseudanthus ligulatus</i> subsp. <i>ligulatus</i> , <i>Acacia aulacocarpa</i> , <i>Leptospermum amboinense</i> , <i>Xanthorrhoea johnsonii</i> and <i>Jacksonia thesioides</i> . Ground-cover species may include <i>Borya septentrionalis</i> , <i>Lepidosperma laterale</i> , <i>Eriachne</i> spp., <i>Cleistochloa subjuncea</i> , <i>Boronia occidentalis</i> , <i>Cheilanthes</i> spp., <i>Coronidium newcastlianum</i> , <i>Schizachyrium</i> spp., <i>Tripogon loliformis</i> , <i>Gonocarpus acanthocarpus</i> and <i>Eragrostis</i> spp. Dry western areas. Granite and rhyolite.	Least concern
7.12.66	<i>Lophostemon confertus</i> (brush box) low shrubland or low to medium closed forest. Exposed rocky slopes on granite and rhyolite.	Of concern
9.5.5a	Mixed woodland to open forest of <i>Eucalyptus crebra</i> , <i>Corymbia clarksoniana</i> and <i>C. citriodora</i> subsp. <i>citriodora</i> +/- <i>E. portuensis</i> with a generally open sub-canopy of canopy species +/- <i>Callitris intratropica</i> and <i>Acacia</i> spp. The open shrub layer often contains juvenile canopy species, <i>Petalostigma pubescens</i> , <i>Acacia flavescens</i> and other <i>Acacia</i> spp. <i>Themeda triandra</i> is the dominant species in a dense grassy ground layer. Occurs on Tertiary plateaus and remnants.	Least concern
9.3.15	Fringing woodland to open forest containing any combination of <i>Casuarina cunninghamiana</i> , <i>Eucalyptus tereticornis</i> and <i>E. platyphylla</i> +/- <i>Lophostemon suaveolens</i> +/- <i>Nauclea orientalis</i> +/- <i>Corymbia tessellaris</i> +/- <i>C. clarksoniana</i> . There is often a low sub-canopy layer which can include canopy species and <i>Ficus</i> spp. The open shrub layer contains juvenile canopy species and can include mesic species such as <i>Euroschinus falcatus</i> , <i>Acacia mangium</i> and <i>Syzygium</i> sp. The ground layer is medium to dense grassy and contains <i>Imperata cylindrica</i> , <i>Crotalaria</i> sp., <i>Heteropogon contortus</i> , <i>Cyperus</i> spp. and <i>Paspalum</i> spp. Occurs on stream banks and channels in areas of higher rainfall in the central east of the bioregion.	Least concern
9.3.16	<i>Eucalyptus tereticornis</i> and/or <i>E. platyphylla</i> and/or <i>Corymbia clarksoniana</i> woodland on alluvial flats, levees and plains.	Least concern



RE	Description	Status (VM Act)
9.12.2	<i>Eucalyptus portuensis</i> , <i>Corymbia citriodora</i> subsp. <i>citriodora</i> , <i>E. granitica</i> or <i>E. crebra</i> , <i>C. intermedia</i> or <i>C. clarksoniana</i> mixed woodland on steep hills and ranges on igneous hills close to Wet Tropics boundary.	Least concern
9.12.4	Low open woodland to woodland of <i>Eucalyptus shirleyi</i> +/- <i>Corymbia peltate</i> +/- <i>Callitris intratropica</i> . The mid layer varies from absent to a mid-dense sub-canopy and/or shrub layer and the ground layer is dense and grassy. Occurs predominantly on sandy shallow soils derived from igneous rocks on rolling low hills to hills.	Least concern