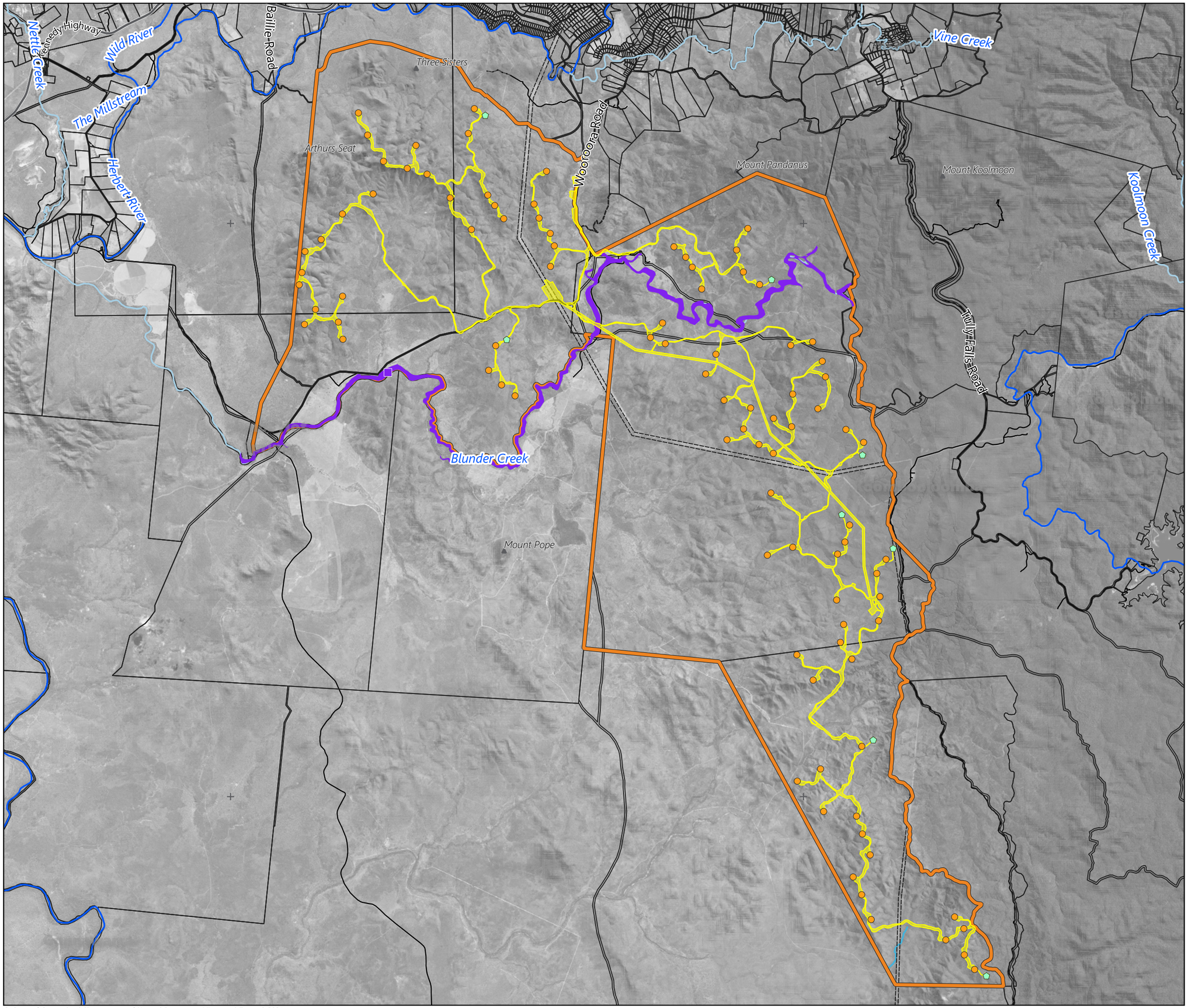

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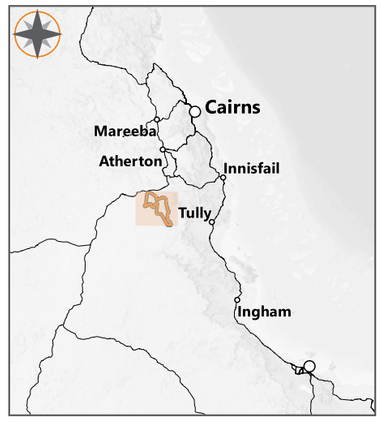
Chalumbin Wind Farm

Potential Habitat for Platypus

Figure 8.9

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Survey Observation
- Potential Habitat
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

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



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

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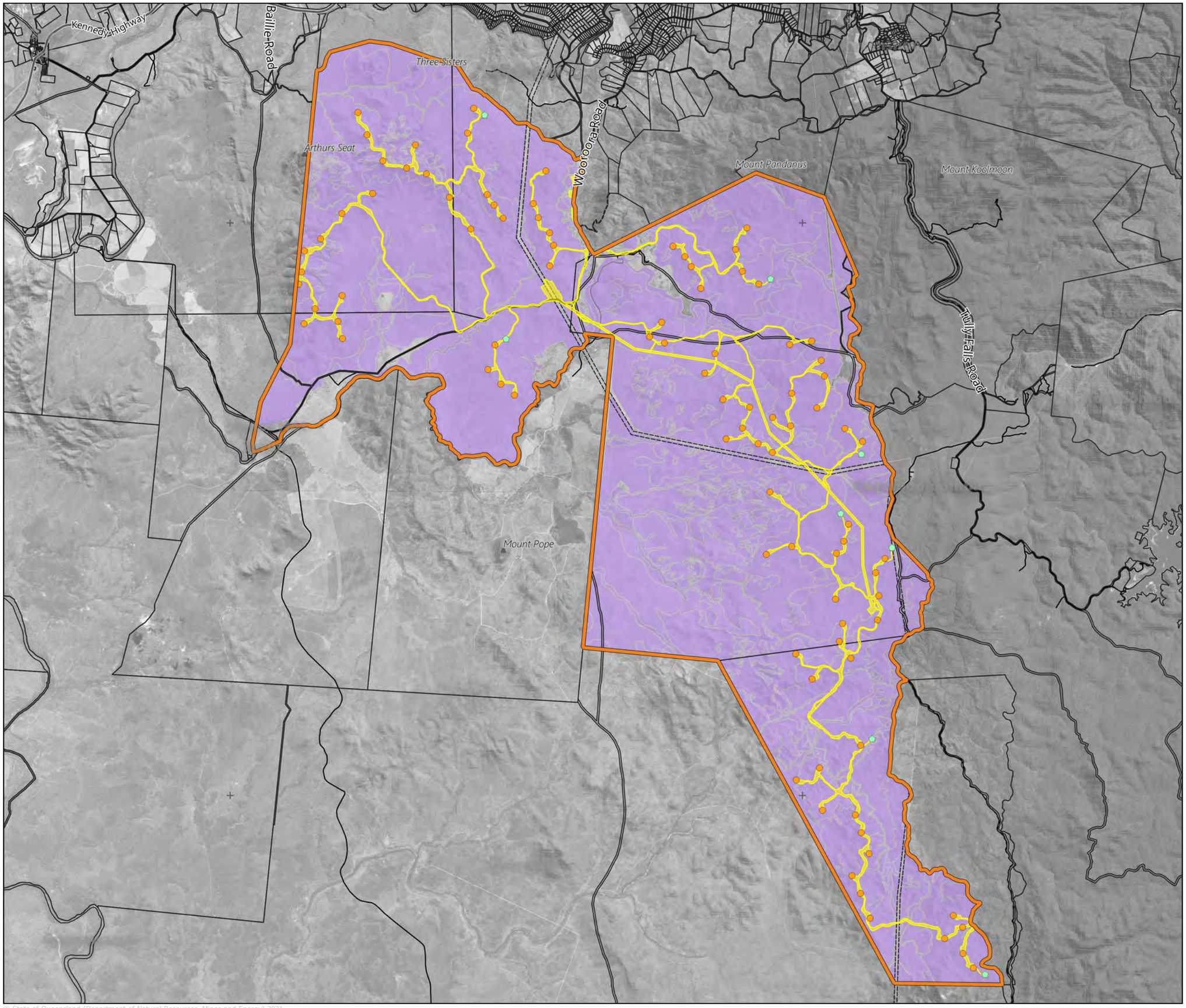
8.10 Short-beaked Echidna

The short-beaked echidna has very broad habitat requirements and could inhabit all remnant and regrowth vegetation across the Project area, as mapped in **Figure 8-10**.



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EPURON

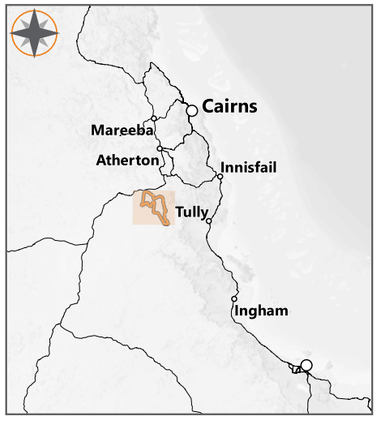
Chalumbin Wind Farm

Potential Habitat for Short-beaked echidna

Figure 8.10

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Potential habitat
- Major Road
- Lot Type Parcel
- Easement

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



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

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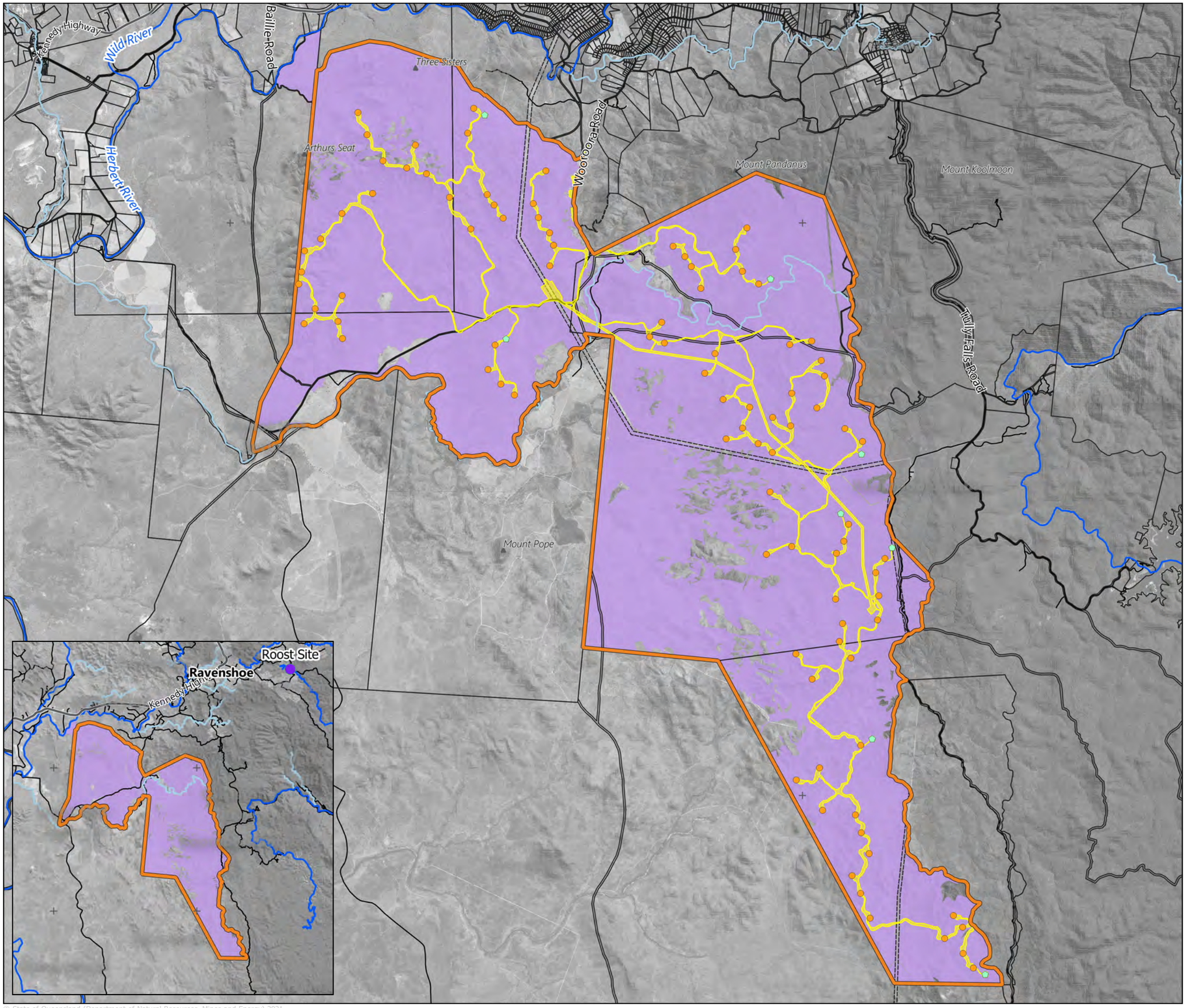
8.11 Spectacled Flying-fox

The spectacled flying-fox forages on a wide variety of rainforest and non-rainforest species, including eucalypts (*Eucalyptus* spp., *Corymbia* spp.) in tall open forests adjoining rainforest communities and in tropical woodland and savanna ecosystems. It will forage within 50 km of a camp and the Mabi Forest TEC is considered a key habitat for the spectacled flying-fox (SPRAT 2021).

The National Flying Fox Monitoring programme (DAWE 2021b) reports a spectacled flying-fox camp at Malaan, east of Ravenshoe and just outside the Study area. The desktop assessment also indicates the species' presence in the Ravenshoe Forest Reserve 1 which is within the Study area, and abuts the Project area immediately to the north. There is limited rainforest habitat within the Project area to support a camp, and none of its key foraging habitat (Mabi Forest TEC) has been ground-truthed within the Project area. Potential foraging habitat has been mapped as eucalypt forest within 50 km of the known camp at Malaan (**Figure 8-11**).



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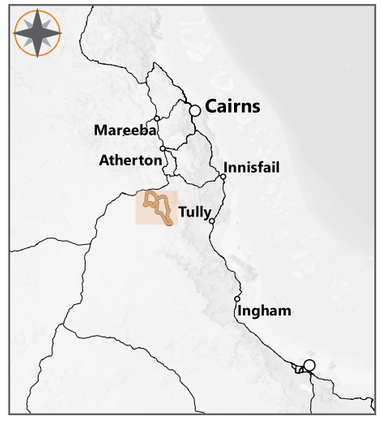
Chalumbin Wind Farm

Potential Habitat for Spectacled flying-fox

Figure 8.11

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Roost Site
- Potential habitat
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

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



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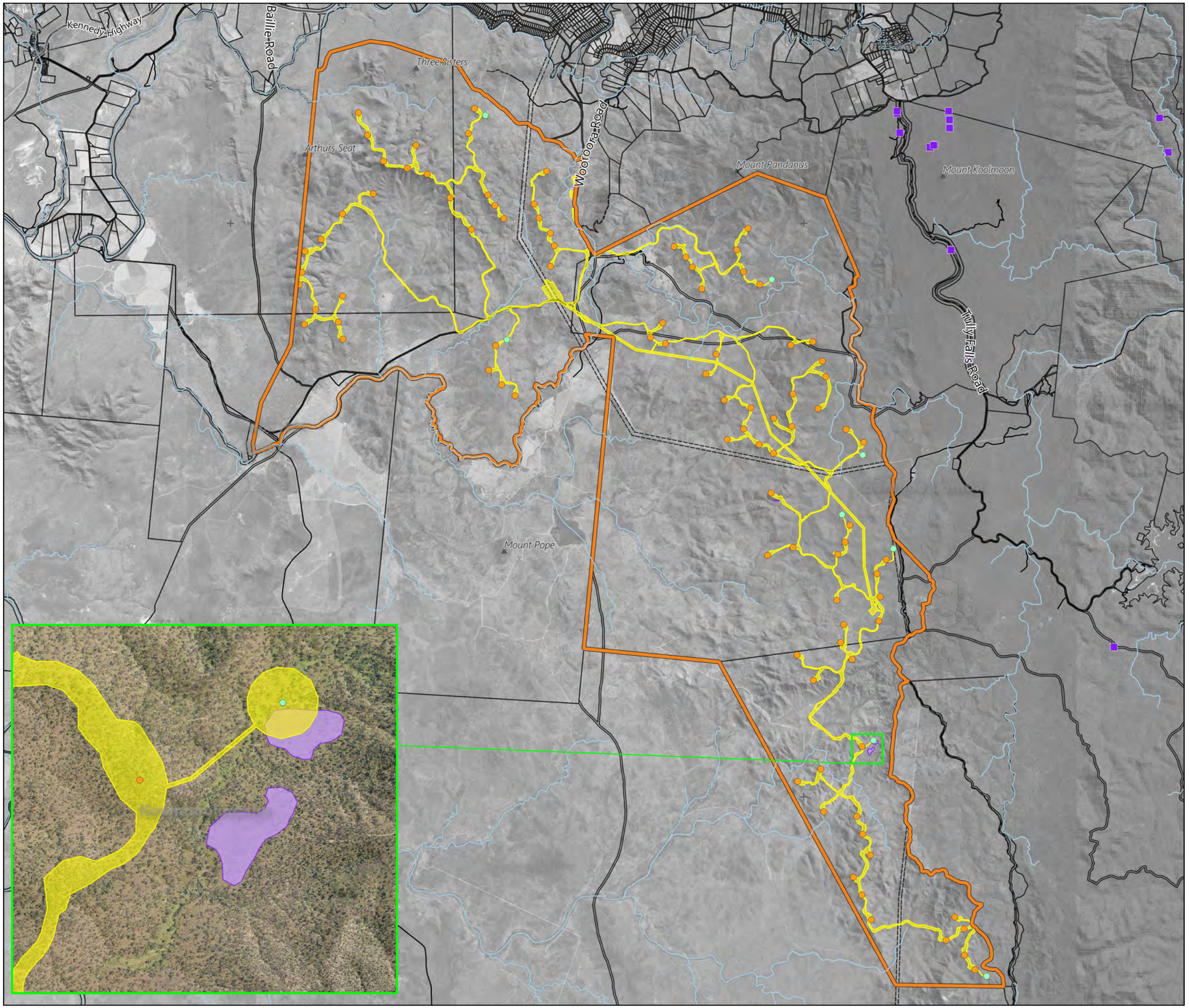
Data Source(s):
Digital Cadastral Database - Department of Natural Resources, Mines and Energy (2021)
Queensland Imagery Whole Of State
Satellite Public Basemap Service

8.12 Southern Cassowary

The southern cassowary requires a high diversity of fruiting trees to provide year-round supply of fleshy fruit; the species occurs primarily in rainforests but also woodlands, melaleuca swamps, mangroves and beaches. The Recovery Plan for the Southern Cassowary (Latch 2007) identifies three categories of habitat for the southern cassowary (Essential Habitat, general habitat and rehabilitating habitat). The Recovery Plan lists 91 REs that comprise Essential Habitat for the southern cassowary, of which three have been ground-truthed within the Project area; REs 7.12.7, 7.3.8 and 7.8.7. These have been mapped as potential habitat for the southern cassowary in **Figure 8-12**.



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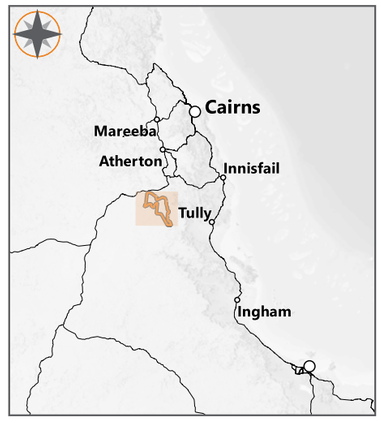
Chalumbin Wind Farm

Potential Habitat for Southern Cassowary

Figure 8.12

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Sightings (WildNet)
- Potential Habitat
- Watercourse Major
- Road
- Lot Type Parcel
- Easement

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



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

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8.13 Red Goshawk

Red goshawks nest in trees that are taller than 20 m (DERM 2012) and within 1 km of a watercourse or wetland (TSSC 2015c). The species feeds primarily on birds and will forage over any Eucalypt dominated forests and woodlands. The following has been mapped across the Project area (**Figure 8-13**):

- Potential nesting habitat: trees > 20 m tall within 1 km of a watercourse and Eucalypt-dominated open forests and woodlands within 1 km of permanent water; and
- Potential foraging habitat: remainder of open forests within the Project area.

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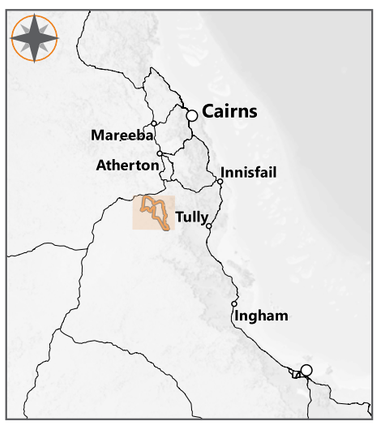
Chalumbin Wind Farm

Potential Habitat for Red goshawk

Figure 8.13

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Potential disused nest (January 2021)
- Potential nesting habitat
- Potential foraging habitat
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

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



0 1 2 3 4 5 km

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

8.14 White-throated Needletail

No mapping has been undertaken for white-throated needletail as this species could occur in any airspace over the Project area. It is a migratory species that occurs in Australia only during the summer months but is highly aerial and only rarely alights while in Australia (roosting in the canopy of mature trees).

8.15 Fork-tailed Swift

No mapping has been undertaken for the fork-tailed swift as this species could occur in any airspace over the Project area. It is a migratory species that does not breed in Australia. It exhibits foraging and movement that is completely aerial.

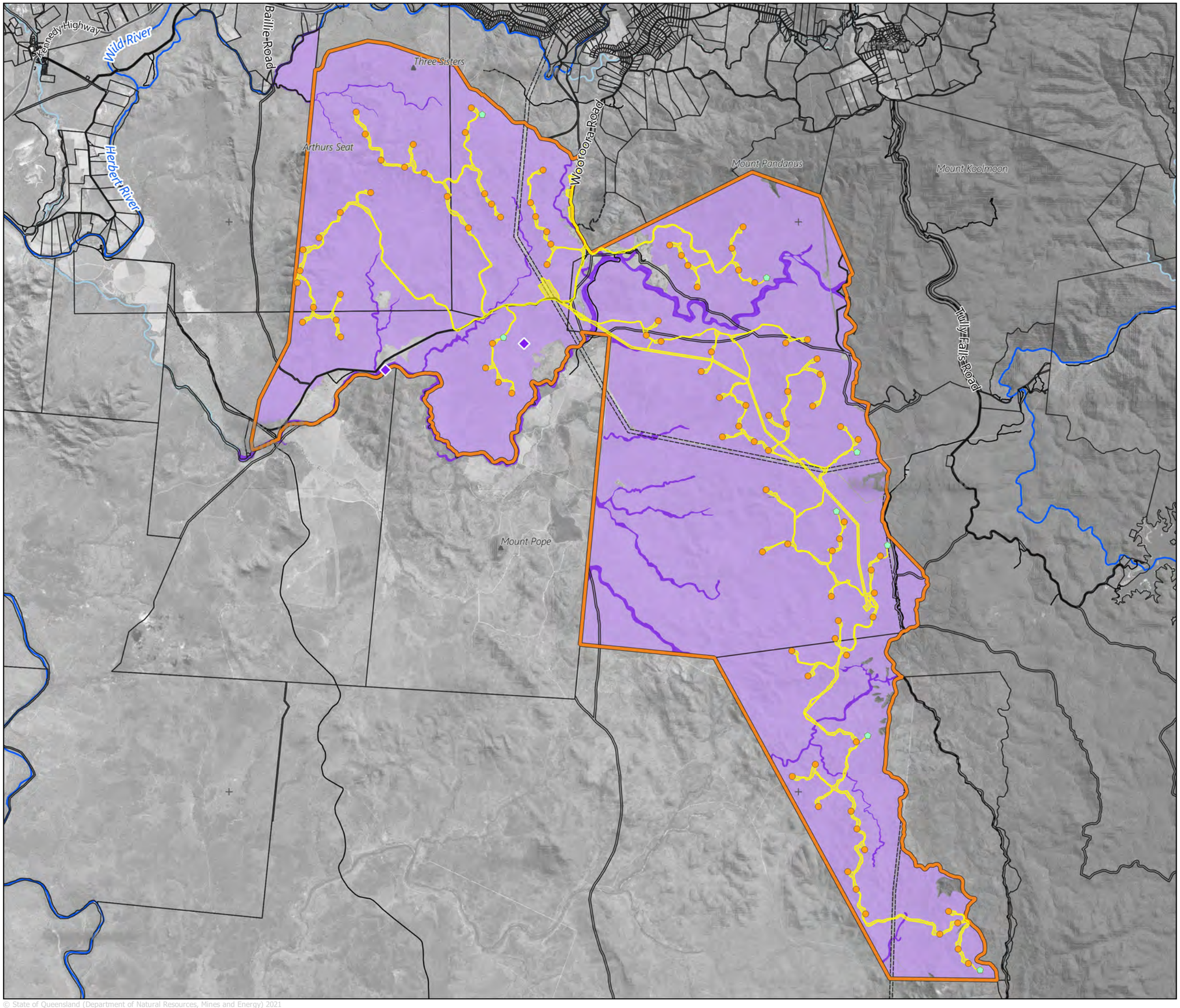
8.16 Masked Owl

The masked owl is known to use a range of habitat types in Queensland including riparian forest, rainforest, open forests, Melaleuca swamps and mangrove edges, as well as along the margins of sugar cane fields (SPRAT 2021).

It requires large old-growth trees with large hollows for nesting (SPRAT 2021). It usually nests in patches of closed forest and feeds largely on small to medium sized terrestrial mammals. The subspecies probably breeds in March-October and nests are 7-8 km apart (SPRAT 2021).

During field surveys, the species was observed (through calls) at two locations along Blunder Creek within the Glen Gordon property.

The majority of the Project area, with the exception of cleared areas and rainforest patches, comprises potential foraging habitat for the masked owl. It is dependent on tree hollows for nesting (Woinarski 2004). The riparian environments of the higher stream order waterways within the Project area comprise high value foraging, breeding and roosting habitat for the species. These areas have therefore been mapped as preferred habitat for the masked owl, see **Figure 8-14**.



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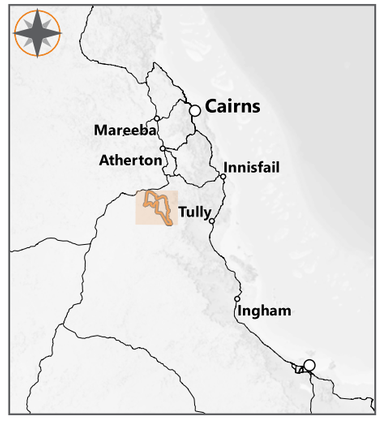
Chalumbin Wind Farm

Potential Habitat for Masked owl

Figure 8.14

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Survey Observation
- Preferred habitat
- Potential habitat
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

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



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

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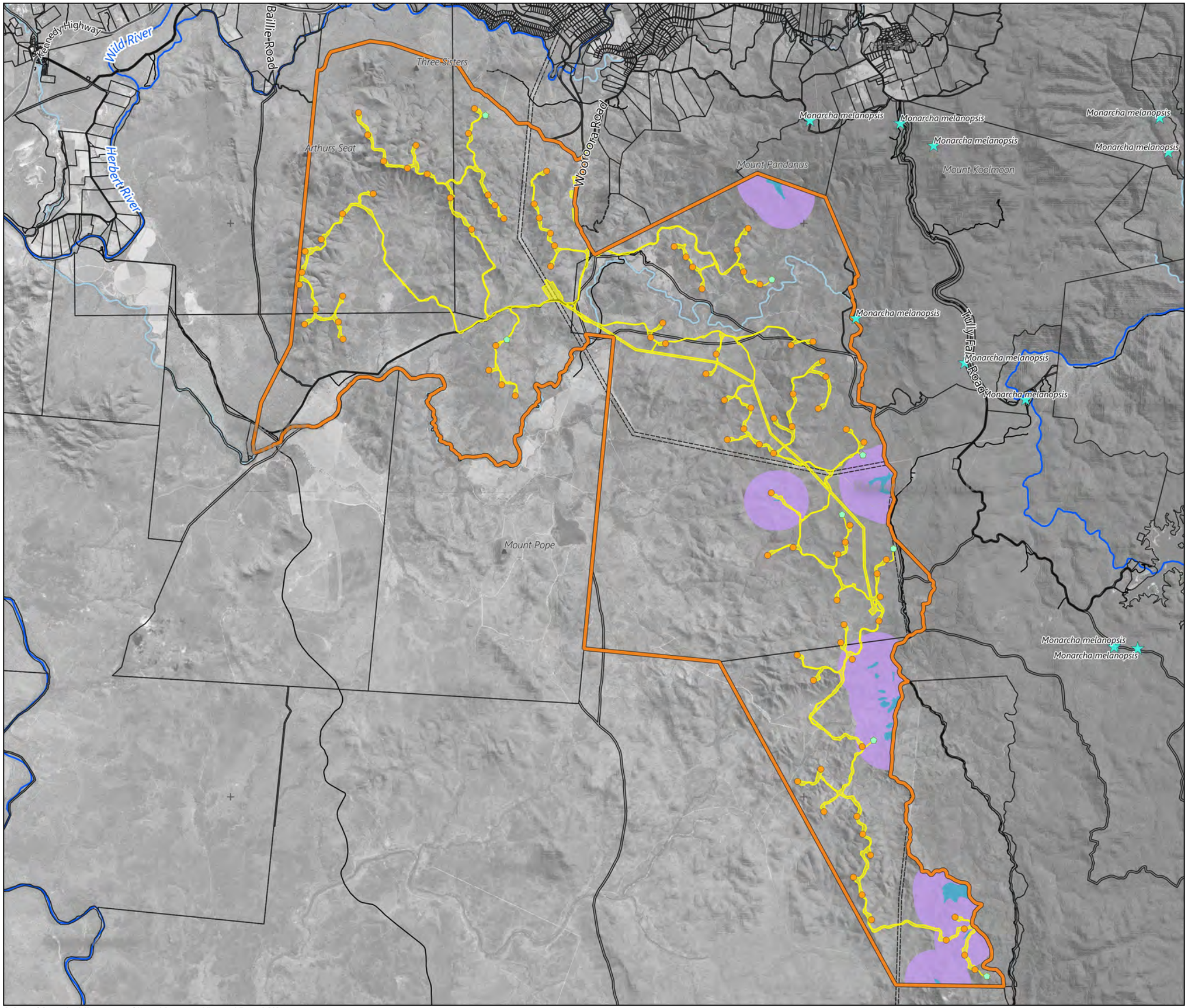
8.17 Black-faced Monarch

The black-faced monarch mainly occurs in rainforest ecosystems, including semi-deciduous vine-thickets, complex notophyll vine-forest, tropical (mesophyll) rainforest, subtropical (notophyll) rainforest, mesophyll (broadleaf) thicket/shrubland, warm temperate rainforest, dry (monsoon) rainforest and (occasionally) cool temperate rainforest. It is also sometimes found in nearby open eucalypt forests (mainly wet sclerophyll forests), especially in gullies with a dense, shrubby understorey as well as in dry sclerophyll forests and woodlands, often with a patchy understorey. It breeds in rainforest habitat and feeds mostly in rainforest but also in open eucalypt forest (SPRAT 2021).

The following habitat has been mapped for the black-faced monarch across the Project area (**Figure 8-15**):

- Preferred habitat – rainforest communities (which are not prevalent within the Project area); and
- Potential habitat – open eucalypt forest within 1 km of rainforests.



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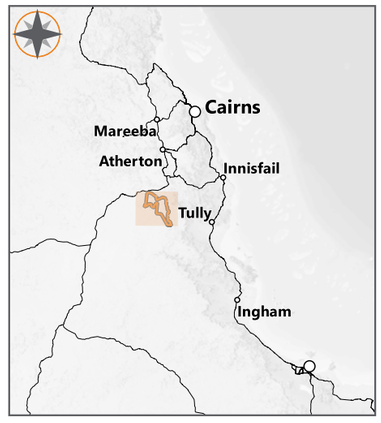
Chalumbin Wind Farm

Potential Habitat for Black-faced monarch

Figure 8.15

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Important habitat
- Potential habitat
- Threatened Fauna Records (WildNET)
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

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



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

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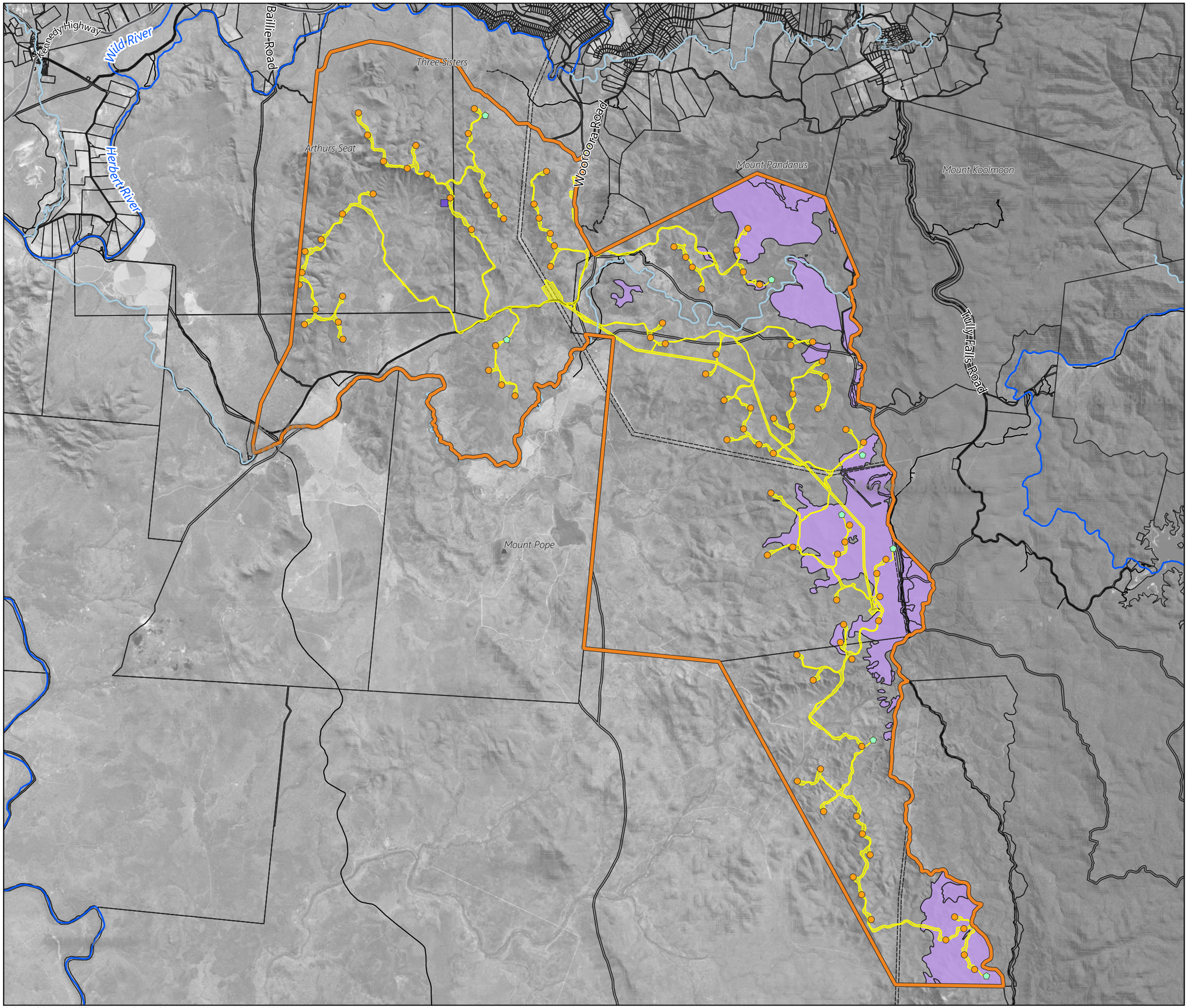
8.18 Rufous Fantail

The rufous fantail inhabits the dense, shady undergrowth of gullies in rainforest and wet sclerophyll forests. These have been mapped as preferred habitat, see **Figure 8-16**.



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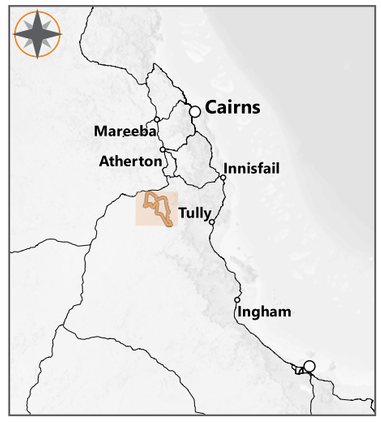
Chalumbin Wind Farm

Rufous fantail Habitat

Figure 8.16

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Observation
- Potential habitat
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

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



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

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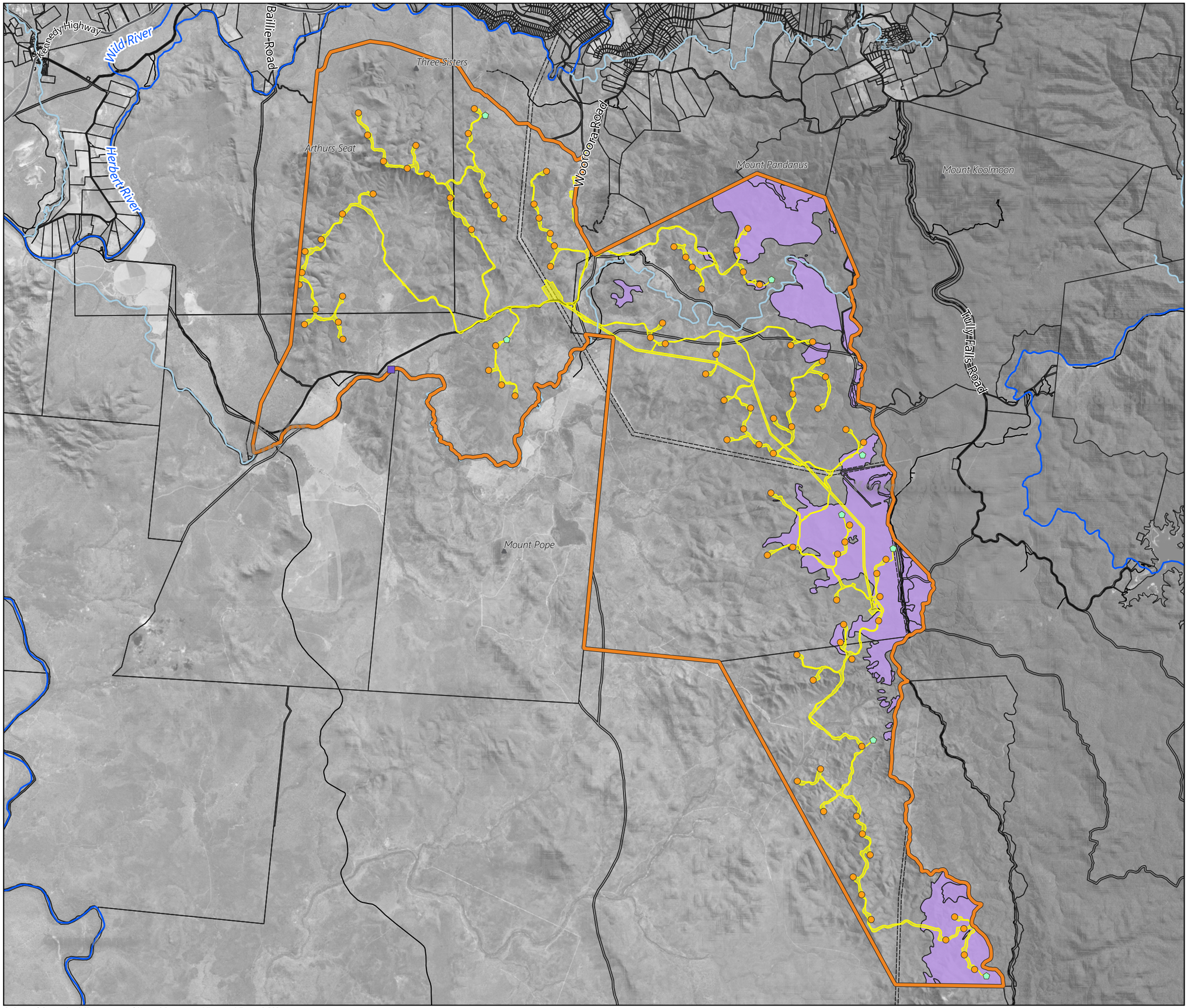
8.19 Spectacled Monarch

The spectacled monarch inhabits dense rainforests and moist eucalypt forests, including waterside vegetation and mangroves. These have been mapped as potential habitat, see **Figure 8-17**.



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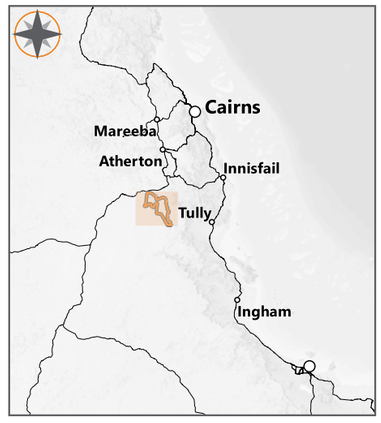
Chalumbin Wind Farm

Spectacled monarch Habitat

Figure 8.17

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Observation
- Potential habitat
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

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



0 1 2 3 4 5 km

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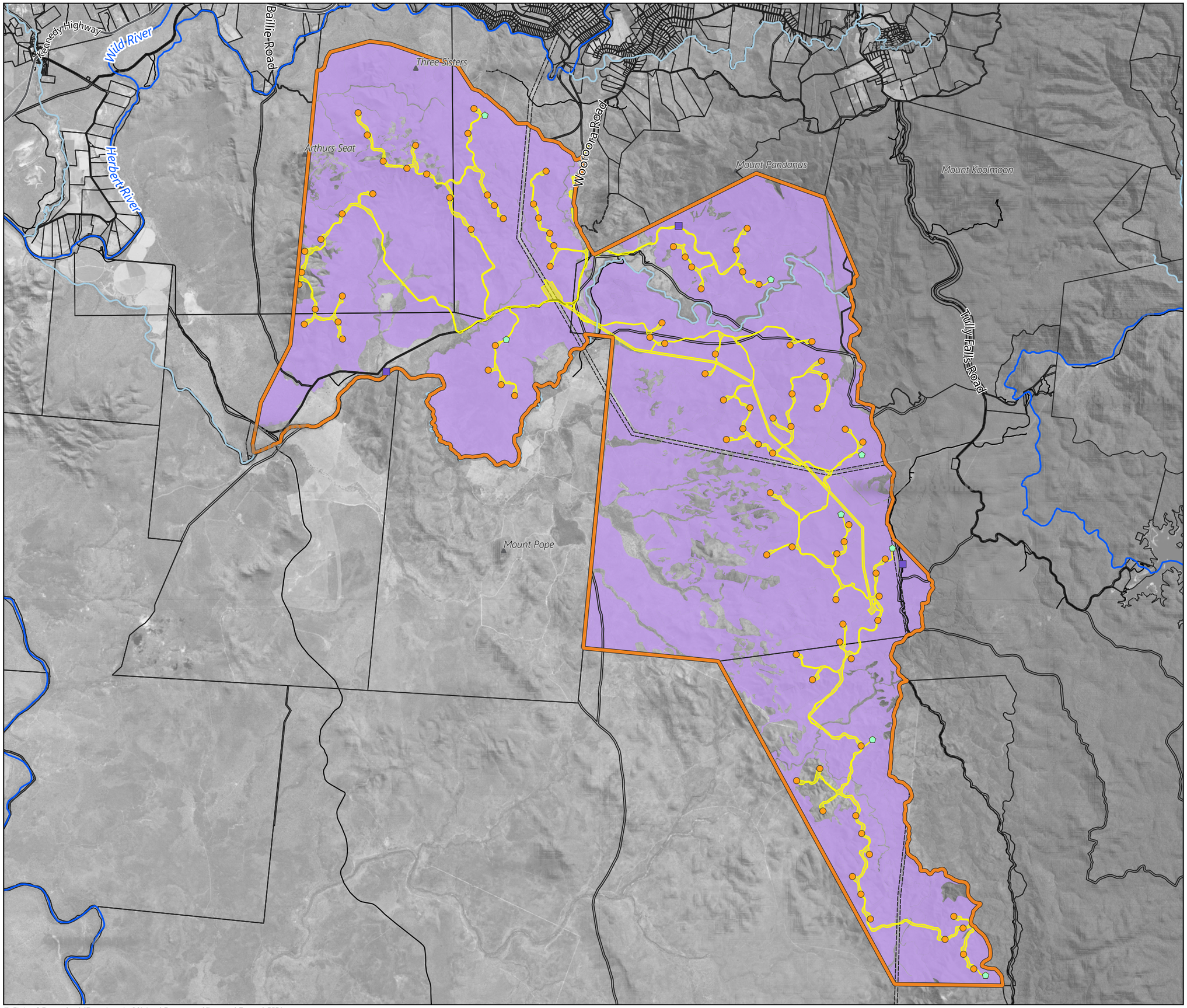
Data Source(s):
Digital Cadastral Database - Department of Natural Resources, Mines and Energy (2021)
Queensland Imagery Whole Of State
Satellite Public Basemap Service

8.20 Satin Flycatcher

The satin flycatcher inhabits heavily vegetated gullies in eucalypt-dominated forests and taller woodlands (but not rainforests). These have been mapped as potential habitat, see **Figure 8-18**.



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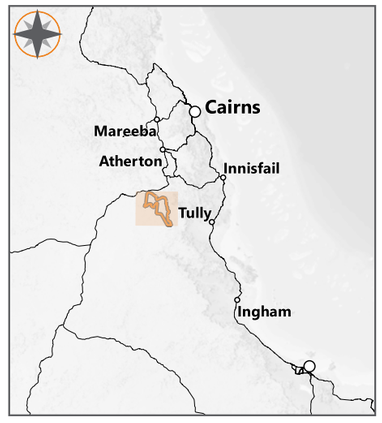
Chalumbin Wind Farm

Satin flyctacher Habitat

Figure 8.18

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Observation
- Potential habitat
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

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



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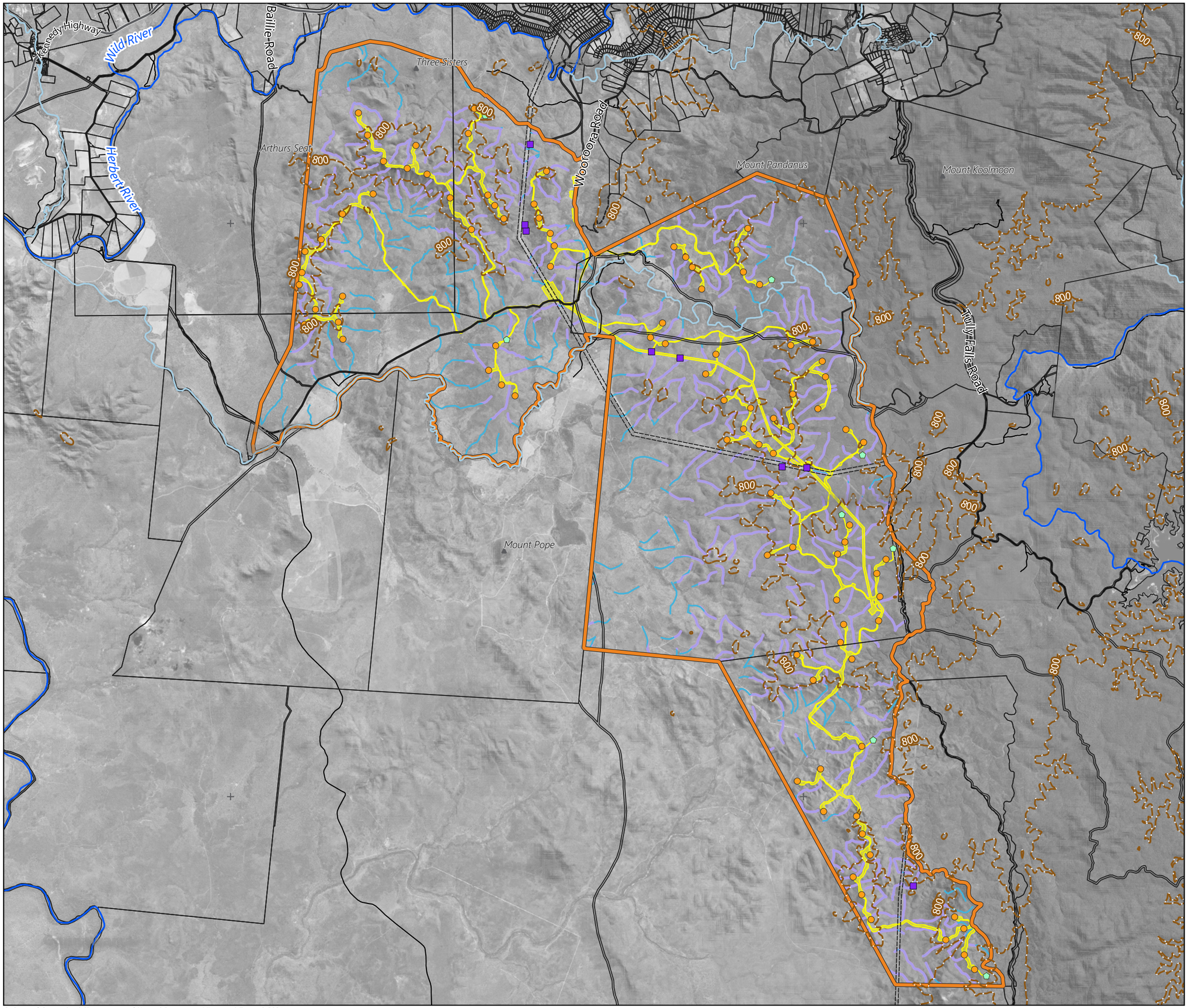
Data Source(s):
Digital Cadastral Database - Department of Natural Resources, Mines and Energy (2021)
Queensland Imagery Whole Of State
Satellite Public Basemap Service

8.21 Magnificent Brood-frog

The magnificent brood-frog is range-restricted and is only known to occur on rhyolites of the Glen Gordon volcanics at altitudes greater than 800 m. During field surveys, the species was observed in nine locations, with two locations recording large groups of male frogs (15-20 individuals). Five of the nine recorded observations were below the 800 m contour, which contradicts the published lower limit of the species' range.

Open eucalypt forest within 50 m of a stream order 1 watercourse on rhyolites of the Glen Gordon volcanics was mapped as potential habitat for magnificent brood-frog across the Project area, see **Figure 8-19**.



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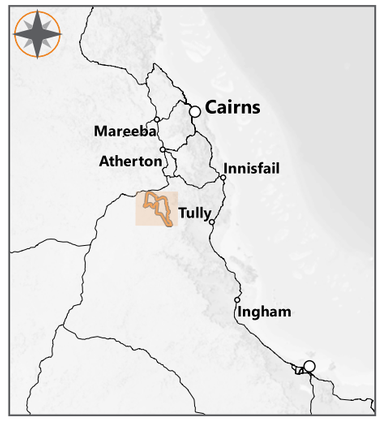
Chalumbin Wind Farm

Potential Habitat for Magnificent brood-frog

Figure 8.19

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- 800m Contour
- Survey Observation
- Preferred habitat
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

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



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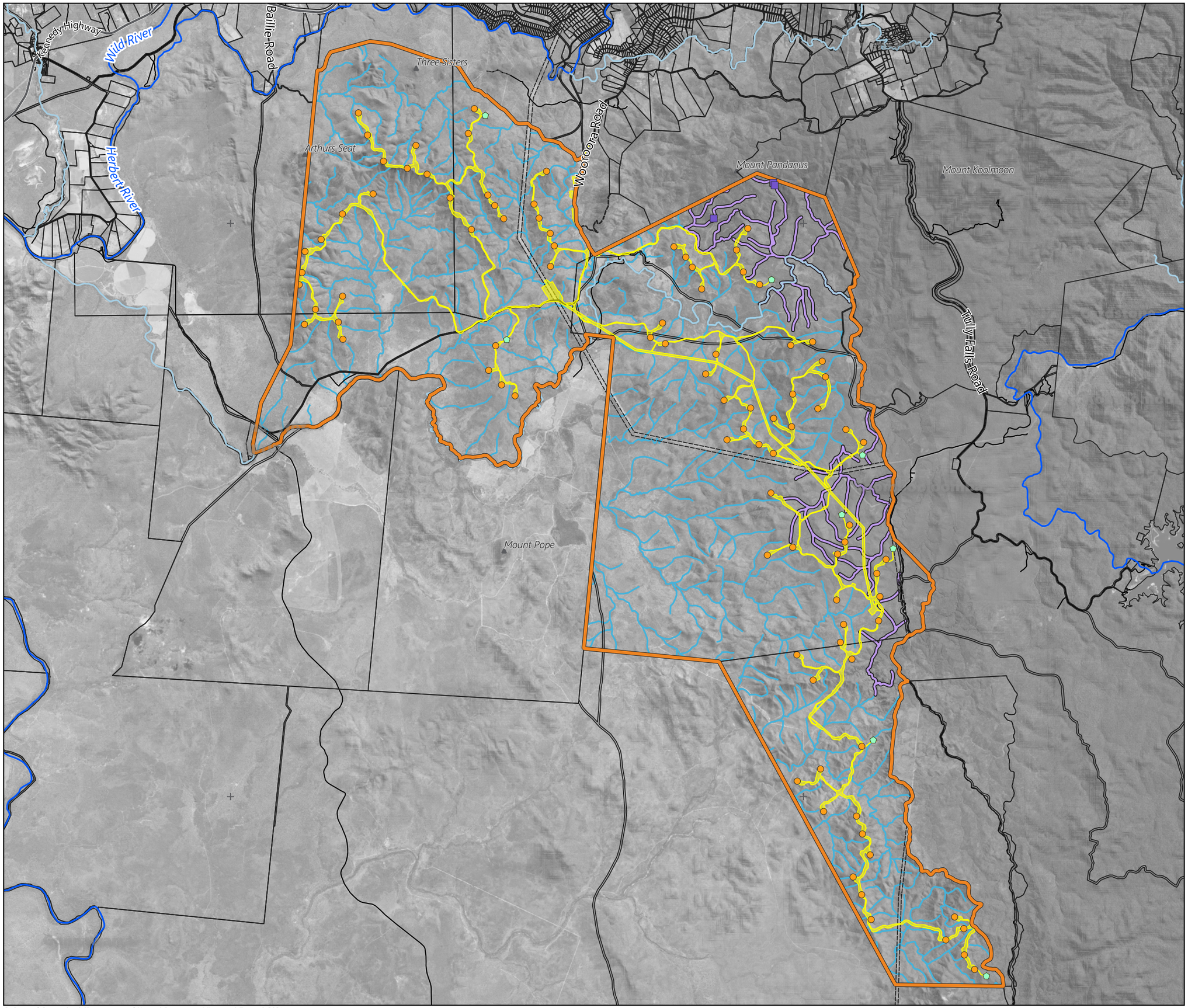
Data Source(s):
Digital Cadastral Database - Department of Natural Resources, Mines and Energy (2021)
Queensland Imagery Whole Of State
Satellite Public Basemap Service

8.22 Tapping Green-eyed Frog

Creeks within rainforest and wet sclerophyll forest were mapped as potential habitat for the tapping green-eyed frog, as shown in **Figure 8-20**.



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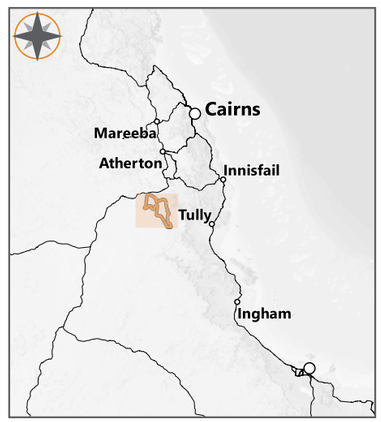
Chalumbin Wind Farm

Potential Habitat for Tapping Green-Eyed frog

Figure 8.20

- Project Area
- Wind Turbine
- Met-mast
- Project Footprint
- Threatened Fauna Record
- Potential Habitat
- Major Road
- River
- Creek
- Lot Type Parcel
- Easement

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



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

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9.0 Impact Assessment

The following sections describe and quantify the potential impacts associated with construction and operation of the Project in broad terms. Significant impact assessments for MSES are presented in **Section 11.0**.

9.1 Project Footprint

The Project footprint has been defined based on the Project description in **Section 3.0**, including the extent of earthworks required to provide a maximum direct impact area. The Project footprint mapped and assessed within this report includes areas permanently required for infrastructure such as turbines, access roads, substations, etc., and the extent of earthworks required across the varying terrain. The Project footprint also accommodates required fire breaks around above-ground infrastructure such as turbines and overhead powerline poles. Some of the Project footprint will also include areas of temporary disturbance such as laydown areas that will be rehabilitated on completion of construction.

The total Project footprint is approximately 1,132 ha (3.58 % of the Project area). Within this, areas of temporary disturbance are estimated to be up to 25 % of the Project footprint, subject to detailed design. In many instances, the access track width required for operation of the Project will be less than that required for construction – where appropriate to do so, the access tracks will be reduced in width prior to operation, with those parts no longer required for operations to be rehabilitated.

The Project will not clear any additional habitat outside the maximum disturbance limits identified, but will have flexibility in certain locations to microsite infrastructure within the Project footprint in response to site-specific constraints, including ecological constraints such as large habitat trees.

9.2 Potential Construction Impacts

Throughout the construction phase the Project has the potential to impact MSES values via the following:

- Vegetation clearing resulting in loss of habitat;
- Habitat fragmentation and reduced connectivity;
- Fauna injury or mortality during vegetation clearing and potential entrapment in trenches when installing underground powerlines;
- Fauna injury or mortality due to vehicle strike;
- Wildlife disturbance due to dust, noise, light and vibration emissions;
- Reduced water quality due to erosion and sedimentation;
- Potential spills of hazardous materials;
- Introduction or increased prevalence of pests and weeds due to increased vehicle movements and vegetation clearing; and
- Increased risk of bushfire due to potential ignition sources on site associated with increased activity.

These are discussed in more detail in the following sections.

9.2.1 Vegetation Clearing

The Project area supports large areas of remnant vegetation dominated by open eucalypt woodland with small pockets of scattered rainforest communities close to the eastern boundary (i.e. closer to the Wet Tropics WHA). The Project has been designed to avoid any clearing of rainforest vegetation; therefore, threatened species specifically associated with these rainforest communities are not expected to be impacted.

Clearing of eucalypt woodland will reduce breeding, foraging and sheltering habitat for flora and fauna species, and the process of vegetation clearance has the potential to result in injury to or mortality of native fauna species. Some species are more sedentary and hence more susceptible to impacts than others. Conversely, more mobile species such as migratory birds are unlikely to be disturbed by vegetation clearing as they are able to disperse more easily.

The total estimated area of vegetation clearing is 1,079.4 ha of remnant vegetation and 1 ha of regrowth vegetation, as outlined in **Table 9-1**. Watercourse vegetation, wetland vegetation, connectivity and essential habitat have been assessed in accordance with the SRI Guideline (DSDIP 2014) and the results are discussed in **Section 11.0**.

Table 9-1 Summary of Vegetation Clearing

RE	Description	Remnant (ha)	Regrowth (ha)
Least Concern (VM Act Status)			
7.3.8	*Melaleuca viridiflora* (broad leaf tea tree) +/- *Eucalyptus* spp. +/- *Lophostemon suaveolens* (swamp mahogany) open forest to open woodland. Humic gleyed texture contrast soils with impeded drainage, on alluvial plains.	0.9	0
7.3.16	*Eucalyptus platyphylla* woodland to open forest on alluvial plains. Gently sloping to flat, moderately to poorly drained alluvial lowlands, foot slopes and piedmont fans.	3.4	0
7.12.27a	*Eucalyptus reducta* medium open forest and woodland. Uplands and highlands on shallow granitic and rhyolitic soils, of the moist rainfall zone.	155.3	0
7.12.27c	*Eucalyptus resinifera* and *Syncarpia glomulifera* open woodland. Uplands and highlands on shallow granitic and rhyolitic soils, of the moist rainfall zone.	80.6	0
7.12.29a	*Corymbia intermedia*, *Eucalyptus tereticornis*, *E. drepanophylla* open forest to low open forest and woodland with *Allocasuarina torulosa*, *A. littoralis*, *Lophostemon suaveolens*, *Acacia cincinnata*, *A.* flavescens, *Banksia aquilonia*, and *Xanthorrhoea johnsonii*. Uplands, on granite and rhyolite.	11.6	0
7.12.30a	*Corymbia citriodora*, *Eucalyptus portuensis*, *C. intermedia*, *Syncarpia glomulifera* woodland to low woodland to open forest with *Callitris intratropica*, *Acacia calyculata* and *Xanthorrhoea johnsonii.* Uplands and highlands, of the most and dry rainfall zones.	61.5	0

RE	Description	Remnant (ha)	Regrowth (ha)
7.12.34	*Eucalyptus portuensis* and/or *E. drepanophylla* +/- *C. intermedia* +/- *C. citriodora*, +/- *E. granitica* open woodland to open forest on uplands on granite	182.1	0
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 *Acacia* spp. and/or *Lophostemon suaveolens* and/or *Allocasuarina littoralis* and/or *Eucalyptus lockyeri* subsp. *exuta*.	26.7	0
7.12.65k	Granite and rhyolite rock outcrop, of dry western areas, associated with shrublands to closed forests of *Acacia* spp. and/or *Lophostemon* spp. and/or *Allocasuarina* spp. Dry western areas. Granite and rhyolite.	5.6	0
9.5.5a	Mixed woodland to open forest of *Eucalyptus crebra* (narrow-leaved ironbark), *Corymbia clarksoniana* (Clarkson's bloodwood) and *C. citriodora* subsp. *citriodora* (lemon-scented gum) +/- *E. portuensis* (white mahogany) with a generally open sub-canopy of canopy species +/- *Callitris intratropica* (cypress pine) and *Acacia* spp. The open shrub layer often contains juvenile canopy species, *Petalostigma pubescens* (quinine), *Acacia flavescens* (powder puff wattle) and other *Acacia* spp. *Themeda triandra* (kangaroo grass) is the dominant species in a dense grassy ground layer. Occurs on Tertiary plateaus and remnants.	6.8	0
9.3.15	Fringing woodland to open forest containing any combination of *Casuarina cunninghamiana*, *Eucalyptus tereticornis* and *E. platyphylla* +/- *Lophostemon suaveolens* +/- *Nauclea orientalis* +/- *Corymbia tessellaris* +/- *C. clarksoniana*. There is often a low sub-canopy layer which can include canopy species and Ficus spp. The open shrub layer contains juvenile canopy species and can include mesic species such as *Euroschinus falcatus*, *Acacia mangium* and *Syzygium sp*. The ground layer is medium to dense grassy and contains *Imperata cylindrica*, *Crotalaria sp*., *Heteropogon contortus*, *Cyperus spp*. and *Paspalum spp*. Occurs on stream banks and channels in areas of higher rainfall in the central east of the bioregion.	2.7	0
9.3.16	*Eucalyptus tereticornis* and/or *E. platyphylla* and/or *Corymbia clarksoniana* woodland on alluvial flats, levees and plains.	6.4	0
9.12.2	*Eucalyptus portuensis*, *Corymbia citriodora* subsp. *citriodora*, *E. granitica* or *E. crebra*, *C. intermedia* or C. *clarksoniana* mixed woodland on steep hills and ranges on igneous hills close to Wet Tropics boundary.	291.7	0
9.12.4	Low open woodland to woodland of *Eucalyptus shirleyi* +/- *Corymbia peltate* +/- *Callitris intratropica*. 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.	0.6	0
Of Concern			

RE	Description	Remnant (ha)	Regrowth (ha)
7.3.26	*Casuarina cunninghamiana* woodland to open forest on alluvium fringing streams.	3.8	0
7.3.43	*Eucalyptus tereticornis* open forest to woodland on uplands on well-drained alluvium	5.5	0.4
7.3.43a	*Eucalyptus tereticornis* open forest, tall open forest and woodland including communities ranging from those dominated by *E. tereticornis* to mixtures of that species with *Corymbia intermedia*, *E. drepanophylla*, *Lophostemon suaveolens* and *Allocasuarina torulosa*. Uplands on alluvium. Contains palustrine wetland (e.g. in swales).	0.7	0
7.8.7a	*Eucalyptus tereticornis* open forest, tall open forest and woodland. May also include *Corymbia intermedia*, *E. drepanophylla*, *Lophostemon suaveolens* and *Allocasuarina torulosa*. Uplands and highlands on basaltic krasnozem and prairie soils, of the moist rainfall zone.	0.5	0
7.8.10	*Eucalyptus tereticornis*, *E. drepanophylla* (or *E. granitica*), *E. portuensis*, *Corymbia intermedia* woodland to open forest, or *E. moluccana* woodland to open forest, of uplands and highlands on basalt.	0.9	0
7.8.18d	*Lophostemon suaveolens* woodland and open forest.	0.1	0
7.12.52	*Eucalyptus resinifera*, *Corymbia intermedia*, *Allocasuarina littoralis*, *Syncarpia glomulifera*, *E. drepanophylla* +/- *E. reducta* woodland on granite and rhyolite in the dry to moist rainfall zone	170.2	0
7.12.57	Shrubland and low woodland mosaic with *Syncarpia glomulifera*, *Corymbia abergiana*, *Eucalyptus portuensis*, *Allocasuarina littoralis* and *Xanthorrhoea johnsonii* on uplands and highlands on granite	7.6	0
7.12.57a	Shrubland and low woodland mosaic with *Syncarpia glomulifera*, *Corymbia abergiana*, *Eucalyptus portuensis*, *Allocasuarina littoralis* and *Xanthorrhoea johnsonii*. Uplands and highlands on granite and rhyolite, of the moist and dry rainfall zones.	27.5	0
7.12.66	*Lophostemon confertus* (brush box) low shrubland or low to medium closed forest. Exposed rocky slopes on granite and rhyolite.	23.4	0
Endangered			
7.8.19	*Corymbia clarksoniana* open forest to woodland on basalt.	3.4	0.7
Total		**1,079.4**	**1.1**

Table 9-2 presents a summary of other MSES values within the Project footprint.

Table 9-2 Other MSES Habitat Values within the Project Footprint

MSES	Description of MSES	Area within Project Footprint
Protected Wildlife Habitat [Endangered, Vulnerable and Special Least Concern species listed under the NC Act – provided for MSES species known or likely to occur in the Project area]	*Coleus amoenus*	23.65 ha
	Koala	23.64 ha preferred habitat 494.49 ha potential habitat
	Greater glider	63.23 ha preferred habitat 479.62 ha potential habitat
	Spotted-tailed quoll	170.41 ha potential habitat
	Platypus	2.73 ha potential habitat
	Short-beaked echidna	1,080.35 ha potential habitat
	Spectacled flying-fox	1,024.62 ha potential foraging habitat
	Red goshawk	147.95 ha preferred nesting habitat 932.4 ha potential foraging habitat
	White-throated needletail	1,080.35 ha potential habitat
	Fork-tailed swift	1,080.35 ha potential habitat
	Masked owl	6.45 ha preferred roosting habitat 1,070.97 ha potential foraging habitat
	Black-faced monarch	83.11 ha potential habitat
	Rufous fantail	170.29 ha potential habitat
	Spectacled monarch	170.29 ha potential habitat
	Satin flycatcher	1,080.35 ha of potential habitat
	Magnificent brood-frog	54.43 ha potential habitat
High-risk Trigger Mapping	High-risk areas identified in flora survey trigger mapping as described by the *Environmental Offsets Regulation 2014*, schedule 2.	358.08 ha
Fish Passage	Works proposed across waterways within the Project area (i.e. access tracks) may have an impact on fish passage.	5.27 km

9.2.2 Habitat Fragmentation

Terrestrial habitat connectivity may be reduced as a result of the Project due to linear clearing, which may reduce fauna movements between areas of retained remnant vegetation. This habitat fragmentation will be more prominent where clearing widths are larger and intersect intact areas of vegetation. Clearing linear widths through habitats also has the potential to isolate plant populations by causing barriers to the dispersal of seeds and fruit, and to increase edge effects (additional light entering the forest, weed encroachment, increased feral animal abundance and increased risk of bushfire), thereby reducing the ecological functioning of those areas.

Some species are more prone to the impacts of fragmentation, such as greater gliders which are not able to traverse larger cleared areas. The maximum known gliding distance for a greater glider is 100 m (DELWP 2019); however, given the slopes and relatively short tree heights across much of the Project area, clearings less than 100 m wide are likely to act as a barrier to this species' movement. Other species (such as masked owl) are less likely to be affected by clearings of this size and will disperse quite readily across access tracks and powerline easements.

Fragmentation impacts will be somewhat temporary as a substantial proportion of the clearing for the access roads and other infrastructure elements is likely to be rehabilitated on completion of construction (subject to detailed design). Further details on site rehabilitation are provided in **Section 10.0** and will be outlined in a Rehabilitation Management Plan. It is anticipated that the proponent will need to further explore these post-construction rehabilitation opportunities as part of any forthcoming development permit conditions, as well as to respond to the requirements of the Public Environment Report Guidelines under the EPBC Act.

9.2.3 Fauna Injury or Mortality

Direct fauna injury or mortality may occur as a result of the Project during vegetation clearing (e.g. through removal of mature trees containing hollows), vehicle collision or through entrapment in trenches.

Mortality from tree clearing is a greater risk for nocturnal arboreal mammals such as the greater glider, whereby mortality may occur from removal of hollow-bearing trees which provide daytime denning habitat for the species.

Excavations will be required to create trenches in which underground cables will be carried, and to allow construction of turbine pads and access roads. This will involve removal of ground vegetation, soil and rock which provide fauna habitat (e.g. denning sites in rocky areas). During trenching activities there is potential for fauna to fall into and become trapped in open trenches, where they may perish or become subject to increased predation risk. Particularly susceptible species groups include reptiles, frogs and small mammals.

Increased traffic around the Project area has the potential to kill or injure fauna on impact. Some ground-dwelling or slow-moving species may be particularly susceptible to these impacts.

9.2.4 Reduced Air Quality

Increased dust from vegetation clearing, earthworks and vehicle movements during construction has the potential to temporarily and locally impact flora and fauna values in the vicinity of the Project footprint. Excess generation of dust and subsequent deposition on leaves can impair plant photosynthesis and productivity, resulting in reduced habitat quality for fauna. Increased dust can also impact on respiratory systems of fauna, alter soil properties impacting on plant species assemblages and reduce water quality in aquatic habitats.

Dust is expected to only be a potential issue during vegetation clearing and construction.

9.2.5 Noise and Vibration

Noise may adversely affect fauna by interfering with communication (e.g. territorial bird song), masking the sound of predators and prey, causing avoidance reactions and displacement from habitat. Construction noise will be generated by the Project through the use of machinery, plant and vehicles, and will vary from short intermittent noise from plant and equipment to more persistent noise from generators. The generation of construction noise may be in areas which have the potential to support threatened fauna species. Individuals that occur within the Project area may leave the area of impact. Project construction works and therefore potential noise impacts will be temporary.

Vibration from vehicles and equipment may cause temporary disturbance to fauna, and displacement or structural damage to boulder piles, rock fissures and caves which form habitat for fauna. Blasting may be required for construction of some pads and access roads depending on geological constraints, and obligate cave-dwelling bats would be particularly susceptible to vibration impacts from blasting.

9.2.6 Light Emissions

Artificial lighting from infrastructure and machinery may impact fauna within the Project area during construction. Artificial lighting can have a range of impacts which vary between species. Artificial light can disrupt patterns of both nocturnal and diurnal species by eliciting responses. Some species may avoid brightly lit areas, potentially due to the perception of being increased risk of predation. Conversely, some species such as nocturnal reptiles, frogs and bats may congregate at artificial light sources to feed on insects attracted to light.

Other potential adverse impacts include disruption of breeding and migratory patterns, disorientation and potential collision with structures.

9.2.7 Erosion and Sedimentation

The main construction activities that could impact on water quality are excavations and earthmoving for construction of turbine pads and access roads. This may lead to erosion and sedimentation, reduction in water quality and changes to water flows.

During construction activities, sediment may be mobilised and transported by surface water during rainfall events, ultimately discharging into watercourses and drainage lines and potentially reducing water quality in downstream aquatic habitats. Increased suspended sediments can reduce light penetration into the water column, reducing photosynthesis of aquatic macrophytes and decreasing dissolved oxygen levels. However, many creek lines in the Project area are ephemeral, which may reduce the magnitude of these impacts.

Changes in the hydrology of the Project area may occur through alteration of surface flows and stormwater runoff, including obstruction of flow. This can result in scouring or waterlogging occurring in some areas.

The accidental release of pollutants (including leaks and other uncontrolled releases) into the surrounding environment and waterways has the potential to degrade aquatic habitat quality in the Project area and impact vegetation communities and fauna utilising these areas. This includes direct toxic impacts on fauna from ingestion or inhalation. Without mitigation, contaminants may enter waterways including oily wastewater (from heavy equipment cleaning), contaminated runoff from chemical or fuel storage areas and general washdown water.

9.2.8 Hazardous Materials

Project activities have the potential to result in accidental releases of hazardous materials, such as fuels and oils from vehicles and machinery. These hazardous materials can lead to localised soil contamination and contamination of

water resources, which in turn can cause injury, reduced vigour or mortality to flora and fauna. The severity of the impact is dependent on the location and magnitude of the release.

9.2.9 Pests and Weeds

Project activities have the potential to increase the abundance of pest flora in the Project area and facilitate dispersal of species to previously unaffected areas. Movement of vehicles, equipment and personnel throughout the Project area is the key vector of transmission, in particular vehicles and equipment sourced from regions beyond the Project area which may introduce new species. Many weed species thrive on disturbed ground and will rapidly colonise disturbed areas in advance of native species recolonisation.

Increased pest flora abundance has adverse impacts on native vegetation and biodiversity, as well as potential negative economic effects on local land uses such as grazing activities.

Project-related activities may also increase pest fauna abundance in the Project area. This can lead to increased competition with, and predation of native fauna. In addition, habitat degradation may occur through vegetation trampling (e.g. feral pig wallowing). Creation of new access points into areas of intact vegetation may create pathways for feral fauna species to disperse. Uncontained waste sources may also attract feral fauna such as wild dogs.

9.2.10 Bushfire Risk

Fire is a natural part of the Australian landscape, and most vegetation communities are adapted to periodic fires. However, changes in the natural fire regime may result in changes in the species composition and / or structure of the vegetation. The increased presence of construction vehicles and personnel in the Project area may increase fire risk through use of machinery that may generate sparks, use of flammable liquids and idling vehicles being present in areas of ground vegetation.

9.3 Potential Operational Impacts

Throughout the operational phase, the Project has the potential to impact on MSES via the following:

- Fauna injury or mortality due to vehicle strike;
- Collision with turbines towers, blades and powerlines;
- Barotrauma;
- Wildlife disturbance due to noise and light emissions;
- Potential spills of hazardous materials;
- Increased pests and weeds due to increased vehicle movements; and
- Increased risk of bushfire due to potential ignition sources on site associated with increased activity.

These are discussed in more detail in the following sections.

9.3.1 Vehicle Strike

Increased traffic around the Project area has the potential to kill or injure fauna on impact although traffic levels will be greatly reduced from the construction phase and more geared towards light vehicles. Ground dwelling or slow-moving species may be particularly susceptible to traffic impacts.

9.3.2 Collision Risk

Potential impacts to threatened and migratory species, and other species groups of concern (e.g. microbats, raptors and waterfowl) may occur through direct collision with turbine towers and blades and associated powerlines, but also through flying through the "wake" behind the turbine. Many species will rarely, if ever, fly at rotor height while others will do so routinely. Different types of flight (e.g. soaring, direct flight, hovering) and different speeds of flight also will pose a different risk of collision.

Turbine siting will influence collision risk, with turbines located near wetlands likely to lead to greater risk of collision with birds and bats which congregate near wetland habitats. Turbines located on ridgelines and in valleys or other topographical features which may "funnel" birds and bats through a narrow pathway, may also pose a greater risk of collision.

Other factors that attract birds and bats to the proximity of turbines include an increase in perching habitat (from powerlines or the turbine structure itself), increased lighting that increases insect abundance around turbines, and the presence of carcasses around the base of turbines (attracting raptors and corvids in particular).

Generally, species at higher risk of collision are likely to comprise:

- Raptors – this group take advantage of updrafts associated with ridgelines to move around. Raptor species were reasonably well represented in the diurnal bird surveys, with observations of collared sparrowhawk, brown goshawk, grey goshawk, wedge-tailed eagle, Pacific baza, whistling kite, brown falcon and peregrine falcon.
- Migratory swifts – both white-throated needletail and fork-tailed swift were recorded during the field surveys and will routinely fly at RSA height.
- Waterfowl (ducks, cormorants, terns, herons, etc.) – these species are generally prone to collision due to their often-direct nature of flight, flight height and lower manoeuvrability than other species. No significant wetlands are present within the Project area and this group was not well represented in the diurnal bird surveys, with minimal observations of Australian wood duck, Pacific black duck, white-necked heron and white-faced heron.
- Migrating passerines and other species – migratory passerines routinely fly at RSA height. The Project area is not considered to be located in a significant corridor for passerine movement.
- High-flying or migratory/nomadic microbats – many species forage at or below canopy height, but some species forage well above canopy height (e.g. some of the freetail and sheathtail species).

9.3.3 Barotrauma

Mortality from near-contact collision in the form of barotrauma is known to primarily affect microbat species. Barotrauma is associated with low air pressure produced in the wake of moving blade-tips in the form of vertices. These vertices increase in size and decompression gradients with increasing blade velocity. The sudden change in air pressure associated with the vertices is known to damage the internal air-containing tissues of microbats such as lungs when entering a fast-moving turbine wake, typically causing internal haemorrhaging resulting in death. This form of mortality may account for up to 50 % of all microbat deaths associated with wind farms in locations where

microbats are common. Rapid air pressure changes are largely an undetectable hazard and it is thought that microbats are more susceptible to fatal barotrauma than other groups due to particular anatomical features such as large lungs to body ratios and specialised vascular system to power high-energy flight (Baerwald et al. 2008).

9.3.4 Noise and Light Emissions

The mechanisms for operational impacts from noise and lighting are as described in **Section 9.2.5** for construction, although the potential for significant noise generating activities is greatly reduced.

Artificial lighting from infrastructure may impact fauna within the Project area during operation of the Project. In particular, artificial light can disrupt patterns of both nocturnal and diurnal species by eliciting responses. Some species may avoid brightly lit areas, potentially due to the perception of an increased risk of predation. Increased lighting of turbines may increase the presence of insects and in turn lead to an increased risk of collision with turbines for bats and birds. As presented in the Aeronautical Impact Assessment (Appendix P of the Planning Report), the Project is not proposed to have aviation safety lighting installed on the wind turbines.

9.3.5 Hazardous Materials

As described in **Section 9.2.8** for construction activities, operational activities have the potential to cause harm to fauna species through accidental releases of hazardous materials. The volume of such substances being used and stored on site during operation will be significantly less than during construction, with a corresponding reduction in risk.

9.3.6 Pests and Weeds

As described in **Section 9.2.9** for construction activities, operational activities have the potential to increase the abundance of pest flora and fauna in the Project area and facilitate dispersal of species to previously unimpacted areas.

9.3.7 Bushfire Risk

During operational activities, there is potential for heightened fire risk due to the increased presence of maintenance and monitoring vehicles and personnel in the Project area. This is through the use of machinery that may generate sparks, use of flammable liquids and idling vehicles being present in areas of ground vegetation.

9.4 Potential Decommissioning Impacts

At the end of the Project's operational life, infrastructure will be decommissioned and the site rehabilitated to facilitate continuation of the current land use (i.e. agriculture). Decommissioning involves the removal of all above-ground infrastructure such as turbines, overhead transmission lines, switch stations, etc. Removal of buried infrastructure is not normally undertaken as this typically causes additional disturbance and environmental impacts. Once above-ground infrastructure is removed, the land is rehabilitated in line with specific approval conditions and landholder agreements.

Impacts during decommissioning are likely to relate primarily to vehicle movements around the Project area, potential for spread of weeds and elevated risk of bushfire as described in the sections above. No additional vegetation clearing would be anticipated during decommissioning activities; however, this would be subject to a separate assessment if required.

10.0 Impact Avoidance, Minimisation and Mitigation

10.1 Design Phase

Ecological surveys of the Project area commenced at an early stage during Project design, and as such the results of the surveys have been able to significantly inform the Project layout. Central to this process was ensuring that areas of higher ecological significance were avoided to the greatest practical extent, taking into consideration the challenging terrain and wind resource requirements.

Initial ecological surveys were designed to collect information about the characteristics of the broader Project area, such that the opportunities and constraints could inform the subsequent Project design activities.

The evolution of the Project design demonstrates informed and ecologically sensitive development, where observations in the field have resulted in tangible and significant changes to the Project. From Project inception, CWF has been committed to achieving ecologically sustainable development through this Project, and this has formed a fundamental driver for the wider Project team.

Avoidance of MSES and associated habitat has been demonstrated during the design process as described in the subsections below.

10.1.1 Avoidance of Wet Tropics WHA

The Wet Tropics WHA is located to the east and northeast of the Wooroora property, and also cuts across a portion of the north-eastern extent of the Project area (within Wooroora). It was considered critical by the Project team to ensure that the Project footprint did not extend into the Wet Tropics WHA. The proposed wind turbine layout has been designed to achieve a separation distance of at least 600 m to the Wet Tropics WHA at its closest point (in the east of Wooroora). This not only avoids direct impacts to the Wet Tropics WHA, but also decreases the likelihood of any indirect impacts to the Wet Tropics WHA being associated with the Project.

10.1.2 Avoidance of Rainforest Habitats

Since the inception of the Project, the rainforest habitats associated with the Wet Tropics WHA and various MSES were identified as some of the higher-value ecological aspects of the Project area. Consequently, the ecological surveys on site were partly designed to ground-truth the extent of these rainforest habitats such that they could be avoided by the Project footprint.

The Project area supports large areas of remnant vegetation dominated by open eucalypt woodland with small pockets of scattered rainforest communities close to the eastern boundary. The Project has been designed to avoid any clearing of rainforest vegetation and therefore threatened species specifically associated with these rainforest communities are not expected to be impacted.

10.1.3 Avoidance of Arthur's Seat

Desktop and site-based cultural heritage investigations of the Project area identified that the Arthur's Seat topographical feature was of high cultural significance for the Traditional Owners. This, coupled with the known presence of *T. nitchaga* and *H. porteri* at this location, contributed to Arthur's Seat being avoided by the Project footprint by at least 1,000 m.

10.1.4 Avoidance of Habitat for MSES Plants Associated with Rocky Pavement

Some of the MSES flora species that are known to exist within the Project area (*P. clotteniana, H. porteri, T. nitchaga* and *Coleus amoenus*) share a common trait – their habitat requirements are highly niche. All recorded observations of these species during the field surveys were in association with the rocky pavement shrub complex habitat, corresponding with RE 7.12.65k. This vegetation community occurs on the granite and rhyolite outcrops favoured by all three listed plant species.

Through analysis of high-resolution aerial photography, these rocky pavement areas were identified and mapped throughout the Project area. These rocky pavement areas were then targeted for flora surveys in October 2020 and March 2021, and those found to contain MSES species were avoided as far as possible by the Project footprint through subsequent refinement by the Project team. This has resulted in the avoidance of most impacts to these MSES flora species through appropriate and considerate Project design, with only one known population of *Coleus amoenus* (listed as Vulnerable under the NC Act) likely to be impacted.

10.1.5 Avoidance of Potential Red Goshawk Nest

The location of the potential red goshawk nest within the Glen Gordon property in riparian vegetation associated with Blunder Creek was identified as a high constraint for the purposes of Project design. The Project footprint has been designed to achieve a separation distance of more than 1,000 m between this nest and any proposed wind turbine. The Project footprint has also avoided this location through the appropriate placement of access tracks in areas removed from this potential red goshawk nest.

10.1.6 Reduction in Number of Turbines

In mid-2020, CWF had designed approximately 200 wind turbines across the Project area for further investigation and refinement once specific constraints were identified. The Project has evolved to the point where less than half of the original number of proposed wind turbines now remain under consideration. Central to the process was the preparation of ecological constraints mapping that sought to bring together the collective implications associated with ecological findings throughout the Project area to inform the Project team. This ecological constraint mapping (and associated advice) was then overlayed with other considerations (e.g. wind mapping, topography, landholder considerations) to determine the current Project footprint.

10.1.7 Further Minimisation of Project Footprint for Relevant Purpose Determination

CWF has worked with DoR over the past six months to further demonstrate that the Project has sought to minimise impacts to regulated vegetation to the greatest practical extent. To this end, CWF undertook a thorough review of the civil and electrical design for the Project, including challenging the width of the proposed Project footprint and ensuring that the electrical design requirements were realistic. This process led to a full re-appraisal of the civil and electrical design clearing requirements, with a view to ensure that colocation occurred wherever practicable subject to known constraints (topographical, landholder, ecological, etc.).

Specific actions undertaken by CWF in this process included:

- Civil design – CWF capitalised on opportunities to reduce proposed clearing widths for access tracks in the flatter parts of the Project area. The width of the Project footprint in some of these locations is now less than 25 m.
- Removal of proposed WTG20 and associated hardstand from the design.

- Changes to the location of some proposed access tracks on Lot 31 SP288862 to respond to landholder and ecological factors (e.g. avoiding mapped wetlands).
- Electrical design sought to achieve underground cabling for collector systems where feasible (collocated with access tracks). It is only in the more rugged terrain where cabling presents major issues (through much larger batter requirements when separation distances and offsets from the access track are factored in). In such locations, the collector systems are proposed as an overhead (approx. 33kV) alignment.
- Further design of the arrangement of the northern substation, BESS, construction compound, O&M facility resulted in changes to the overall footprints to adequately accommodate cables and OHTL infrastructure.
- Colocation of the OHTL corridor and access tracks where crossing major watercourses (e.g. between WTGs 74 and 75) on Lot 1 CWL3298, in areas of known greater glider habitat.
- Reduction in the area of the proposed southern substation, to reduce impacts and clearing requirements on Lot 1 CWL3298

10.1.8 Additional Mitigation Measures

Further to the measures described above, the following general measures have been implemented throughout the design phase to avoid and minimise environmental impacts to the greatest practical extent:

- Locating the substation, office, construction compound and temporary laydown areas on existing cleared land as far as practicable, and away from watercourses;
- Co-locating underground electric cabling with Project access roads and minimising the width of Project access roads as far as practicable; and
- Minimising the number and width of watercourse crossings – this has been a considerable driver to minimise potential impacts on greater glider, masked owl and red goshawk.

10.2 Construction Phase

10.2.1 Vegetation Clearing

The following measures will be employed during the construction phase of the Project to avoid and minimise impacts associated with vegetation clearing:

- Vegetation clearing will be limited to those areas required for earthworks and construction of the Project. Those areas which are not required for the ongoing operation of the Project will be rehabilitated to pre-disturbance land use as soon as practicable following construction.
- The approved disturbance area will be clearly demarcated prior to clearing to avoid unnecessary clearing of vegetation and to ensure personnel and vehicles stay within the approved footprint.
- Sequential clearing will occur to minimise impacts on native fauna, particularly arboreal fauna which may be using tree hollows.
- Measures to ensure clearing limits are adhered to will be documented in the CEMP and addressed in site inductions.
- Access will be limited to approved access routes and tracks.

- Turbine locations will be microsited within the Project corridor, where conditions and wind resource allow, to take advantage of areas of lower ecological significance.
- Removal of protected plants will be avoided as much as practicable by locating infrastructure away from populations and individuals during micrositing activities.
- Access roads will be aligned along existing tracks wherever practicable to minimise vegetation removal and loss of hollow-bearing trees, as well as to avoid additional disturbance through GBR wetland protection areas.
- Develop a Threatened Species Management Plan and Species Management Program (TSMP) to identify specific measures to be implemented that will mitigate impacts to threatened fauna species and breeding places during clearing, as well as operation of the Project.
- Pre-clearance surveys will be undertaken by a suitably qualified ecologist to:
  - identify GPS locations of any protected plants within the proposed disturbance areas noting details for each individual, including a health assessment;
  - identify and mark all hollow-bearing trees;
  - identify and mark any other active breeding places such as nests, burrows etc.;
  - identify suitable release sites; and
  - identify presence of weed species.
- A suitably qualified fauna spotter-catcher will be present during all clearing activities, working under an approved TSMP. The fauna spotter-catcher will be responsible to check an area immediately prior to any clearing for presence of any native fauna including searches of all potential habitats such as terrestrial microhabitats and hollows, etc. Any captured species (excluding koalas) will be relocated to an agreed release site. The fauna spotter-catcher will then advise the ground staff as to measures that need to be taken to avoid impacts on breeding places and fauna species. Specific threatened species pre-clearance activities within the Project footprint will include:
  - canopy searches in suitable foraging tree species for koala; and
  - inspections of suitably sized hollows for the presence of greater glider.
- Sequential clearing will occur. Key steps as part of sequential clearing are summarised below:
  - the first phase will consist of removing understorey vegetation and smaller juvenile trees only. Juvenile trees are under 4 m in height or trunk circumference of less than 31.5 cm at 1.3 m above the ground. No hollow-bearing trees will be cleared in Phase 1;
  - after 48hrs the second phase can commence which is to clear the remaining larger trees, including those with hollows. Trees with small hollows will be cleared using the "slow drop" technique. The tree will be brought down slowly by the machine and mulch put underneath to soften the fall. They will then be inspected by the fauna spotter-catcher to ensure no wildlife remain in the hollow. Where practicable, fauna will be caught, and released into suitable recipient sites once clearing has stopped.
  - if any native fauna are injured they will be taken to a local vet/wildlife carer for treatment.
  - it is important the clearing is done in such a way that arboreal fauna are given the opportunity to disperse from the area once clearing has commenced under their own volition. To encourage this to occur, no habitat trees will be isolated (either singly or in groups) and instead dispersal corridors will be left in place that link

vegetation with clearing areas to adjacent areas of retained habitat. Such corridors could consist of a single row of trees no more than 30-40 m apart that will act as 'stepping stones'.

- any confirmed koalas will be identified by putting flagging tape and/or marking spray on the tree they are in, and any nearby trees with overlapping crowns or those trees that may impact the koala's tree during felling will not be cleared until the koala has moved from the area under its own volition. In most situations the koala will move from the area overnight.
- fell trees away from retained areas of vegetation where practicable. Where trees unavoidably fall into retained areas, leave in-situ to mimic natural tree fall and provide habitat for ground-dwelling fauna.
- micro-habitats such as fallen logs and rocks will be moved into adjacent habitat.

10.2.2 Habitat Fragmentation

The following measures will be implemented to mitigate and manage impacts of fragmentation as much as practicable during the construction phase:

- Fencing will be limited to use around the substation, and operation and maintenance facilities. Fencing design will give consideration to the movement of fauna through or over it, for example by not using barbed wire on the top strand of fences.
- Installation of glider rope crossings and glider poles in areas of preferred glider habitat with a clearance width of 50 m or greater to maintain habitat connectivity.
- Nest box installation to be undertaken where active dens are identified within the Project footprint to compensate for loss of denning resources.
- Minimise clearing widths and where feasible install measures to assist fauna safely move across these areas to adjacent habitats. This may be reducing vehicle speeds to minimise chance of vehicle strike, establish rope crossings at key fauna corridors (such as watercourse crossings).
- Install fauna exclusion fencing around some infrastructure such as the substation if there is a high risk of fauna species being impacted.
- Undertake staged clearing of native vegetation, and retain habitat trees where practicable, to minimise impacts to native fauna species.
- Implement weed and pest control across the Project area to reduce degradation of habitats and edge effects as a result of the Project.

10.2.3 Fauna Injury or Mortality

The following measures will be implemented to prevent species mortality during the construction phase:

- All vehicles associated with construction activities will travel at slow speeds to minimise the chance of any fauna strikes occurring. Speed limit signage will be placed at the entrance to the site and other key access tracks.
- A suitably qualified fauna spotter/catcher will be present during all clearing activities associated with the vegetation clearance, working under a Species Management Program. The spotter/catcher will be responsible to check an area prior to any slashing, minor vegetation removal, or ground disturbance occurring for; animal

breeding places (such as hollow bearing trees, nests, dens and fallen logs) and presence of any fauna species (such as checking for reptiles under fallen logs, and koalas within eucalypt trees).

- All contractors will be educated on the presence of native fauna including threatened species and need to travel slowly and look out for fauna when driving. This training will form part of mandatory inductions.
- Vehicle traffic will be confined to designated roads and access tracks.
- All fauna encountered (e.g. vehicle strike or during clearing activities) will be recorded in a central register by the Project Environment Manager. Any injured fauna will be reported as required in the Species Management Program that will be in place for the Project.
- Appropriate procedures for managing injured wildlife should be developed and included in the CEMP.
- During trenching activities, open trenches will be monitored daily. If species are trapped in the trench they will be released by a fauna spotter-catcher. The amount of open trench will be minimised and trenches will preferably be backfilled prior to nightfall.
- Escape ramps or planks and/or shelter (e.g. sawdust filled bags) for trapped fauna will be installed in open trenches.

10.2.4 Dust Emissions

The following measures will be implemented to mitigate and manage impacts from dust as much as practicable during the construction phase:

- Dust suppression techniques such as the use of water carts or application of soil binders will be implemented as required during construction.
- Dust generating activities will be minimised during dry, windy conditions.
- Low speed limits will be implemented on site to minimise dust generation.
- Areas of exposed soils will be stabilised / rehabilitated as soon as practicable, in line with best practice requirements.
- Machinery and vehicle tyres will be regularly cleaned to reduce wheel entrained dust emissions and/or the use of vibration grids will be considered.
- Access roads will be designed to have a less erodible surface.
- Water spraying of nearby sensitive vegetation should be considered if visible dust sedimentation is observed.

10.2.5 Noise and Vibration

The following measures will be implemented to mitigate and manage impacts from noise and vibration as much as practicable during the construction phase:

- Standard construction work hours for noise-generating activities will generally be between 6.30am and 6.30pm, reducing the risk of disturbance to nocturnal and crepuscular fauna.
- Equipment is to be fitted with noise reduction devices where practicable and switched off when not in use.
- Blasting will minimised as far as practicable.

- Prior to construction, likely locations for blasting will be reviewed to determine the risk of damage or disturbance to caves that have the potential to support bat roosts and additional controls will be developed as necessary.

10.2.6 Light Emissions

The following measures will be implemented to mitigate and manage impacts from lighting as much as practicable during the construction phase:

- Standard construction work hours (generally 6.30am to 6.30pm) predominantly coincide with daylight hours, minimising the need for lighting to facilitate night works. There may be some night work associated with the Project, subject to construction schedule and climatic conditions.
- Site lighting will be kept to the minimum required for safety.
- Where necessary, construction lighting will be directed to the required areas and designed to minimise light spill to surrounding areas through the use of shields or similar.

10.2.7 Erosion and Sedimentation

The following measures will be implemented to mitigate and manage impacts of erosion and sediment as much as practicable during the construction phase:

- Erosion in active construction areas cannot be eliminated but can be controlled. As part of the construction planning a certified Erosion and Sediment Control Plan (ESCP) will be prepared prior to construction and implemented during on-site activities. Sediment and erosion control measures to prevent soil loss will be developed consistent with the International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control (BPESC) document. The ESCP will form part of the overall CEMP. Particular focus will be given to managing runoff in the vicinity of watercourses.
- As a minimum standard, access tracks will be constructed in accordance with EHP publication: "Erosion control on property roads and tracks—managing runoff".
- Creek crossing locations will seek to take advantage of existing gaps in the riparian corridors as far as practicable. Work in creek crossings will be carried out in periods of no flow where practicable.
- Design on site infrastructure to ensure water flows are not impounded or concentrated (e.g. culverts, diversion ditches, etc.).
- No equipment or materials will be stored across flow paths.
- The extent of the area required to carry out the permitted activity must be limited to the minimum area necessary to reasonably carry out the works.
- Waterway crossings will be designed in accordance with accepted development requirements for waterway barrier works wherever practicable to ensure fish passage is not impeded.
- Watercourse crossings must be designed to maintain flow and minimise the increase in flow volume or velocity.
- Constructed access tracks (e.g. culverts or splash-through crossings) must be provided with a scour apron and cut off wall on the downstream side sufficient to prevent bed erosion.

10.2.8 Hazardous Materials

The following measures will be implemented to mitigate and manage impacts from accidental releases of hazardous substances:

- Hazardous chemicals will be stored within dedicated, bunded areas or within self-bunded containers away from watercourses and other sensitive receptors.
- Refuelling and the maintenance of machinery and equipment will be undertaken over hardstand areas with containment measures in place.
- Any accidental releases of hazardous materials will be reported within internal incident reporting systems so that these events can be reviewed, and corrective action taken as appropriate.
- Spill kits will be maintained onsite and located in proximity to chemical storage and handling areas; spill kit contents will be commensurate to the type and quantity of chemicals stored on-site.
- All recovered materials including affected soils, used absorbent pads and gravel, recovered liquids etc. are to be disposed of offsite at an appropriately licenced landfill facility.

10.2.9 Pests and Weeds

The following measures will be implemented to mitigate and manage impacts from weeds and pest animals as much as practicable during the construction phase:

- A Weed and Pest Management Plan will be developed for the Project with specific advice for key identified species. The plan will include management of weed spread, management of pest infestations, and monitoring effectiveness of control measures.
- Weed hygiene protocols will be implemented such as a dedicated vehicle and machinery cleaning bay at the main entrance to the site. This will not be placed near a watercourse.
- Restricted invasive plants present within the construction footprint will be treated prior to the commencement of works at that location.
- Onsite waste disposal (especially food waste) to discourage presence of pest fauna. Waste will be stored in covered bins/skips to prevent fauna access.
- Weeds will be identified during pre-clearing surveys, in particular, any large infestations within proposed disturbance areas. Clean and dirty zones should be demarcated on site to facilitate weed management.
- All vehicles, equipment and materials brought into site (such as gravel) will be certified as weed and disease free.
- Design weed washdown facilities at key access points and ensure that runoff is contained on site.
- Any herbicides used on site must be dispensed by an appropriately trained and qualified weed sprayer.

10.2.10 Bushfire Risk

The following measures will be implemented to mitigate and manage impacts from bushfire risks as much as practicable during the construction phase:

- As part of the construction planning a Bushfire Management Plan will be prepared by a suitably qualified person prior to construction and implemented during on-site activities. During the bushfire season, the fire danger status will be monitored daily.
- For "hot-work" activities, a risk assessment will be completed considering forecast weather, fire hazard ratings and site conditions.
- Vehicles may not idle or be parked in areas of long grass.
- Access tracks and fencelines will be used as firebreaks within the Project area and regularly maintained during construction and operation of the Project.
- Smoking will not be permitted on site.
- Fuel loads will be monitored and managed through activities such as controlled grazing, cool mosaic burns and weed management.

10.3 Operational Phase

10.3.1 Vehicle Strike

The following measures will be implemented to prevent species mortality through collision with vehicles during the operational phase:

- All vehicles associated with operational and maintenance activities will travel at slow speeds to minimise the chance of any fauna strikes occurring. Speed limit signage will be placed at the entrance to the site and other key access tracks.
- All contractors will be educated on the presence of native fauna including threatened species and need to travel slowly and look out for fauna when driving. This training will form part of mandatory inductions.
- Vehicle traffic will be confined to designated roads and access tracks.
- Threatened fauna encountered on site will be recorded in a central register by the Project Environment Manager. Any injured fauna will be reported as required in the Species Management Program that will be in place for the Project.
- Appropriate procedures for managing injured wildlife should be developed and included in the Project EMP.

10.3.2 Collision Risk

The following measures will be implemented to mitigate and manage impacts from bird and bat collision risks as much as practicable during the operational phase:

- As part of the operational planning a Bird and Bat Management Plan (BBMP) will be prepared by a suitably qualified person prior to the operation of the wind turbines. The BBMP will outline a monitoring program, identify if any threatened species are significantly impacted and define a strategy that manages and mitigates any significant impacts on these species. A Preliminary BBMP is included in **Appendix F**.
- The availability of perches in the vicinity of turbines will be reduced.

- Lighting of turbines will be limited – it is the advice of a specialist aviation consultant that wind turbines associated with the Project do not require aviation safety lighting (refer Appendix P of the Planning Report).
- Use of onsite deterrents such as ultrasonic devices will be investigated.
- The presence of standing water in the vicinity of turbines will be minimised.
- Operational monitoring for the site utilisation of birds and bats will be undertaken and compared to baseline data. Triggers for adaptive management will be included. Annual bird and bat utilisation surveys will be undertaken in line with Project approval conditions as part of monitoring to assess whether the Project area continues to be used by species and to assess any changes in abundance that may influence BBMP risk ratings.
- A regular carrion removal program will be implemented.

10.3.3 Noise and Light Emissions

The following measures will be implemented to mitigate and manage impacts from noise and lighting as much as practicable during the operational phase:

- Night lighting will mainly be limited to that required for safety and security. Project lighting will be minimised (i.e. low luminance) as far as possible.
- Directional lighting should be away from environmentally sensitive areas.

10.3.4 Pests and Weeds

The following measures will be implemented to mitigate and manage impacts from weeds and pest animals as much as practicable during the operational phase:

- Weed mapping within the construction footprint will be undertaken prior to commencement of works.
- Restricted invasive plants present within the construction footprint will be treated prior to the commencement of works at that location.
- All vehicles and equipment accessing site must arrive in the first instance with a current weed hygiene inspection certificate.
- Vehicles and equipment departing weed infested areas must be washed down and confirmed as clean down prior to entering weed free areas.
- A Weed and Pest Management Plan will be developed for the Project with specific advice for key identified species. This will include management of weed spread, management of pest infestations, and monitoring effectiveness of control measures.
- A pest animal monitoring program will be developed for the Project.
- Any herbicides used on site must be dispensed by an appropriately trained and qualified weed sprayer.

10.3.5 Bushfire Risk

The following measures will be implemented to mitigate and manage impacts from bushfire risks as much as practicable during the operational phase:

- A Bushfire Management Plan will be implemented during the operational phase of the Project. During the bushfire season, the fire danger status will be monitored daily.
- For "hot-work" activities, a risk assessment will be completed considering forecast weather, fire hazard ratings and site conditions.
- Vehicles may not idle or be parked in areas of long grass.
- Access tracks and fencelines will be used as firebreaks within the Project area and regularly maintained during construction and operation of the Project.
- Fuel loads will be monitored and managed through activities such as controlled grazing, cool mosaic burns and weed management.
- Smoking will not be permitted on site.

10.4 Rehabilitation

The following measures will be implemented to facilitate rehabilitation of the Project area:

- Areas required for construction which are no longer required for operation will be rehabilitated to pre-disturbance land use. This may include soil stabilisation, direct seeding, managing natural regeneration and weed management.
- It is anticipated that relatively large areas required to be cleared for construction access tracks can be rehabilitated back down to a considerably narrower width for operational purposes. At any given location, the extent to which this might occur will depend on the nature of the earthworks and the anticipated operational activities.
- Hollow-bearing stags, woody debris, logs and rocks will be retained for use in rehabilitation.
- Where seeding and/or revegetation is required, plant species will be selected that are found in similar adjacent habitat on site. This may include use of an inert initial colonisation species to assist in groundcover and stabilisation.

It is anticipated that the proponent will need to further explore these post-construction rehabilitation opportunities as part of any forthcoming development permit conditions, as well as to respond to the requirements of the Public Environment Report Guidelines under the EPBC Act.

10.5 Decommissioning

The following measures will be implemented to facilitate decommissioning of the Project area:

- Implement site planning and management requirements in accordance with a developed decommissioning and rehabilitation plan.
- Sequential rehabilitation will be practiced as soon as practicable following decommissioning activities.

11.0 Significant Impact Assessment

Significant residual impact assessments were carried out for MSES using the SRI Guideline (DSDIP 2014) applying State Code 16: Native Vegetation Clearing. This includes the following MSES:

- Endangered or Of Concern REs;
- Remnant vegetation within the defined distance of a watercourse;
- REs that intersect with a wetland;
- Connectivity; and
- Essential habitat.

Detailed assessments for each MSES value against the relevant criteria are provided in the following sections.

11.1 Assessment of Impacts on Endangered or Of Concern REs

The MSES significant residual assessments for Endangered and Of Concern REs are presented in the following tables.

Table 11-1 SRI Assessment for Endangered RE 7.8.19

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing of more than 5 ha of Endangered or Of Concern RE vegetation	Up to 4.03 ha of remnant and regrowth vegetation will be cleared.	Unlikely
Clearing that results in an overall area (not confined to property boundaries) of Endangered or Of Concern RE vegetation of less than 5 ha	Overall area of remnant and regrowth RE 7.8.19 in study area is a 14.4 ha. Clearing will not reduce this area of vegetation to less than 5 ha.	Unlikely
Clearing that results in the physical separation of Endangered and Of Concern RE communities within and on adjoining sites	The impacts to RE 7.8.19 are for the widening of an existing road, which currently passes through the mapped REs. No new physical separation of the patches shall occur.	Unlikely
Conclusion	The Project is not expected to result in a significant residual impact to RE 7.8.19.	

Table 11-2 SRI Assessment for Of Concern RE 7.3.26

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing of more than 5 ha of Endangered or Of Concern RE vegetation	Up to 3.76 ha of remnant and regrowth vegetation will be cleared.	Unlikely
Clearing that results in an overall area (not confined to property boundaries) of Endangered or Of Concern RE vegetation of less than 5 ha	Overall area of remnant and regrowth RE 7.3.26 in study area is 390 ha. Clearing will not reduce this area of vegetation to less than 5 ha.	Unlikely
Clearing that results in the physical separation of Endangered and Of Concern RE communities within and on adjoining sites	Clearing will result in a physical separation of up to 80 m at each of the watercourse crossings	Likely
Conclusion	The Project is likely to result in a significant residual impact to RE 7.3.26 as it will result in a physical separation of up to 80 m at each of the watercourse crossings.	

Table 11-3 SRI Assessment for Of Concern RE 7.3.43

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing of more than 5 ha of Endangered or Of Concern RE vegetation	Up to 6.63 ha of remnant and regrowth vegetation will be cleared.	Likely
Clearing that results in an overall area (not confined to property boundaries) of Endangered or Of Concern RE vegetation of less than 5 ha	Overall area of remnant and regrowth RE 7.3.43 in study area is 290.5 ha. Clearing will not reduce this area of vegetation to less than 5 ha.	Unlikely
Clearing that results in the physical separation of Endangered and Of Concern RE communities within and on adjoining sites	Clearing will result in a physical separation of up to 90 m	Likely
Conclusion	The Project is likely to result in a significant residual impact to RE 7.3.43 as it will result in the loss of up to 6.63 ha of remnant and regrowth vegetation and a physical separation of up to 90 m.	

Table 11-4 SRI Assessment for Of Concern RE 7.8.7

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing of more than 5 ha of Endangered or Of Concern RE vegetation	Up to 0.51 ha of remnant and regrowth vegetation will be cleared.	Unlikely
Clearing that results in an overall area (not confined to property boundaries) of Endangered or Of Concern RE vegetation of less than 5 ha	Overall area of remnant and regrowth RE 7.8.7 in study area is 88.2 ha. Clearing will not reduce this area of vegetation to less than 5 ha.	Unlikely
Clearing that results in the physical separation of Endangered and Of Concern RE communities within and on adjoining sites	No new physical separation of the patches shall occur.	Unlikely
Conclusion	The Project is not expected to result in a significant residual impact to RE 7.8.7	

Table 11-5 SRI Assessment for Of Concern RE 7.8.10

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing of more than 5 ha of Endangered or Of Concern RE vegetation	Up to 0.51 ha of remnant and regrowth vegetation will be cleared.	Unlikely
Clearing that results in an overall area (not confined to property boundaries) of Endangered or Of Concern RE vegetation of less than 5 ha	Overall area of remnant and regrowth RE 7.8.10 in study area is 20.35 ha. Clearing will not reduce this area of vegetation to less than 5 ha.	Unlikely
Clearing that results in the physical separation of Endangered and Of Concern RE communities within and on adjoining sites	No new physical separation of the patches shall occur.	Unlikely
Conclusion	The Project is not expected to result in a significant residual impact to RE 7.8.10.	

Table 11-6 SRI Assessment for Of Concern 7.8.18

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing of more than 5 ha of Endangered or Of Concern RE vegetation	Up to 0.09 ha of remnant and regrowth vegetation will be cleared.	Unlikely
Clearing that results in an overall area (not confined to property boundaries) of Endangered or Of Concern RE vegetation of less than 5 ha	Overall area of remnant and regrowth RE 7.8.10 in study area is 0.09 ha. Clearing will not reduce this area of vegetation to less than 5 ha.	Unlikely
Clearing that results in the physical separation of Endangered and Of Concern RE communities within and on adjoining sites	No new physical separation of the patches shall occur.	Unlikely
Conclusion	The Project is not expected to result in a significant residual impact to RE 7.8.18.	

Table 11-7 SRI Assessment for Of Concern RE 7.12.52

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing of more than 5 ha of Endangered or Of Concern RE vegetation	Up to 170.16 ha of remnant and regrowth vegetation will be cleared.	Likely
Clearing that results in an overall area (not confined to property boundaries) of Endangered or Of Concern RE vegetation of less than 5 ha	Overall area of remnant and regrowth RE 7.12.52 in study area is 3,316.96 ha. Clearing will not reduce this area of vegetation to less than 5 ha.	Unlikely
Clearing that results in the physical separation of Endangered and Of Concern RE communities within and on adjoining sites	Clearing will result in a physical separation of up to 140 m	Likely
Conclusion	The Project is likely to result in a significant residual impact to RE 7.12.52 as it will result in the loss of up to 170.16 ha of remnant and regrowth vegetation and a physical separation of up to 140 m.	

Table 11-8 SRI Assessment for Of Concern RE 7.12.57

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing of more than 5 ha of Endangered or Of Concern RE vegetation	Up to 35.01 ha of remnant and regrowth vegetation will be cleared.	Likely
Clearing that results in an overall area (not confined to property boundaries) of Endangered or Of Concern RE vegetation of less than 5 ha	Overall area of remnant and regrowth RE 7.12.57 in study area is 537.32 ha. Clearing will not reduce this area of vegetation to less than 5 ha.	Unlikely
Clearing that results in the physical separation of Endangered and Of Concern RE communities within and on adjoining sites	Clearing will result in a physical separation of up to 65 m	Likely
Conclusion	The Project is likely to result in a significant residual impact to RE 7.12.57 as it will result in the loss of up to 35.01 ha of remnant and regrowth vegetation and a physical separation of up to 65 m.	

Table 11-9 SRI Assessment for Of Concern 7.12.66

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing of more than 5 ha of Endangered or Of Concern RE vegetation	Up to 23.40 ha of remnant and regrowth vegetation will be cleared.	Likely
Clearing that results in an overall area (not confined to property boundaries) of Endangered or Of Concern RE vegetation of less than 5 ha	Overall area of remnant and regrowth RE 7.12.66 in study area is 236.39 ha. Clearing will not reduce this area of vegetation to less than 5 ha.	Unlikely
Clearing that results in the physical separation of Endangered and Of Concern RE communities within and on adjoining sites	Clearing will result in a physical separation of up to 80 m	Likely
Conclusion	The Project is likely to result in a significant residual impact to RE 7.12.66 as it will result in the loss of up to 23.40 ha of remnant and regrowth vegetation and a physical separation of up to 80 m.	

11.2 Assessment of Impacts on Remnant Vegetation within a Defined Distance of a Watercourse

Table 11-10 SRI Assessment for Remnant Vegetation with a Defined Distance of a Watercourse

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Permanent removal of vegetation within the defined distance of a stream order 2 or higher where no rehabilitation is proposed	Up to 9.00 ha of remnant vegetation within a defined distance of a watercourse is proposed to be removed.	Likely
Building of an online detention basin greater than 1 ha in size or other similar works that result in the clearing of vegetation which fragments up and downstream remnant areas on any stream order	The works do not comprise construction of online detention basins or similar that would result in fragmentation of riparian vegetation.	Unlikely
Permanent clearing of more than 0.5 ha of an Endangered or Of Concern RE, within the defined distance of a watercourse	Up to 4.26 ha of remnant vegetation comprising Of Concern RE, within a defined distance of a watercourse is proposed to be removed.	Likely
Conclusion	The Project is expected to result in a significant residual impact to remnant vegetation within a defined distance of a watercourse as up to 9.00 ha of remnant watercourse vegetation is required to be removed, of which 4.26 ha comprises Of Concern RE.	

11.3 Assessment of Impacts on Remnant Vegetation that Intersects with a Wetland

There is no clearing of remnant wetland vegetation proposed within either the Wet Tropics (coastal) bioregion or the Einasleigh (non-coastal) bioregion.

11.4 Assessment of Impacts on Connectivity

Table 11-11 SRI Assessment for Connectivity in the Wet Tropics Bioregion (Coastal)

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing does not occur in areas of vegetation that are less than 10 ha	Clearing occurs in primarily contiguous areas of vegetation that total 17,750.1 ha in size.	Unlikely
Clearing does not reduce the extent of vegetation to less than 10 ha	The proposed removal of 726.64 ha within the bioregion will leave 17,023.5 ha	Unlikely

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing does not occur in areas of vegetation less than 100 m wide	No clearing will occur in vegetation less than 100 m wide	Unlikely
Clearing does not reduce the width of vegetation to less than 100 m	No clearing will reduce the width of vegetation to less than 100 m wide	Unlikely
Clearing does not occur where the extent of vegetation on the subject lot(s) is reduced to, or less than, 30 % of the total area of the lot(s)	Wooroora Property is 20,300 ha in size with 17,529.1 ha of vegetation within the bioregion. The proposed removal of 695.1 ha in the lot will leave 16,834 ha which constitutes 86 % of the total vegetation of the lot within the bioregion remaining. Glen Gordon Property is 11,285.3 ha in size with 85.7 ha of vegetation in the bioregion. The proposed removal of 21.4 ha in the lot will leave 64.3 ha which constitutes of the 75 % of total vegetation of the lot within the bioregion remaining.	Unlikely
Conclusion	The Project is not likely to have a significant residual impact on connectivity in the Wet Tropics bioregion.	

Table 11-12 SRI Assessment for Connectivity in the Einasleigh Uplands Bioregion (Non-Coastal)

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing does not occur in areas of vegetation that are less than 50 ha	Clearing occurs in areas of vegetation that are 12,957.9 ha	Unlikely
Clearing does not reduce the extent of vegetation to less than 50 ha	The proposed removal of 353.7 ha will leave 12,604.2 ha	Unlikely
Clearing does not occur in areas of vegetation less than 200 m wide	1.22 ha of clearing will occur in vegetation less than 200m wide	Likely
Clearing does not reduce the width of vegetation to less than 200 m	6.22 ha of clearing will reduce the width of vegetation to less than 200 m wide	Likely
Clearing does not occur where the extent of vegetation on the subject lot(s) is reduced to, or less than, 30 % of the total area of the lot(s)	Glen Gordon Property is 11,285.3 ha in size with 10,601.7 ha of vegetation in the bioregion. The proposed removal of 322.2 ha in the lot will leave 10,963.1 ha which constitutes of the 97 % of total vegetation of the lot within the bioregion remaining.	Unlikely

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
	Wooroora Property is 20,300 ha in size with 2,295.9 ha of vegetation within the bioregion. The proposed removal of 17.7 ha in the lot will leave 2,278.2 ha which constitutes 99 % of the total vegetation of the lot within the bioregion remaining.	
Conclusion	The Project is likely to have a significant residual impact on connectivity as it will occur in vegetation less than 200 m wide and reduce the width of vegetation to less than 200 m wide. Despite not meeting the Acceptable Outcomes within State Code 16 for PO16 (and represented by the SRI criteria assessed above), the Project complies with the intent of PO16 in that it retains sufficient vegetation to maintain ecological processes throughout and beyond the Project area. Therefore, it is not considered that offsets are required for impacts to connectivity associated with the Project (refer to the SDAP Code Responses in Appendix R to the Planning Report).	

11.5 Assessment of Impacts on Essential Habitat

Table 11-13 SRI Assessment for Essential Habitat

SRI Criteria	Project Assessment	Significant Impact Likely / Unlikely?
Clearing of essential habitat exceeding the thresholds in Table 1, SDAP Module 8, i.e.: Dense and mid-dense REs - 10 m width and 0.5 ha area Sparse and very sparse REs - 20 m width and 2 ha area Grassland REs - 25 m width and 5 ha area Whereby the structure category of the RE is as per the REDD	Up to 13.81 ha of mid-dense essential habitat will be cleared, with a maximum width of 140 m. Up to 114.38 ha of sparse essential habitat will be cleared, with a maximum width of 180 m. Up to 3.56 ha of uncategorised essential habitat remapped as non-remnant or rocky pavements will be cleared, with a maximum width of 130 m.	Likely
Clearing of essential habitat resulting in a greater than 10 % permanent reduction in the extent of essential habitat mapped on site	The total extent of essential habitat mapped on site is 4,355.8 ha. The proposed clearing of 131.75 ha represents a permanent reduction of up to 3.0% on the site.	Unlikely
Conclusion	The Project is likely to have a significant residual impact on essential habitat as clearing will exceed the thresholds in Table 1, SDAP Module 8 for dense / mid-dense and sparse / very sparse REs.	

11.6 Environmental Offsets

It has been identified that the Project may result in a significant residual impact to Of Concern REs, watercourse vegetation and essential habitat.

Subject to approvals and detailed design, environmental offsets will be provided by CWF for this residual impact, in accordance with the Queensland Environmental Offsets Policy.

12.0 Conclusion

This report has been prepared to identify and assess potential impacts of the Project on the ecological values of the Project area. Based on desktop assessments and extensive seasonal field ecology surveys, the following MSES are considered known to occur within the Project area:

- Endangered and Of Concern REs;
- Remnant vegetation within a defined distance of a watercourse;
- Flora species listed as Endangered, Vulnerable or Near Threatened under the NC Act;
- Fauna species listed as Endangered, Vulnerable, Near Threatened or Special Least Concern under the NC Act;
- Connectivity values;
- Essential habitat; and
- Watercourses for fish habitat.

Construction of the Project will result in the removal of native vegetation and disturbance of existing ground conditions, on either a temporary or permanent basis. The assessment identified the following as potential impacts that may occur to ecological values as a result of the Project:

- Loss of habitat;
- Fragmentation of habitat and loss of connectivity;
- Injury or mortality of fauna species;
- Disturbance to habitat from noise, light and vibration; and
- Habitat degradation from invasive species and inappropriate fire regimes.

The proponent has undertaken significant work in designing the Project footprint to avoid the areas of greatest ecological value within the Project area. Wherever practicable, the Project footprint has been sites in areas of lower ecological value, including the avoidance of patches of rainforest vegetation and of areas known to support listed threatened flora species to the greatest extent practicable. This has resulted in a Project design that largely conserves the habitats and characteristics of highest ecological value within the Project area.

Significant residual impact assessments were carried out for MSES using the SRI Guideline (DSDIP 2014) and it was found that the Project is likely to result in a significant residual impact to Of Concern REs, watercourse vegetation and essential habitat. Offsets for these residual impacts will be required in accordance with the Queensland Environmental Offsets Policy.

The Project design demonstrates compliance with PO5 of State Code 23, as it has ensured that impacts on flora, fauna and associated ecological processes are avoided, or minimised and mitigated, through effective siting, design and operation of the development.

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Appendix A

Desktop Searches

Australian Government

Department of Agriculture, Water and the Environment

EPBC Act Protected Matters Report

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

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

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

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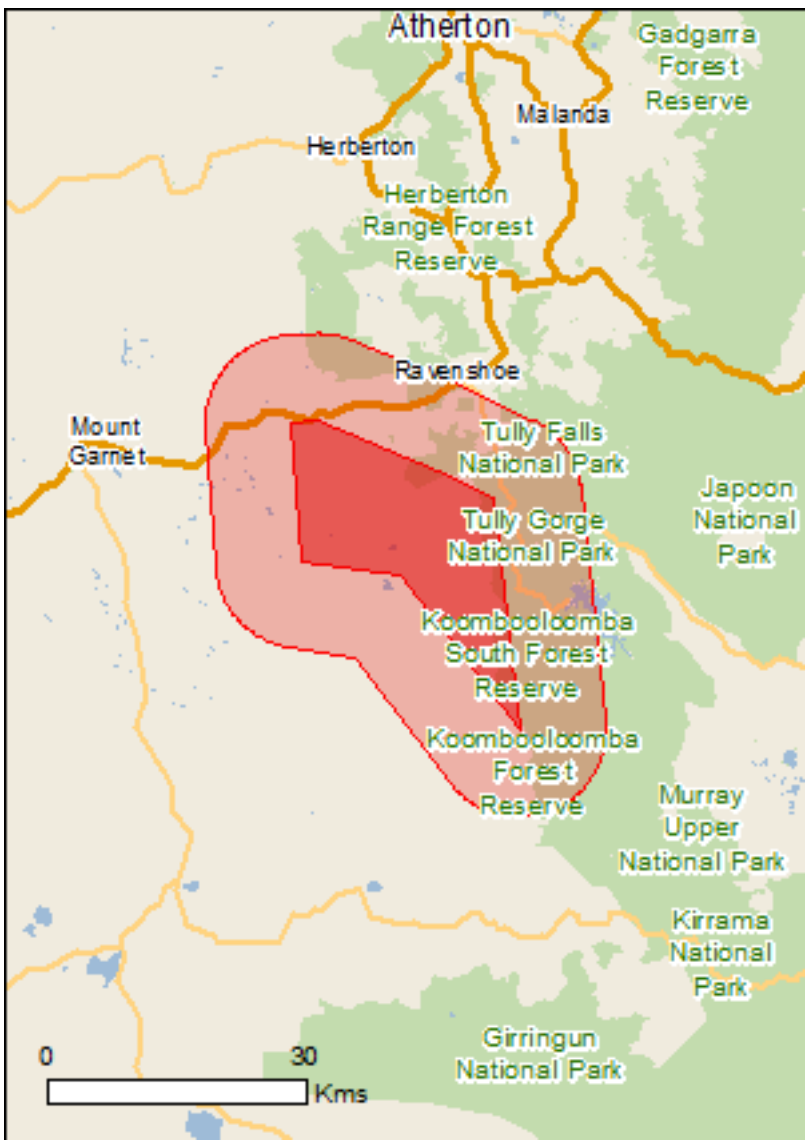

This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2015

Coordinates

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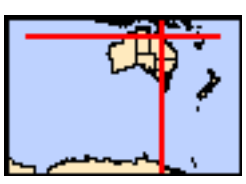

Summary

Matters of National Environmental Significance

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

World Heritage Properties:	1
National Heritage Places:	2
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	53
Listed Migratory Species:	19

Other Matters Protected by the EPBC Act

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

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

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

Commonwealth Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	24
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	11
Regional Forest Agreements:	None
Invasive Species:	28
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

World Heritage Properties		[Resource Information]
Name	State	Status
Wet Tropics of Queensland	QLD	Declared property

National Heritage Properties		[Resource Information]
Name	State	Status
Natural		
Wet Tropics of Queensland	QLD	Listed place
Indigenous		
Wet Tropics World Heritage Area (Indigenous Values)	QLD	Within listed place

Listed Threatened Ecological Communities		[Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Broad leaf tea-tree (Melaleuca viridiflora) woodlands in high rainfall coastal north Queensland	Endangered	Community likely to occur within area
Mabi Forest (Complex Notophyll Vine Forest 5b)	Critically Endangered	Community likely to occur within area

Listed Threatened Species		[Resource Information]
Name	Status	Type of Presence
Birds		
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Casuarius casuarius johnsonii Southern Cassowary, Australian Cassowary, Double-wattled Cassowary [25986]	Endangered	Species or species habitat known to occur within area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat known to occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Turnix olivii Buff-breasted Button-quail [59293]	Endangered	Species or species habitat likely to occur within area

Name	Status	Type of Presence
Tyto novaehollandiae kimberli Masked Owl (northern) [26048]	Vulnerable	Species or species habitat likely to occur within area
Frogs		
Litoria dayi Australian Lace-lid, Lace-eyed Tree Frog, Day's Big-eyed Treefrog [86707]	Vulnerable	Species or species habitat known to occur within area
Litoria nyakalensis Mountain Mistfrog, Nyakala Frog [1820]	Critically Endangered	Species or species habitat likely to occur within area
Pseudophryne covacevichae Magnificent Brood Frog [64385]	Vulnerable	Species or species habitat known to occur within area
Mammals		
Bettongia tropica Northern Bettong [214]	Endangered	Species or species habitat may occur within area
Dasyurus hallucatus Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat likely to occur within area
Dasyurus maculatus gracilis Spotted-tailed Quoll (North Queensland), Yarri [64475]	Endangered	Species or species habitat known to occur within area
Hipposideros semoni Semon's Leaf-nosed Bat, Greater Wart-nosed Horseshoe-bat [180]	Vulnerable	Species or species habitat may occur within area
Macroderma gigas Ghost Bat [174]	Vulnerable	Breeding likely to occur within area
Mesembriomys gouldii rattoides Black-footed Tree-rat (north Queensland), Shaggy Rabbit-rat [87620]	Vulnerable	Species or species habitat likely to occur within area
Petauroides volans Greater Glider [254]	Vulnerable	Species or species habitat known to occur within area
Petaurus australis Wet Tropics subspecies Yellow-bellied Glider (Wet Tropics), Fluffy Glider [88022]	Endangered	Foraging, feeding or related behaviour known to occur within area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat known to occur within area
Pteropus conspicillatus Spectacled Flying-fox [185]	Endangered	Species or species habitat known to occur within area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area
Rhinolophus robertsi Large-eared Horseshoe Bat, Greater Large-eared Horseshoe Bat [87639]	Vulnerable	Species or species habitat likely to occur within area
Saccolaimus saccolaimus nudicluniatus Bare-rumped Sheath-tailed Bat, Bare-rumped Sheathtail Bat [66889]	Vulnerable	Species or species habitat likely to occur within area
Plants		
Acacia purpureopetala Purple-flowered Wattle [61156]	Critically Endangered	Species or species habitat likely to occur

Name	Status	Type of Presence within area
Alloxylon flammeum Red Silky Oak, Queensland Waratah, Tree Waratah [56400]	Vulnerable	Species or species habitat known to occur within area
Aponogeton bullosus [8299]	Endangered	Species or species habitat likely to occur within area
Arthraxon hispidus Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area
Canarium acutifolium [23956]	Vulnerable	Species or species habitat likely to occur within area
Carronia pedicellata [24178]	Endangered	Species or species habitat likely to occur within area
Chingia australis [24603]	Endangered	Species or species habitat likely to occur within area
Corymbia rhodops [64015]	Vulnerable	Species or species habitat may occur within area
Cycas platyphylla a cycad [55796]	Vulnerable	Species or species habitat known to occur within area
Dichanthium setosum bluegrass [14159]	Vulnerable	Species or species habitat likely to occur within area
Diplazium cordifolium [15585]	Vulnerable	Species or species habitat likely to occur within area
Euphorbia carissoides [12431]	Vulnerable	Species or species habitat likely to occur within area
Grevillea glossadenia [7979]	Vulnerable	Species or species habitat known to occur within area
Homoranthus porteri [55196]	Vulnerable	Species or species habitat known to occur within area
Lastreopsis walleri a fern [18229]	Vulnerable	Species or species habitat known to occur within area
Macropteranthes montana [9003]	Vulnerable	Species or species habitat may occur within area
Phaius australis Lesser Swamp-orchid [5872]	Endangered	Species or species habitat may occur within area
Phaius pictus [22564]	Vulnerable	Species or species habitat likely to occur within area
Phlegmariurus marsupiiformis Water Tassel-fern [86553]	Vulnerable	Species or species habitat likely to occur within area

Name	Status	Type of Presence
Polyphlebium endlicherianum Middle Filmy Fern [87494]	Endangered	Species or species habitat likely to occur within area
Prostanthera clotteniana [76165]	Critically Endangered	Species or species habitat known to occur within area
Tephrosia leveillei [16946]	Vulnerable	Species or species habitat may occur within area
Triplarina nitchaga [64593]	Vulnerable	Species or species habitat likely to occur within area
Tropilis callitrophilis Thin Feather Orchid [82771]	Vulnerable	Species or species habitat known to occur within area
Vappodes lithocola Dwarf Butterfly Orchid, Cooktown Orchid [78893]	Endangered	Species or species habitat likely to occur within area
Zeuxine polygonoides Velvet Jewel Orchid [46794]	Vulnerable	Species or species habitat may occur within area
Reptiles		
Delma mitella Atherton Delma, Legless Lizard [25931]	Vulnerable	Species or species habitat known to occur within area
Egernia rugosa Yakka Skink [1420]	Vulnerable	Species or species habitat may occur within area

Listed Migratory Species [Resource Information]

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

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Marine Species		
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area
Hirundo rustica Barn Swallow [662]		Species or species habitat likely to occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Monarcha trivirgatus Spectacled Monarch [610]		Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat likely to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [Resource Information]

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

Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat likely to occur within area
Anseranas semipalmata Magpie Goose [978]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Chrysococcyx osculans Black-eared Cuckoo [705]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area
Hirundo rustica Barn Swallow [662]		Species or species habitat likely to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Monarcha trivirgatus Spectacled Monarch [610]		Species or species habitat known to occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area

Name	Threatened	Type of Presence
[Rostratula benghalensis (sensu lato)](#)		
Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
[Tringa nebularia](#)		
Common Greenshank, Greenshank [832]		Species or species habitat may occur within area
Reptiles		
[Crocodylus porosus](#)		
Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
Alcock	QLD
Kirrama	QLD
Koombooloomba	QLD
Koombooloomba	QLD
Koombooloomba South	QLD
Millstream Falls	QLD
Ravenshoe 1	QLD
Tully Falls	QLD
Tully Gorge	QLD
Yourka	QLD
Yourka Reserve	QLD

Invasive Species	[Resource Information]

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

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

Name	Status	Type of Presence
		habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Frogs		
Rhinella marina Cane Toad [83218]		Species or species habitat known to occur within area
Mammals		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Feral deer Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Acacia nilotica subsp. indica Prickly Acacia [6196]		Species or species habitat may occur within area
Annona glabra Pond Apple, Pond-apple Tree, Alligator Apple, Bullock's Heart, Cherimoya, Monkey Apple, Bobwood, Corkwood [6311]		Species or species habitat likely to occur within area
Cabomba caroliniana Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171]		Species or species habitat likely to occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Cryptostegia grandiflora Rubber Vine, Rubbervine, India Rubber Vine, India Rubbervine, Palay Rubbervine, Purple Allamanda [18913]		Species or species habitat likely to occur within area
Hymenachne amplexicaulis Hymenachne, Olive Hymenachne, Water Stargrass, West Indian Grass, West Indian Marsh Grass [31754]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Lantana camara		
Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat likely to occur within area
Parthenium hysterophorus		
Parthenium Weed, Bitter Weed, Carrot Grass, False Ragweed [19566]		Species or species habitat likely to occur within area
Salvinia molesta		
Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Senecio madagascariensis		
Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]		Species or species habitat likely to occur within area
Reptiles		
Hemidactylus frenatus		
Asian House Gecko [1708]		Species or species habitat likely to occur within area

Nationally Important Wetlands [Resource Information]

Name	State
Innot Hot Springs	QLD

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

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

- migratory and
- marine

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

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

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

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

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

Coordinates

-17.959564 145.546847,-17.959564 145.546847,-17.807632 145.424968,-17.793249 145.321971,-17.655899 145.311671,-17.653936 145.338107,-17.70431 145.463763,-17.730474 145.521785,-17.959564 145.546847

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

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

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

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Queensland Government

Wildlife Online Extract

Search Criteria: Species List for a Defined Area
Species: All
Type: All
Status: All
Records: All
Date: Since 1980
Latitude: 17.655 to 17.966
Longitude: 145.3 to 145.563
Email: nikki.odonnell@attexo.com.au
Date submitted: Monday 03 May 2021 10:34:29
Date extracted: Monday 03 May 2021 10:40:02

The number of records retrieved = 894

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians	Bufonidae	*Rhinella marina*	cane toad	Y			34
animals	amphibians	Hylidae	*Litoria fallax*	eastern sedgefrog		C		24
animals	amphibians	Hylidae	*Litoria nasuta*	striped rocketfrog		C		19
animals	amphibians	Hylidae	*Litoria rothii*	northern laughing treefrog		C		6
animals	amphibians	Hylidae	*Litoria bicolor*	northern sedgefrog		C		2
animals	amphibians	Hylidae	*Litoria latopalmata*	broad palmed rocketfrog		C		2
animals	amphibians	Hylidae	*Litoria jungguy*	northern stony creek frog		C		2
animals	amphibians	Hylidae	*Litoria rubella*	ruddy treefrog		C		19
animals	amphibians	Hylidae	*Litoria serrata*	tapping green eyed frog		V		29/7
animals	amphibians	Hylidae	*Litoria caerulea*	common green treefrog		C		7
animals	amphibians	Hylidae	*Litoria gracilenta*	graceful treefrog		C		29
animals	amphibians	Hylidae	*Litoria xanthomera*	orange thighed treefrog		C		14
animals	amphibians	Hylidae	*Litoria lesueuri sensu lato*	stony creek frog		C		15
animals	amphibians	Hylidae	*Litoria inermis*	bumpy rocketfrog		C		37
animals	amphibians	Limnodynastidae	*Limnodynastes convexiusculus*	marbled frog		C		1
animals	amphibians	Limnodynastidae	*Platyplectrum ornatum*	ornate burrowing frog		C		13
animals	amphibians	Limnodynastidae	*Limnodynastes terraereginae*	scarlet sided pobblebonk		C		20
animals	amphibians	Limnodynastidae	*Limnodynastes peronii*	striped marshfrog		C		42
animals	amphibians	Microhylidae	*Cophixalus infacetus*	creaking nurseryfrog		C		1
animals	amphibians	Microhylidae	*Cophixalus australis*	southern ornate nursery-frog		C		125/19
animals	amphibians	Microhylidae	*Austrochaperina pluvialis*	white browed whistlefrog		C		3
animals	amphibians	Microhylidae	*Austrochaperina robusta*	robust whistlefrog		C		9/2
animals	amphibians	Myobatrachidae	*Mixophyes schevilli sensu lato*	northern barred frog		C		6
animals	amphibians	Myobatrachidae	*Pseudophryne covacevichae*	magnificent broodfrog		V	V	39
animals	amphibians	Myobatrachidae	*Taudactylus acutirostris*	sharp snouted dayfrog		PE	EX	2
animals	amphibians	Myobatrachidae	*Mixophyes schevilli*	northern barred frog		C		10/3
animals	amphibians	Myobatrachidae	*Mixophyes coggeri*	mottled barred frog		C		1
animals	amphibians	Myobatrachidae	*Uperoleia altissima*	tableland gungan		C		53/1
animals	birds	Acanthizidae	*Acanthiza katherina*	mountain thornbill		C		30
animals	birds	Acanthizidae	*Acanthiza reguloides*	buff-rumped thornbill		C		1
animals	birds	Acanthizidae	*Sericornis keri*	Atherton scrubwren		C		12
animals	birds	Acanthizidae	*Gerygone mouki*	brown gerygone		C		24
animals	birds	Acanthizidae	*Gerygone olivacea*	white-throated gerygone		C		2
animals	birds	Acanthizidae	*Sericornis frontalis*	white-browed scrubwren		C		1
animals	birds	Acanthizidae	*Oreoscopus gutturalis*	fernwren		C		14
animals	birds	Acanthizidae	*Sericornis magnirostra*	large-billed scrubwren		C		47
animals	birds	Acanthizidae	*Smicrornis brevirostris*	weebill		C		4
animals	birds	Acanthizidae	*Sericornis citreogularis*	yellow-throated scrubwren		C		42
animals	birds	Accipitridae	*Haliaeetus leucogaster*	white-bellied sea-eagle		C		1
animals	birds	Accipitridae	*Haliastur sphenurus*	whistling kite		C		2
animals	birds	Accipitridae	*Accipiter fasciatus*	brown goshawk		C		2
animals	birds	Accipitridae	*Aquila audax*	wedge-tailed eagle		C		3
animals	birds	Accipitridae	*Accipiter cirrocephalus*	collared sparrowhawk		C		1/1
animals	birds	Accipitridae	*Erythrotriorchis radiatus*	red goshawk		E	V	2
animals	birds	Accipitridae	*Accipiter novaehollandiae*	grey goshawk		C		1
animals	birds	Aegothelidae	*Aegotheles cristatus*	Australian owlet-nightjar		C		15

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Alcedinidae	*Ceyx azureus*	azure kingfisher		C		3
animals	birds	Alcedinidae	*Ceyx pusillus*	little kingfisher		C		1
animals	birds	Anatidae	*Nettapus coromandelianus*	cotton pygmy-goose		C		1
animals	birds	Anatidae	*Nettapus pulchellus*	green pygmy-goose		C		1
animals	birds	Anatidae	*Dendrocygna arcuata*	wandering whistling-duck		C		1
animals	birds	Anatidae	*Anas superciliosa*	Pacific black duck		C		4
animals	birds	Anatidae	*Aythya australis*	hardhead		C		1
animals	birds	Anatidae	*Anas gracilis*	grey teal		C		1
animals	birds	Anatidae	*Cygnus atratus*	black swan		C		1
animals	birds	Anhingidae	*Anhinga novaehollandiae*	Australasian darter		C		1
animals	birds	Apodidae	*Aerodramus terraereginae*	Australian swiftlet		C		3
animals	birds	Ardeidae	*Nycticorax caledonicus*	nankeen night-heron		C		1
animals	birds	Ardeidae	*Ardea pacifica*	white-necked heron		C		1
animals	birds	Ardeidae	*Ardea intermedia*	intermediate egret		C		1
animals	birds	Ardeidae	*Egretta garzetta*	little egret		C		2
animals	birds	Ardeidae	*Ardea alba modesta*	eastern great egret		C		1
animals	birds	Ardeidae	*Egretta novaehollandiae*	white-faced heron		C		4
animals	birds	Artamidae	*Artamus leucorynchus*	white-breasted woodswallow		C		2
animals	birds	Artamidae	*Cracticus nigrogularis*	pied butcherbird		C		6
animals	birds	Artamidae	*Gymnorhina tibicen*	Australian magpie		C		8
animals	birds	Artamidae	*Strepera graculina*	pied currawong		C		29
animals	birds	Artamidae	*Cracticus torquatus*	grey butcherbird		C		10
animals	birds	Burhinidae	*Burhinus grallarius*	bush stone-curlew		C		6
animals	birds	Cacatuidae	*Calyptorhynchus banksii banksii*	red-tailed black-cockatoo (Cape York & Eastern Aust)		C		2
animals	birds	Cacatuidae	*Cacatua galerita*	sulphur-crested cockatoo		C		39
animals	birds	Cacatuidae	*Calyptorhynchus banksii*	red-tailed black-cockatoo		C		7
animals	birds	Campephagidae	*Coracina papuensis*	white-bellied cuckoo-shrike		C		13
animals	birds	Campephagidae	*Coracina tenuirostris*	cicadabird		C		12
animals	birds	Campephagidae	*Coracina novaehollandiae*	black-faced cuckoo-shrike		C		7
animals	birds	Campephagidae	*Coracina lineata*	barred cuckoo-shrike		C		10
animals	birds	Campephagidae	*Lalage tricolor*	white-winged triller		C		2
animals	birds	Campephagidae	*Lalage leucomela*	varied triller		C		4
animals	birds	Casuariidae	*Dromaius novaehollandiae*	emu		C		4
animals	birds	Casuariidae	*Casuarius casuarius johnsonii (southern population)*	southern cassowary (southern population)		E	E	15
animals	birds	Charadriidae	*Elseyornis melanops*	black-fronted dotterel		C		1
animals	birds	Charadriidae	*Vanellus miles*	masked lapwing		C		2
animals	birds	Climacteridae	*Cormobates leucophaea minor*	white-throated treecreeper (northern)		C		23
animals	birds	Climacteridae	*Cormobates leucophaea*	white-throated treecreeper		C		27
animals	birds	Columbidae	*Geophaps scripta peninsulae*	squatter pigeon (northern subspecies)		C		8
animals	birds	Columbidae	*Lopholaimus antarcticus*	topknot pigeon		C		4
animals	birds	Columbidae	*Macropygia amboinensis*	brown cuckoo-dove		C		37/1
animals	birds	Columbidae	*Ptilinopus magnificus*	wompoo fruit-dove		C		25
animals	birds	Columbidae	*Ptilinopus superbus*	superb fruit-dove		C		37
animals	birds	Columbidae	*Phaps chalcoptera*	common bronzewing		C		11

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Columbidae	*Ocyphaps lophotes*	crested pigeon		C		6
animals	birds	Columbidae	*Columba leucomela*	white-headed pigeon		C		2
animals	birds	Columbidae	*Geophaps scripta*	squatter pigeon		C		3
animals	birds	Columbidae	*Geopelia striata*	peaceful dove		C		15
animals	birds	Columbidae	*Chalcophaps indica*	emerald dove		C		10
animals	birds	Coraciidae	*Eurystomus orientalis*	dollarbird		C		5
animals	birds	Corvidae	*Corvus orru*	Torresian crow		C		13
animals	birds	Corvidae	*Corvus coronoides*	Australian raven		C		1
animals	birds	Cuculidae	*Cacomantis variolosus*	brush cuckoo		C		6
animals	birds	Cuculidae	*Chalcites lucidus*	shining bronze-cuckoo		C		10
animals	birds	Cuculidae	*Chalcites basalis*	Horsfield's bronze-cuckoo		C		1
animals	birds	Cuculidae	*Centropus phasianinus*	pheasant coucal		C		11
animals	birds	Cuculidae	*Cacomantis flabelliformis*	fan-tailed cuckoo		C		7
animals	birds	Cuculidae	*Scythrops novaehollandiae*	channel-billed cuckoo		C		5
animals	birds	Cuculidae	*Eudynamys orientalis*	eastern koel		C		3
animals	birds	Dicruridae	*Dicrurus bracteatus*	spangled drongo		C		17
animals	birds	Estrildidae	*Neochmia temporalis*	red-browed finch		C		14
animals	birds	Eurostopodidae	*Eurostopodus argus*	spotted nightjar		C		1
animals	birds	Eurostopodidae	*Eurostopodus mystacalis*	white-throated nightjar		C		1
animals	birds	Halcyonidae	*Dacelo leachii*	blue-winged kookaburra		C		9/1
animals	birds	Halcyonidae	*Tanysiptera sylvia*	buff-breasted paradise-kingfisher		C		1
animals	birds	Halcyonidae	*Todiramphus macleayii*	forest kingfisher		C		5
animals	birds	Halcyonidae	*Todiramphus sanctus*	sacred kingfisher		C		3
animals	birds	Halcyonidae	*Dacelo novaeguineae*	laughing kookaburra		C		23
animals	birds	Jacanidae	*Irediparra gallinacea*	comb-crested jacana		C		1
animals	birds	Maluridae	*Malurus melanocephalus*	red-backed fairy-wren		C		12
animals	birds	Megaluridae	*Megalurus timoriensis*	tawny grassbird		C		1
animals	birds	Megapodiidae	*Alectura lathami*	Australian brush-turkey		C		5
animals	birds	Megapodiidae	*Megapodius reinwardt*	orange-footed scrubfowl		C		22
animals	birds	Meliphagidae	*Entomyzon cyanotis*	blue-faced honeyeater		C		10
animals	birds	Meliphagidae	*Phylidonyris niger*	white-cheeked honeyeater		C		1
animals	birds	Meliphagidae	*Bolemoreus frenatus*	bridled honeyeater		C		34
animals	birds	Meliphagidae	*Stomiopera unicolor*	white-gaped honeyeater		C		1
animals	birds	Meliphagidae	*Cissomela pectoralis*	banded honeyeater		C		1
animals	birds	Meliphagidae	*Lichmera indistincta*	brown honeyeater		C		10
animals	birds	Meliphagidae	*Melithreptus lunatus*	white-naped honeyeater		C		3
animals	birds	Meliphagidae	*Philemon corniculatus*	noisy friarbird		C		17
animals	birds	Meliphagidae	*Xanthotis flaviventer*	tawny-breasted honeyeater		C		1
animals	birds	Meliphagidae	*Xanthotis macleayanus*	Macleay's honeyeater		C		9
animals	birds	Meliphagidae	*Manorina melanocephala*	noisy miner		C		12
animals	birds	Meliphagidae	*Microptilotis gracilis*	graceful honeyeater		C		2
animals	birds	Meliphagidae	*Myzomela sanguinolenta*	scarlet honeyeater		C		11
animals	birds	Meliphagidae	*Philemon citreogularis*	little friarbird		C		10
animals	birds	Meliphagidae	*Melithreptus albogularis*	white-throated honeyeater		C		4
animals	birds	Meliphagidae	*Acanthorhynchus tenuirostris*	eastern spinebill		C		9
animals	birds	Meliphagidae	*Ptilotula fusca*	fuscous honeyeater		C		4

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Meliphagidae	*Meliphaga notata*	yellow-spotted honeyeater		C		2
animals	birds	Meliphagidae	*Meliphaga lewinii*	Lewin's honeyeater		C		35
animals	birds	Meliphagidae	*Caligavis chrysops*	yellow-faced honeyeater		C		12
animals	birds	Meropidae	*Merops ornatus*	rainbow bee-eater		C		5
animals	birds	Monarchidae	*Arses kaupi*	pied monarch		C		2
animals	birds	Monarchidae	*Machaerirhynchus flaviventer*	yellow-breasted boatbill		C		6
animals	birds	Monarchidae	*Symposiachrus trivirgatus*	spectacled monarch		SL		16
animals	birds	Monarchidae	*Carterornis leucotis*	white-eared monarch		C		1
animals	birds	Monarchidae	*Monarcha melanopsis*	black-faced monarch		SL		24
animals	birds	Monarchidae	*Grallina cyanoleuca*	magpie-lark		C		5
animals	birds	Monarchidae	*Myiagra rubecula*	leaden flycatcher		C		6
animals	birds	Nectariniidae	*Dicaeum hirundinaceum*	mistletoebird		C		10
animals	birds	Neosittidae	*Daphoenositta chrysoptera*	varied sittella		C		6
animals	birds	Oriolidae	*Sphecotheres vieilloti*	Australasian figbird		C		2
animals	birds	Oriolidae	*Oriolus flavocinctus*	yellow oriole		C		1
animals	birds	Oriolidae	*Oriolus sagittatus*	olive-backed oriole		C		9
animals	birds	Orthonychidae	*Orthonyx spaldingii*	chowchilla		C		21
animals	birds	Pachycephalidae	*Colluricincla boweri*	Bower's shrike-thrush		C		35
animals	birds	Pachycephalidae	*Colluricincla harmonica*	grey shrike-thrush		C		10
animals	birds	Pachycephalidae	*Pachycephala pectoralis*	golden whistler		C		36
animals	birds	Pachycephalidae	*Pachycephala rufiventris*	rufous whistler		C		10
animals	birds	Pachycephalidae	*Colluricincla megarhyncha*	little shrike-thrush		C		18
animals	birds	Pachycephalidae	*Pachycephala simplex peninsulae*	grey whistler		C		1
animals	birds	Paradisaeidae	*Ptiloris victoriae*	Victoria's riflebird		C		27
animals	birds	Pardalotidae	*Pardalotus striatus*	striated pardalote		C		6
animals	birds	Pardalotidae	*Pardalotus punctatus*	spotted pardalote		C		6
animals	birds	Pelecanidae	*Pelecanus conspicillatus*	Australian pelican		C		2
animals	birds	Petroicidae	*Eopsaltria australis*	eastern yellow robin		C		6
animals	birds	Petroicidae	*Heteromyias cinereifrons*	grey-headed robin		C		58
animals	birds	Petroicidae	*Microeca flavigaster*	lemon-bellied flycatcher		C		4
animals	birds	Petroicidae	*Tregellasia capito*	pale-yellow robin		C		16
animals	birds	Petroicidae	*Microeca fascinans*	jacky winter		C		2
animals	birds	Phalacrocoracidae	*Phalacrocorax sulcirostris*	little black cormorant		C		2
animals	birds	Phalacrocoracidae	*Microcarbo melanoleucos*	little pied cormorant		C		4
animals	birds	Phasianidae	*Coturnix ypsilophora*	brown quail		C		2
animals	birds	Podargidae	*Podargus strigoides*	tawny frogmouth		C		8
animals	birds	Pomatostomidae	*Pomatostomus temporalis*	grey-crowned babbler		C		4
animals	birds	Psittacidae	*Trichoglossus haematodus moluccanus*	rainbow lorikeet		C		33
animals	birds	Psittacidae	*Cyclopsitta diophthalma macleayana*	Macleay's fig-parrot		V		4
animals	birds	Psittacidae	*Trichoglossus chlorolepidotus*	scaly-breasted lorikeet		C		24
animals	birds	Psittacidae	*Aprosmictus erythropterus*	red-winged parrot		C		4
animals	birds	Psittacidae	*Platycercus elegans*	crimson rosella		C		12
animals	birds	Psittacidae	*Platycercus adscitus*	pale-headed rosella		C		11
animals	birds	Psittacidae	*Parvipsitta pusilla*	little lorikeet		C		8
animals	birds	Psittacidae	*Alisterus scapularis*	Australian king-parrot		C		22
animals	birds	Psophodidae	*Psophodes olivaceus*	eastern whipbird		C		30

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animals	birds	Ptilonorhynchidae	*Scenopoeetes dentirostris*	tooth-billed bowerbird		C		36
animals	birds	Ptilonorhynchidae	*Ptilonorhynchus violaceus*	satin bowerbird		C		4
animals	birds	Ptilonorhynchidae	*Ptilonorhynchus nuchalis*	great bowerbird		C		3
animals	birds	Ptilonorhynchidae	*Ailuroedus maculosus*	spotted catbird		C		26
animals	birds	Ptilonorhynchidae	*Amblyornis newtonianus*	golden bowerbird		C		12
animals	birds	Rallidae	*Gallinula tenebrosa*	dusky moorhen		C		3
animals	birds	Rhipiduridae	*Rhipidura albiscapa*	grey fantail		C		47
animals	birds	Rhipiduridae	*Rhipidura rufifrons*	rufous fantail		SL		20
animals	birds	Rhipiduridae	*Rhipidura leucophrys*	willie wagtail		C		8
animals	birds	Strigidae	*Ninox boobook*	southern boobook		C		17
animals	birds	Strigidae	*Ninox rufa queenslandica*	rufous owl (southern subspecies)		C		5
animals	birds	Strigidae	*Ninox connivens*	barking owl		C		4
animals	birds	Threskiornithidae	*Threskiornis spinicollis*	straw-necked ibis		C		1
animals	birds	Threskiornithidae	*Platalea regia*	royal spoonbill		C		1
animals	birds	Threskiornithidae	*Threskiornis molucca*	Australian white ibis		C		1
animals	birds	Timaliidae	*Zosterops lateralis*	silvereye		C		7
animals	birds	Turdidae	*Zoothera lunulata*	Bassian thrush		C		5
animals	birds	Tytonidae	*Tyto delicatula*	eastern barn owl		C		3
animals	birds	Tytonidae	*Tyto tenebricosa multipunctata*	lesser sooty owl		C		3
animals	insects	Papilionidae	*Ornithoptera priamus*	New Guinea birdwing		C		1
animals	mammals	Acrobatidae	*Acrobates pygmaeus*	feathertail glider		C		1
animals	mammals	Canidae	*Canis familiaris*	dog	Y			2
animals	mammals	Canidae	*Canis familiaris (dingo)*	dingo				10
animals	mammals	Canidae	*Canis sp.*		Y			1
animals	mammals	Dasyuridae	*Antechinus flavipes rubeculus*	yellow-footed antechinus (north-east Queensland)		C		4
animals	mammals	Dasyuridae	*Dasyurus maculatus gracilis*	spotted-tailed quoll (northern subspecies)		E	E	1
animals	mammals	Dasyuridae	*Sminthopsis murina*	common dunnart		C		3
animals	mammals	Dasyuridae	*Planigale maculata*	common planigale		C		6
animals	mammals	Dasyuridae	*Antechinus adustus*	rusty antechinus		C		1
animals	mammals	Dasyuridae	*Sminthopsis sp.*			C		1
animals	mammals	Felidae	*Felis catus*	cat	Y			2
animals	mammals	Leporidae	*Oryctolagus cuniculus*	rabbit	Y			5
animals	mammals	Macropodidae	*Notamacropus agilis*	agile wallaby		C		7
animals	mammals	Macropodidae	*Dendrolagus lumholtzi*	Lumholtz's tree-kangaroo		NT		2
animals	mammals	Macropodidae	*Macropus sp.*			C		1
animals	mammals	Macropodidae	*Wallabia bicolor*	swamp wallaby		C		3
animals	mammals	Macropodidae	*Petrogale mareeba*	Mareeba rock-wallaby		C		1
animals	mammals	Macropodidae	*Macropus giganteus*	eastern grey kangaroo		C		28
animals	mammals	Macropodidae	*Notamacropus parryi*	whiptail wallaby		C		36
animals	mammals	Macropodidae	*Osphranter robustus*	common wallaroo		C		8
animals	mammals	Macropodidae	*Thylogale stigmatica*	red-legged pademelon		C		7
animals	mammals	Miniopteridae	*Miniopterus australis*	little bent-wing bat		C		8
animals	mammals	Miniopteridae	*Miniopterus schreibersii oceanensis*	eastern bent-wing bat		C		3
animals	mammals	Muridae	*Uromys caudimaculatus*	giant white-tailed rat		C		6

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animals	mammals	Muridae	*Pseudomys delicatulus*	delicate mouse		C		2
animals	mammals	Muridae	*Rattus sp.*			C		5/1
animals	mammals	Muridae	*Mus musculus*	house mouse	Y			5
animals	mammals	Muridae	*Melomys cervinipes*	fawn-footed melomys		C		13
animals	mammals	Muridae	*Pseudomys patrius*	eastern pebble-mound mouse		C		2
animals	mammals	Muridae	*Rattus lutreolus*	swamp rat		C		3/1
animals	mammals	Muridae	*Rattus fuscipes*	bush rat		C		6
animals	mammals	Muridae	*Melomys burtoni*	grassland melomys		C		12
animals	mammals	Muridae	*Rattus rattus*	black rat	Y			2
animals	mammals	Muridae	*Pogonomys sp.*	tree mouse		C		1
animals	mammals	Ornithorhynchidae	*Ornithorhynchus anatinus*	platypus		SL		4
animals	mammals	Peramelidae	*Perameles pallescens*	northern long-nosed bandicoot		C		10
animals	mammals	Peramelidae	*Isoodon macrourus*	northern brown bandicoot		C		6
animals	mammals	Petauridae	*Petaurus sp.*			C		5
animals	mammals	Petauridae	*Petaurus notatus*	Krefft's glider		C		8
animals	mammals	Petauridae	*Dactylopsila trivirgata*	striped possum		C		1
animals	mammals	Petauridae	*Petaurus australis unnamed subsp.*	yellow-bellied glider (northern subspecies)		E	V	1
animals	mammals	Phalangeridae	*Trichosurus vulpecula*	common brushtail possum		C		43
animals	mammals	Phascolarctidae	*Phascolarctos cinereus*	koala		V	V	1
animals	mammals	Potoroidae	*Aepyprymnus rufescens*	rufous bettong		C		12
animals	mammals	Pseudocheiridae	*Petauroides minor*	northern greater glider		V	V	28
animals	mammals	Pseudocheiridae	*Hemibelideus lemuroides*	lemuroid ringtail possum		C		113
animals	mammals	Pseudocheiridae	*Pseudocheirus peregrinus*	common ringtail possum		C		1
animals	mammals	Pseudocheiridae	*Pseudochirulus herbertensis*	Herbert River ringtail possum		C		46
animals	mammals	Pseudocheiridae	*Pseudochirops archeri*	green ringtail possum		C		21
animals	mammals	Pteropodidae	*Pteropus scapulatus*	little red flying-fox		C		8
animals	mammals	Pteropodidae	*Nyctimene robinsoni*	eastern tube-nosed bat		C		5
animals	mammals	Pteropodidae	*Pteropus conspicillatus*	spectacled flying-fox		E	E	6
animals	mammals	Rhinolophidae	*Rhinolophus megaphyllus*	eastern horseshoe-bat		C		1
animals	mammals	Suidae	*Sus scrofa*	pig	Y			6
animals	mammals	Tachyglossidae	*Tachyglossus aculeatus*	short-beaked echidna		SL		2
animals	mammals	Vespertilionidae	*Nyctophilus bifax*	northern long-eared bat		C		6
animals	mammals	Vespertilionidae	*Nyctophilus gouldi*	Gould's long-eared bat		C		3
animals	mammals	Vespertilionidae	*Vespadelus pumilus*	eastern forest bat		C		4
animals	mammals	Vespertilionidae	*Murina florium*	tube-nosed insectivorous bat		V		2
animals	mammals	Vespertilionidae	*Chalinolobus nigrogriseus*	hoary wattled bat		C		3
animals	mammals	Vespertilionidae	*Nyctophilus geoffroyi*	lesser long-eared bat		C		1
animals	mammals	Vespertilionidae	*Myotis macropus*	large-footed myotis		C		1
animals	mammals	Vespertilionidae	*Kerivoula papuensis*	golden-tipped bat		C		3
animals	mammals	Vespertilionidae	*Scoteanax rueppellii*	greater broad-nosed bat		C		5
animals	ray-finned fishes	Anguillidae	*Anguilla reinhardtii*	longfin eel				2
animals	ray-finned fishes	Atherinidae	*Craterocephalus stercusmuscarum*	flyspecked hardyhead				1
animals	ray-finned fishes	Eleotridae	*Mogurnda adspersa*	southern purplespotted gudgeon				4
animals	ray-finned fishes	Eleotridae	*Hypseleotris sp.*					2
animals	ray-finned fishes	Plotosidae	*Tandanus tropicanus*					2

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animals	ray-finned fishes	Poeciliidae	*Gambusia holbrooki*	mosquitofish	Y			1
animals	ray-finned fishes	Terapontidae	*Leiopotherapon unicolor*	spangled perch				2
animals	ray-finned fishes	Terapontidae	*Hephaestus fuliginosus*	sooty grunter				2
animals	reptiles	Agamidae	*Lophosaurus boydii*	Boyd's forest dragon		C		1/1
animals	reptiles	Agamidae	*Diporiphora australis*	tommy roundhead		C		19
animals	reptiles	Agamidae	*Intellagama lesueurii*	eastern water dragon		C		3
animals	reptiles	Agamidae	*Pogona barbata*	bearded dragon		C		1
animals	reptiles	Agamidae	*Diporiphora nobbi*	nobbi		C		1
animals	reptiles	Boidae	*Simalia kinghorni*	amethystine python (Australian form)		C		1/1
animals	reptiles	Boidae	*Morelia spilota*	carpet python		C		3
animals	reptiles	Carphodactylidae	*Carphodactylus laevis*	chameleon gecko		C		5
animals	reptiles	Carphodactylidae	*Saltuarius cornutus*	northern leaf-tailed gecko		C		27
animals	reptiles	Chelidae	*Wollumbinia latisternum*	saw-shelled turtle		C		2
animals	reptiles	Chelidae	*Emydura macquarii krefftii*	Krefft's river turtle		C		1
animals	reptiles	Colubridae	*Dendrelaphis punctulatus*	green tree snake		C		1
animals	reptiles	Colubridae	*Stegonotus australis*	slaty-grey snake		C		1
animals	reptiles	Colubridae	*Boiga irregularis*	brown tree snake		C		1
animals	reptiles	Diplodactylidae	*Lucasium steindachneri*	Steindachner's gecko		C		2
animals	reptiles	Diplodactylidae	*Amalosia rhombifer*	zig-zag gecko		C		3
animals	reptiles	Diplodactylidae	*Oedura monilis sensu lato*	ocellated velvet gecko		C		1
animals	reptiles	Elapidae	*Cacophis churchilli*	northern dwarf crowned snake		C		1
animals	reptiles	Elapidae	*Pseudechis porphyriacus*	red-bellied black snake		C		2
animals	reptiles	Elapidae	*Vermicella annulata*	bandy-bandy		C		1
animals	reptiles	Elapidae	*Cryptophis nigrescens*	eastern small-eyed snake		C		4
animals	reptiles	Gekkonidae	*Gehyra dubia*	dubious dtella		C		2
animals	reptiles	Pygopodidae	*Lialis burtonis*	Burton's legless lizard		C		1
animals	reptiles	Scincidae	*Carlia rostralis*	black-throated rainbow-skink		C		1
animals	reptiles	Scincidae	*Morethia taeniopleura*	fire-tailed skink		C		9
animals	reptiles	Scincidae	*Carlia jarnoldae*	lined rainbow-skink		C		4
animals	reptiles	Scincidae	*Carlia rubigo*	orange-flanked rainbow skink		C		12
animals	reptiles	Scincidae	*Cryptoblepharus pulcher pulcher*	elegant snake-eyed skink		C		5
animals	reptiles	Scincidae	*Lampropholis bellendenkerensis*			C		2
animals	reptiles	Scincidae	*Gnypetoscincus queenslandiae*	prickly forest skink		C		1
animals	reptiles	Scincidae	*Glaphyromorphus mjobergi*	Atherton Tableland mulch-skink		C		1
animals	reptiles	Scincidae	*Cyclodomorphus gerrardii*	pink-tongued lizard		C		2
animals	reptiles	Scincidae	*Cryptoblepharus virgatus*	striped snake-eyed skink		C		1
animals	reptiles	Scincidae	*Coeranoscincus frontalis*	limbless snake-tooth skink		C		1
animals	reptiles	Scincidae	*Saproscincus basiliscus*	basilisk shadeskink		C		17
animals	reptiles	Scincidae	*Glaphyromorphus cracens*	slender mulch-skink		C		1
animals	reptiles	Scincidae	*Pygmaeascincus timlowi*	dwarf litter-skink		C		7
animals	reptiles	Scincidae	*Ctenotus taeniolatus*	copper-tailed skink		C		1
animals	reptiles	Scincidae	*Lygisaurus foliorum*	tree-base litter-skink		C		9/2
animals	reptiles	Scincidae	*Carlia rubrigularis*	red-throated rainbow-skink		C		8
animals	reptiles	Scincidae	*Ctenotus strauchii*	eastern barred wedgesnout ctenotus		C		2
animals	reptiles	Scincidae	*Ctenotus spaldingi*	straight-browed ctenotus		C		2
animals	reptiles	Scincidae	*Bellatorias frerei*	major skink		C		1

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animals	reptiles	Scincidae	*Lygisaurus laevis*	rainforest edge litter-skink		C		1
animals	reptiles	Scincidae	*Concinnia tigrina*	yellow-blotched forest-skink		C		1
animals	reptiles	Scincidae	*Eulamprus quoyii*	eastern water skink		C		1
animals	reptiles	Scincidae	*Carlia vivax*	tussock rainbow-skink		C		1
animals	reptiles	Scincidae	*Ctenotus sp.*			C		1
animals	reptiles	Typhlopidae	*Anilios torresianus*	north-eastern blind snake		C		2
animals	reptiles	Varanidae	*Varanus varius*	lace monitor		C		5
animals	reptiles	Varanidae	*Varanus tristis*	black-tailed monitor		C		1
fungi	Agaricomycetes	Agaricaceae	*Lepiota*					1/1
fungi	Agaricomycetes	Agaricaceae	*Macrolepiota clelandii*			C		1/1
fungi	Agaricomycetes	Amanitaceae	*Amanita*					5/5
fungi	Agaricomycetes	Atheliaceae	*Dictyonema irpicinum*			C		1/1
fungi	Agaricomycetes	Boletaceae	*Boletellus emodensis*			C		1/1
fungi	Agaricomycetes	Boletaceae	*Austroboletus*					2/2
fungi	Agaricomycetes	Boletaceae	*Tylopilus*					2/2
fungi	Agaricomycetes	Boletaceae	*Boletus*					2/2
fungi	Agaricomycetes	Boletaceae	*Strobilomyces*					1/1
fungi	Agaricomycetes	Cantharellaceae	*Cantharellus*					1/1
fungi	Agaricomycetes	Clavariaceae	*Clavicorona*					1/1
fungi	Agaricomycetes	Cortinariaceae	*Gymnopilus*					4/4
fungi	Agaricomycetes	Cortinariaceae	*Cortinarius*					1/1
fungi	Agaricomycetes	Crepidotaceae	*Crepidotus*					2/2
fungi	Agaricomycetes	Entolomataceae	*Entoloma*					1/1
fungi	Agaricomycetes	Fomitopsidaceae	*Fomitopsis*					1/1
fungi	Agaricomycetes	Ganodermataceae	*Amauroderma rude*			C		1/1
fungi	Agaricomycetes	Ganodermataceae	*Ganoderma*					2/2
fungi	Agaricomycetes	Geastraceae	*Geastrum*			C		1/1
fungi	Agaricomycetes	Gomphaceae	*Ramaria*			C		1/1
fungi	Agaricomycetes	Hyaloriaceae	*Pseudohydnum gelatinosum*			C		1/1
fungi	Agaricomycetes	Hydnangiaceae	*Laccaria*					6/6
fungi	Agaricomycetes	Hygrophoraceae	*Hygrocybe cantharellus*			C		1/1
fungi	Agaricomycetes	Hygrophoraceae	*Humidicutis mavis*			C		1/1
fungi	Agaricomycetes	Hygrophoraceae	*Hygrocybe*					1/1
fungi	Agaricomycetes	Inocybaceae	*Inocybe nobilissima*			C		1/1
fungi	Agaricomycetes	Inocybaceae	*Inocybe gracilissima*			C		1/1
fungi	Agaricomycetes	Inocybaceae	*Inocybe*			C		7/7
fungi	Agaricomycetes	Mycenaceae	*Xeromphalina*					1/1
fungi	Agaricomycetes	Mycenaceae	*Mycena*					10/10
fungi	Agaricomycetes	Pleurotaceae	*Hohenbuehelia*					1/1
fungi	Agaricomycetes	Podoscyphaceae	*Cymatoderma elegans*			C		1/1
fungi	Agaricomycetes	Polyporaceae	*Laetiporus sulphureus*			C		1/1
fungi	Agaricomycetes	Polyporaceae	*Microporus*					1/1
fungi	Agaricomycetes	Polyporaceae	*Polyporus*					2/2
fungi	Agaricomycetes	Polyporaceae	*Trametes*					5/5
fungi	Agaricomycetes	Polyporaceae	*Poria*					1/1
fungi	Agaricomycetes	Polyporaceae	*Microporus xanthopus*			C		2/2

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fungi	Agaricomycetes	Psathyrellaceae	*Psathyrella candolleana*			C		1/1
fungi	Agaricomycetes	Psathyrellaceae	*Psathyrella*					2/2
fungi	Agaricomycetes	Pterulaceae	*Pterula*					1/1
fungi	Agaricomycetes	Russulaceae	*Russula lenkunya*			C		1/1
fungi	Agaricomycetes	Russulaceae	*Russula foetens*			C		1/1
fungi	Agaricomycetes	Russulaceae	*Russula*			C		5/5
fungi	Agaricomycetes	Russulaceae	*Russula cyanoxantha*			C		1/1
fungi	Agaricomycetes	Sclerodermataceae	*Scleroderma polyrhizum*			C		1/1
fungi	Agaricomycetes	Sclerodermataceae	*Scleroderma*					4/4
fungi	Agaricomycetes	Stereaceae	*Stereum illudens*			C		1/1
fungi	Agaricomycetes	Stereaceae	*Stereum ostrea*			C		3/3
fungi	Agaricomycetes	Strophariaceae	*Galerina*					1/1
fungi	Agaricomycetes	Strophariaceae	*Hypholoma*					1/1
fungi	Agaricomycetes	Strophariaceae	*Hypholoma fasciculare*			C		1/1
fungi	Agaricomycetes	Tricholomataceae	*Collybia*					1/1
fungi	Agaricomycetes	Tricholomataceae	*Tricholoma eucalypticum*			C		1/1
fungi	Agaricomycetes	Tricholomataceae	*Filoboletus manipularis*			C		2/2
fungi	Agaricomycetes	Tricholomataceae	*Gymnopus*					1/1
fungi	lecanoromycetes	Cladoniaceae	*Cladia muelleri*			C		2/2
fungi	lecanoromycetes	Collemataceae	*Leptogium cyanescens*			C		1/1
fungi	lecanoromycetes	Collemataceae	*Leptogium bullatulum*			C		1/1
fungi	lecanoromycetes	Lecanoraceae	*Lecanora sulfurescens*			C		1/1
fungi	lecanoromycetes	Lobariaceae	*Sticta myrioloba*			C		1/1
fungi	lecanoromycetes	Lobariaceae	*Pseudocyphellaria beccarii*			C		1/1
fungi	lecanoromycetes	Lobariaceae	*Pseudocyphellaria pickeringii*			C		1/1
fungi	lecanoromycetes	Pannariaceae	*Physma byrsaeum*			C		1/1
fungi	lecanoromycetes	Parmeliaceae	*Usnea pectinata*			C		3/3
fungi	lecanoromycetes	Parmeliaceae	*Usnea rubicunda*			C		2/2
fungi	lecanoromycetes	Parmeliaceae	*Usnea rubrotincta*			C		3/3
fungi	lecanoromycetes	Parmeliaceae	*Usnea alboverrucata*			C		3/3
fungi	lecanoromycetes	Parmeliaceae	*Usnea bismolliuscula*			C		2/2
fungi	lecanoromycetes	Parmeliaceae	*Usnea molliuscula subsp. queenslandica*			C		4/4
fungi	lecanoromycetes	Parmeliaceae	*Usnea cornuta*			C		1/1
fungi	lecanoromycetes	Parmeliaceae	*Usnea baileyi*			C		8/8
fungi	lecanoromycetes	Parmeliaceae	*Usnea elixii*			C		7/7
fungi	lecanoromycetes	Parmeliaceae	*Usnea effusa*			C		1/1
fungi	lecanoromycetes	Parmeliaceae	*Usnea dasaea*			C		2/2
fungi	lecanoromycetes	Physciaceae	*Rinodina moziana var. moziana*			C		1/1
fungi	lecanoromycetes	Physciaceae	*Heterodermia koyana*			C		1/1
fungi	lecanoromycetes	Physciaceae	*Rinodina confragosula*			C		1/1
fungi	lecanoromycetes	Ramalinaceae	*Physcidia australasica*			C		1/1
fungi	sordariomycetes	Xylariaceae	*Xylaria longipes*			C		1/1
plants	land plants	Acanthaceae	*Hypoestes phyllostachya*		Y			1/1
plants	land plants	Acanthaceae	*Rostellularia adscendens*			C		1/1
plants	land plants	Acanthaceae	*Rostellularia adscendens subsp. adscendens*			C		1/1
plants	land plants	Amaryllidaceae	*Proiphys amboinensis*			C		1/1

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plants	land plants	Annonaceae	*Polyalthia submontana subsp. sessiliflora*			C		4/4
plants	land plants	Annonaceae	*Desmos goezeanus*			C		2/2
plants	land plants	Apocynaceae	*Marsdenia jensenii*			C		1/1
plants	land plants	Apocynaceae	*Parsonsia latifolia*	green-leaved silkpod		C		1/1
plants	land plants	Apocynaceae	*Alyxia ruscifolia*			C		1/1
plants	land plants	Apocynaceae	*Alyxia orophila*	mountain alyxia		C		1/1
plants	land plants	Apocynaceae	*Alyxia grandis*			C		1/1
plants	land plants	Apocynaceae	*Vincetoxicum*					1/1
plants	land plants	Apocynaceae	*Parsonsia straminea*	monkey rope		C		3/3
plants	land plants	Apocynaceae	*Melodinus baccellianus*			C		1/1
plants	land plants	Apocynaceae	*Hoya australis subsp. tenuipes*			C		1/1
plants	land plants	Apocynaceae	*Parsonsia grayana*			C		3/3
plants	land plants	Apocynaceae	*Neisosperma poweri*			C		2/2
plants	land plants	Aponogetonaceae	*Aponogeton bullosus*			E	E	1/1
plants	land plants	Araceae	*Alocasia brisbanensis*			C		1/1
plants	land plants	Araliaceae	*Hydrocotyle acutiloba*			C		1/1
plants	land plants	Araliaceae	*Hydrocotyle miranda*			C		1/1
plants	land plants	Araliaceae	*Cephalaralia cephalobotrys*	climbing panax		C		1/1
plants	land plants	Araliaceae	*Polyscias australiana*	ivory basswood		C		1/1
plants	land plants	Araliaceae	*Motherwellia haplosciadea*			C		1/1
plants	land plants	Argophyllaceae	*Argophyllum ferrugineum*			C		3/3
plants	land plants	Aristolochiaceae	*Pararistolochia australopithecurus*			C		1/1
plants	land plants	Asteraceae	*Erechtites valerianifolius forma valerianifolius*		Y			1/1
plants	land plants	Asteraceae	*Picris angustifolia subsp. carolorum-henricorum*			C		1/1
plants	land plants	Asteraceae	*Acmella grandiflora var. brachyglossa*			C		1/1
plants	land plants	Asteraceae	*Centipeda minima subsp. minima*			C		1/1
plants	land plants	Asteraceae	*Crassocephalum crepidioides*	thickhead	Y			1/1
plants	land plants	Asteraceae	*Dichrocephala integrifolia*		Y			3/3
plants	land plants	Asteraceae	*Phacellothrix cladochaeta*			C		1/1
plants	land plants	Asteraceae	*Adenostemma macrophyllum*			C		1/1
plants	land plants	Asteraceae	*Eschenbachia leucantha*			C		2/2
plants	land plants	Asteraceae	*Erigeron bonariensis*		Y			1/1
plants	land plants	Asteraceae	*Praxelis clematidea*		Y			5/5
plants	land plants	Asteraceae	*Coronidium rupicola*			C		2/2
plants	land plants	Asteraceae	*Chromolaena odorata*	Siam weed	Y			3/3
plants	land plants	Asteraceae	*Ageratum conyzoides*	billygoat weed	Y			1/1
plants	land plants	Asteraceae	*Euchiton japonicus*			C		1/1
plants	land plants	Asteraceae	*Erigeron pusillus*		Y			1/1
plants	land plants	Asteraceae	*Cirsium vulgare*	spear thistle	Y			1/1
plants	land plants	Asteraceae	*Bidens pilosa*		Y			1/1
plants	land plants	Asteraceae	*Stevia ovata*		Y			7/7
plants	land plants	Asteraceae	*Apowollastonia spilanthoides*			C		2/2
plants	land plants	Athyriaceae	*Diplazium dilatatum*			C		1/1
plants	land plants	Austrobaileyaceae	*Austrobaileya scandens*			C		1/1
plants	land plants	Aytoniaceae	*Plagiochasma rupestre*			C		1/1
plants	land plants	Aytoniaceae	*Reboulia hemisphaerica*			C		1/1

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plants	land plants	Aytoniaceae	*Asterella whiteleggeana*			C		1/1
plants	land plants	Aytoniaceae	*Asterella drummondii*			C		1/1
plants	land plants	Balanopaceae	*Balanops australiana*			C		5/5
plants	land plants	Balsaminaceae	*Impatiens walleriana*	balsam	Y			2/2
plants	land plants	Bignoniaceae	*Pandorea nervosa*			C		1/1
plants	land plants	Bignoniaceae	*Dolichandra unguis-cati*	cat's claw creeper	Y			1/1
plants	land plants	Blechnaceae	*Pteridoblechnum neglectum*			C		1/1
plants	land plants	Blechnaceae	*Doodia linearis*			C		1/1
plants	land plants	Blechnaceae	*Blechnum patersonii subsp. queenslandicum*			C		1/1
plants	land plants	Boryaceae	*Borya septentrionalis*			C		1/1
plants	land plants	Burseraceae	*Canarium australasicum*	mango bark		C		3/3
plants	land plants	Byblidaceae	*Byblis liniflora*			C		1/1
plants	land plants	Byttneriaceae	*Seringia hookeriana*			C		1/1
plants	land plants	Byttneriaceae	*Seringia lanceolata*			C		3/3
plants	land plants	Byttneriaceae	*Commersonia dasyphylla*			C		1/1
plants	land plants	Caesalpiniaceae	*Senna septemtrionalis*		Y			3/3
plants	land plants	Caesalpiniaceae	*Chamaecrista rotundifolia var. rotundifolia*		Y			1/1
plants	land plants	Caesalpiniaceae	*Senna aciphylla*	Australian senna		C		1/1
plants	land plants	Caesalpiniaceae	*Caesalpinia robusta*	giant mother-in-law vine		C		2/2
plants	land plants	Campanulaceae	*Wahlenbergia*					1/1
plants	land plants	Campanulaceae	*Wahlenbergia caryophylloides*			C		1/1
plants	land plants	Celastraceae	*Hippocratea barbata*	knotvine		C		1/1
plants	land plants	Celastraceae	*Siphonodon membranaceus*			C		3/3
plants	land plants	Centrolepidaceae	*Centrolepis exserta*			C		1/1
plants	land plants	Centrolepidaceae	*Centrolepis banksii*			C		1/1
plants	land plants	Clusiaceae	*Garcinia zichii*			C		9/9
plants	land plants	Clusiaceae	*Garcinia*					1/1
plants	land plants	Colchicaceae	*Schelhammera multiflora*			C		2/2
plants	land plants	Commelinaceae	*Cartonema brachyantherum*			C		2/2
plants	land plants	Commelinaceae	*Pollia crispata*	pollia		C		1/1
plants	land plants	Commelinaceae	*Aneilema*					1/1
plants	land plants	Cornaceae	*Alangium polyosmoides subsp. polyosmoides*			C		1/1
plants	land plants	Cucurbitaceae	*Trichosanthes pilosa*			C		1/1
plants	land plants	Cunoniaceae	*Davidsonia pruriens*			C		1/1
plants	land plants	Cunoniaceae	*Pullea stutzeri*	hard alder		C		3/3
plants	land plants	Cyatheaceae	*Cyathea baileyana*	wig tree fern		C		1/1
plants	land plants	Cyatheaceae	*Cyathea rebeccae*	black tree fern		C		2/2
plants	land plants	Cyatheaceae	*Cyathea celebica*			NT		1/1
plants	land plants	Cyatheaceae	*Cyathea woollsiana*			C		1/1
plants	land plants	Cyperaceae	*Machaerina rubiginosa*			C		1/1
plants	land plants	Cyperaceae	*Schoenus melanostachys*			C		2/2
plants	land plants	Cyperaceae	*Fimbristylis acicularis*			C		1/1
plants	land plants	Cyperaceae	*Fimbristylis cinnamometorum*			C		1/1
plants	land plants	Cyperaceae	*Cyperus haspan subsp. juncoides*			C		1/1
plants	land plants	Cyperaceae	*Cyperus polystachyos var. polystachyos*			C		1/1
plants	land plants	Cyperaceae	*Cyperus laevis*			C		1/1

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plants	land plants	Cyperaceae	*Carex maculata*			C		1/1
plants	land plants	Cyperaceae	*Rhynchospora brownii*	beak rush		C		1/1
plants	land plants	Cyperaceae	*Lepironia articulata*			C		1/1
plants	land plants	Cyperaceae	*Cyperus tetraphyllus*			C		1/1
plants	land plants	Cyperaceae	*Chorizandra cymbaria*			C		1/1
plants	land plants	Cyperaceae	*Tetraria capillaris*			C		1/1
plants	land plants	Cyperaceae	*Scleria sphacelata*			C		1/1
plants	land plants	Cyperaceae	*Fimbristylis furva*			C		2/2
plants	land plants	Cyperaceae	*Cyperus cyperoides*			C		1/1
plants	land plants	Cyperaceae	*Schoenus sparteus*			C		1/1
plants	land plants	Cyperaceae	*Rhynchospora leae*			C		1/1
plants	land plants	Cyperaceae	*Schoenus kennyi*			C		1/1
plants	land plants	Cyperaceae	*Cyperus procerus*			C		1/1
plants	land plants	Cyperaceae	*Cyperus prolifer*	dwarf papyrus	Y			1/1
plants	land plants	Dennstaedtiaceae	*Hypolepis glandulifera*	sticky ground fern		C		1/1
plants	land plants	Dennstaedtiaceae	*Microlepia speluncae*	cave fern		C		1/1
plants	land plants	Dichapetalaceae	*Dichapetalum papuanum*			C		2/2
plants	land plants	Dicksoniaceae	*Calochlaena villosa*			NT		1/1
plants	land plants	Dilleniaceae	*Hibbertia aspera subsp. pilosifolia*			C		1/1
plants	land plants	Dilleniaceae	*Hibbertia bicarpellata*			C		2/2
plants	land plants	Dipentodontaceae	*Perrottetia arborescens*			C		1/1
plants	land plants	Droseraceae	*Drosera lanata*			C		1/1
plants	land plants	Droseraceae	*Drosera lunata*			C		1/1
plants	land plants	Dryopteridaceae	*Lastreopsis wurunuran*			C		1/1
plants	land plants	Dryopteridaceae	*Bolbitis taylorii*			C		1/1
plants	land plants	Dryopteridaceae	*Lastreopsis rufescens*			C		2/2
plants	land plants	Ebenaceae	*Diospyros hemicycloides*			C		3/3
plants	land plants	Elaeagnaceae	*Elaeagnus triflora var. triflora*			C		1/1
plants	land plants	Elaeocarpaceae	*Sloanea australis subsp. parviflora*			C		1/1
plants	land plants	Elaeocarpaceae	*Elaeocarpus eumundi*	Eumundi quandong		C		2/2
plants	land plants	Elaeocarpaceae	*Elaeocarpus foveolatus*			C		1/1
plants	land plants	Elaeocarpaceae	*Elaeocarpus ruminatus*			C		1/1
plants	land plants	Elaeocarpaceae	*Elaeocarpus carolinae*			C		2/2
plants	land plants	Elaeocarpaceae	*Elaeocarpus elliffii*			C		4/4
plants	land plants	Elaeocarpaceae	*Sloanea macbrydei*	northern yellow carabeen		C		1/1
plants	land plants	Elaeocarpaceae	*Elaeocarpus obovatus subsp. umbratilis*			C		2/2
plants	land plants	Elaeocarpaceae	*Elaeocarpus largiflorens subsp. largiflorens*			C		2/2
plants	land plants	Elaeocarpaceae	*Elaeocarpus sericopetalus*			C		2/2
plants	land plants	Ericaceae	*Acrothamnus spathaceus*			C		1/1
plants	land plants	Eriocaulaceae	*Eriocaulon fistulosum*			C		1/1
plants	land plants	Eriocaulaceae	*Eriocaulon depressum*			C		1/1
plants	land plants	Escalloniaceae	*Polyosma hirsuta*			C		2/2
plants	land plants	Escalloniaceae	*Polyosma alangiacea*			C		2/2
plants	land plants	Euphorbiaceae	*Euphorbia hirta*		Y			1/1
plants	land plants	Euphorbiaceae	*Croton triacros*			C		2/2
plants	land plants	Euphorbiaceae	*Claoxylon tenerifolium subsp. boreale*			C		1/1

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plants	land plants	Euphorbiaceae	*Bertya polystigma*			C		1/1
plants	land plants	Euphorbiaceae	*Mallotus polyadenos*			C		1/1
plants	land plants	Fabaceae	*Mirbelia pungens*			C		1/1
plants	land plants	Fabaceae	*Crotalaria brevis*			C		1/1
plants	land plants	Fabaceae	*Hovea densivellosa*			C		1/1
plants	land plants	Fabaceae	*Indigofera linnaei*	Birdsville indigo		C		1/1
plants	land plants	Fabaceae	*Desmodium nemorosum*			C		1/1
plants	land plants	Fabaceae	*Aeschynomene villosa*		Y			1/1
plants	land plants	Fabaceae	*Desmodium gangeticum*			C		1/1
plants	land plants	Fabaceae	*Gompholobium nitidum*			C		1/1
plants	land plants	Fabaceae	*Chorizema parviflorum*	eastern flame pea		C		1/1
plants	land plants	Fabaceae	*Indigofera trifoliata*			C		1/1
plants	land plants	Fabaceae	*Vigna vexillata var. angustifolia*			C		1/1
plants	land plants	Fabaceae	*Zornia muriculata subsp. muriculata*			C		1/1
plants	land plants	Fabaceae	*Desmodium heterocarpon var. heterocarpon*			C		1/1
plants	land plants	Fabaceae	*Tephrosia sp. (Miriam Vale E.J.Thompson+ MIR33)*			C		1/1
plants	land plants	Flagellariaceae	*Flagellaria indica*	whip vine		C		1/1
plants	land plants	Gentianaceae	*Fagraea fagraeacea*			C		1/1
plants	land plants	Geocalycaceae	*Chiloscyphus*					4/4
plants	land plants	Geocalycaceae	*Heteroscyphus argutus*			C		1/1
plants	land plants	Gleicheniaceae	*Sticherus flabellatus var. flabellatus*			C		1/1
plants	land plants	Gleicheniaceae	*Gleichenia dicarpa*	pouched coral fern		C		1/1
plants	land plants	Goodeniaceae	*Goodenia grandiflora*			C		1/1
plants	land plants	Goodeniaceae	*Velleia pubescens*			C		3/3
plants	land plants	Haloragaceae	*Gonocarpus humilis*			C		1/1
plants	land plants	Haloragaceae	*Gonocarpus chinensis subsp. verrucosus*			C		1/1
plants	land plants	Himantandraceae	*Galbulimima baccata*			C		3/3
plants	land plants	Hymenophyllaceae	*Hymenophyllum walleri*			C		1/1
plants	land plants	Hymenophyllaceae	*Crepidomanes bipunctatum*			C		1/1
plants	land plants	Hymenophyllaceae	*Vandenboschia johnstonensis*			C		1/1
plants	land plants	Jungermanniaceae	*Jungermannia*					1/1
plants	land plants	Lamiaceae	*Prostanthera clotteniana*			E	CE	2/2
plants	land plants	Lamiaceae	*Platostoma longicorne*			C		1/1
plants	land plants	Lamiaceae	*Pityrodia salviifolia*	pityrodia		C		1/1
plants	land plants	Lamiaceae	*Mentha satureioides*	native pennyroyal		C		1/1
plants	land plants	Lamiaceae	*Coleus glabriflorus*			C		1/1
plants	land plants	Lamiaceae	*Coleus*					1/1
plants	land plants	Lamiaceae	*Teucrium argutum*			C		1/1
plants	land plants	Lamiaceae	*Leucas zeylanica*		Y			1/1
plants	land plants	Lamiaceae	*Coleus australis*			C		4/3
plants	land plants	Lamiaceae	*Coleus amicorum*			C		8/8
plants	land plants	Lamiaceae	*Coleus amoenus*			V		4/4
plants	land plants	Lamiaceae	*Anisomeles moschata*			C		1/1
plants	land plants	Lauraceae	*Beilschmiedia brunnea*			C		1/1
plants	land plants	Lauraceae	*Cryptocarya lividula*			C		9/9
plants	land plants	Lauraceae	*Cryptocarya angulata*	ivory laurel		C		4/4

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Lauraceae	*Beilschmiedia tooram*			C		2/2
plants	land plants	Lauraceae	*Endiandra sankeyana*	Sankey's walnut		C		1/1
plants	land plants	Lauraceae	*Cryptocarya grandis*			C		2/2
plants	land plants	Lauraceae	*Endiandra discolor*	domatia tree		C		1/1
plants	land plants	Lauraceae	*Cryptocarya putida*			C		13/13
plants	land plants	Lauraceae	*Cryptocarya oblata*			C		1/1
plants	land plants	Lauraceae	*Endiandra montana*			C		5/5
plants	land plants	Lauraceae	*Litsea connorsii*			C		3/3
plants	land plants	Lauraceae	*Endiandra wolfei*			C		1/1
plants	land plants	Lauraceae	*Beilschmiedia collina*			C		2/2
plants	land plants	Lauraceae	*Cryptocarya mackinnoniana*			C		1/1
plants	land plants	Lauraceae	*Cryptocarya melanocarpa*			C		11/11
plants	land plants	Lauraceae	*Cryptocarya leucophylla*			C		1/1
plants	land plants	Lauraceae	*Endiandra palmerstonii*	Queensland walnut		C		2/2
plants	land plants	Lauraceae	*Endiandra dichrophylla*	coach walnut		C		10/10
plants	land plants	Lauraceae	*Cryptocarya smaragdina*			C		3/3
plants	land plants	Lauraceae	*Cryptocarya saccharata*			C		2/2
plants	land plants	Lauraceae	*Cryptocarya densiflora*			C		3/3
plants	land plants	Lauraceae	*Cryptocarya cocosoides*			C		5/5
plants	land plants	Lauraceae	*Endiandra sideroxylon*			C		3/3
plants	land plants	Lauraceae	*Cryptocarya corrugata*			C		3/3
plants	land plants	Lauraceae	*Beilschmiedia recurva*			C		2/2
plants	land plants	Lejeuneaceae	*Lejeuneaceae*					1/1
plants	land plants	Lejeuneaceae	*Lejeunea*					1/1
plants	land plants	Lejeuneaceae	*Leptolejeunea*					1/1
plants	land plants	Lentibulariaceae	*Utricularia caerulea*	blue bladderwort		C		2/2
plants	land plants	Lepidoziaceae	*Lepidozia*					1/1
plants	land plants	Leucobryaceae	*Leucobryum*					3/3
plants	land plants	Linderniaceae	*Artanema fimbriatum*			C		1/1
plants	land plants	Linderniaceae	*Lindernia sp. (Sudley A.Gunness 1886)*			C		1/1
plants	land plants	Lindsaeaceae	*Lindsaea terrae-reginae*			E		1/1
plants	land plants	Loganiaceae	*Mitrasacme phascoides*			C		1/1
plants	land plants	Loganiaceae	*Mitrasacme oasena*			C		2/2
plants	land plants	Lythraceae	*Rotala tripartita*			C		2/2
plants	land plants	Lythraceae	*Rotala mexicana*			C		1/1
plants	land plants	Maesaceae	*Maesa dependens var. dependens*			C		1/1
plants	land plants	Malvaceae	*Urena lobata*	urena weed	Y			2/2
plants	land plants	Malvaceae	*Sida rhombifolia*		Y			1/1
plants	land plants	Marattiaceae	*Ptisana oreades*			C		1/1
plants	land plants	Meliaceae	*Synoum glandulosum subsp. paniculosum*			C		1/1
plants	land plants	Meliaceae	*Synoum glandulosum subsp. glandulosum*			C		1/1
plants	land plants	Menispermaceae	*Stephania japonica var. timoriensis*			C		1/1
plants	land plants	Menispermaceae	*Hypserpa decumbens*			C		1/1
plants	land plants	Menispermaceae	*Parapachygone longifolia*			C		1/1
plants	land plants	Menispermaceae	*Hypserpa smilacifolia*			C		2/2
plants	land plants	Meteoriaceae	*Papillaria crocea*			C		1/1

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plants	land plants	Meteoriaceae	*Papillaria flexicaulis*			C		2/2
plants	land plants	Meteoriaceae	*Aerobryopsis longissima*			C		1/1
plants	land plants	Mimosaceae	*Acacia humifusa*			C		1/1
plants	land plants	Mimosaceae	*Acacia calyculata*			C		1/1
plants	land plants	Mimosaceae	*Acacia crassicarpa*			C		1/1
plants	land plants	Mimosaceae	*Archidendron vaillantii*	salmon bean		C		1/1
plants	land plants	Mimosaceae	*Acacia*					1/1
plants	land plants	Mimosaceae	*Acacia burrana*			C		1/1
plants	land plants	Mimosaceae	*Acacia celsa*			C		1/1
plants	land plants	Monimiaceae	*Hedycarya loxocarya*			C		1/1
plants	land plants	Monimiaceae	*Pendressia wardellii*			C		1/1
plants	land plants	Monimiaceae	*Wilkiea angustifolia*			C		4/4
plants	land plants	Monimiaceae	*Austromatthaea elegans*			C		2/2
plants	land plants	Monimiaceae	*Steganthera laxiflora subsp. laxiflora*			C		1/1
plants	land plants	Monimiaceae	*Levieria acuminata*			C		3/3
plants	land plants	Moraceae	*Ficus copiosa*			C		1/1
plants	land plants	Moraceae	*Ficus henneana*			C		1/1
plants	land plants	Myrsinaceae	*Myrsine ireneae subsp. ireneae*			C		2/2
plants	land plants	Myrsinaceae	*Myrsine subsessilis subsp. cryptostemon*			C		1/1
plants	land plants	Myrsinaceae	*Tapeinosperma pallidum*			C		1/1
plants	land plants	Myrsinaceae	*Myrsine achradifolia*			C		1/1
plants	land plants	Myrsinaceae	*Myrsine maculata*			C		1/1
plants	land plants	Myrsinaceae	*Myrsine smithii*			C		1/1
plants	land plants	Myrsinaceae	*Myrsine porosa*			C		1/1
plants	land plants	Myrtaceae	*Syzygium endophloium*			C		2/2
plants	land plants	Myrtaceae	*Gossia myrsinocarpa*			C		1/1
plants	land plants	Myrtaceae	*Rhodomyrtus pervagata*			C		1/1
plants	land plants	Myrtaceae	*Syzygium apodophyllum*			C		1/1
plants	land plants	Myrtaceae	*Leptospermum anfractum*			C		1/1
plants	land plants	Myrtaceae	*Pilidiostigma tropicum*	apricot myrtle		C		2/2
plants	land plants	Myrtaceae	*Rhodomyrtus macrocarpa*	finger cherry		C		1/1
plants	land plants	Myrtaceae	*Syzygium trachyphloium*			C		2/2
plants	land plants	Myrtaceae	*Syzygium cryptophlebium*			C		1/1
plants	land plants	Myrtaceae	*Pilidiostigma tetramerum*			C		2/2
plants	land plants	Myrtaceae	*Leptospermum brachyandrum*	weeping tea-tree		C		2/2
plants	land plants	Myrtaceae	*Eucalyptus lockyeri subsp. exuta*			C		3/3
plants	land plants	Myrtaceae	*Eucalyptus pachycalyx subsp. pachycalyx*			C		1/1
plants	land plants	Myrtaceae	*Eucalyptus shirleyi*			C		1/1
plants	land plants	Myrtaceae	*Syzygium johnsonii*	Johnson's satinash		C		2/2
plants	land plants	Myrtaceae	*Eucalyptus exserta*	Queensland peppermint		C		1/1
plants	land plants	Myrtaceae	*Uromyrtus tenella*			C		2/2
plants	land plants	Myrtaceae	*Sannantha angusta*			C		4/4
plants	land plants	Myrtaceae	*Rhodamnia costata*			C		1/1
plants	land plants	Myrtaceae	*Melaleuca sylvana*			E		3/3
plants	land plants	Myrtaceae	*Melaleuca recurva*			C		1/1
plants	land plants	Myrtaceae	*Syzygium kuranda*	Kuranda satinash		C		2/2

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plants	land plants	Myrtaceae	*Acmena smithii*	lillypilly satinash		C		2/2
plants	land plants	Myrtaceae	*Syzygium wesa*			C		2/2
plants	land plants	Myrtaceae	*Gossia grayi*			C		2/2
plants	land plants	Myrtaceae	*Syzygium*					1/1
plants	land plants	Myrtaceae	*Lenwebbia lasioclada*			C		1/1
plants	land plants	Myrtaceae	*Eucalyptus granitica*	granite ironbark		C		1/1
plants	land plants	Myrtaceae	*Triplarina nitchaga*			V	V	7/7
plants	land plants	Myrtaceae	*Rhodamnia blairiana*			C		1/1
plants	land plants	Myrtaceae	*Melaleuca viminalis*			C		1/1
plants	land plants	Myrtaceae	*Homoranthus porteri*			V	V	2/2
plants	land plants	Myrtaceae	*Rhodomyrtus canescens*			C		1/1
plants	land plants	Ochnaceae	*Brackenridgea australiana*			C		7/7
plants	land plants	Oleaceae	*Notelaea sp. (Barakula A.R.Bean 7553)*			C		1/1
plants	land plants	Oleaceae	*Chionanthus acuminiger*			C		1/1
plants	land plants	Oleaceae	*Jasminum dallachii*	soft jasmine		C		1/1
plants	land plants	Onagraceae	*Ludwigia octovalvis*	willow primrose		C		1/1
plants	land plants	Orchidaceae	*Dendrobium carrii*			C		1/1
plants	land plants	Orchidaceae	*Caladenia carnea*			C		1/1
plants	land plants	Orchidaceae	*Cadetia taylori*			C		1/1
plants	land plants	Orchidaceae	*Diuris oporina*	northern white donkeys tails		NT		2/2
plants	land plants	Orchidaceae	*Corybas abellianus*	nodding helmet orchid		NT		1/1
plants	land plants	Orchidaceae	*Mobilabium hamatum*			C		1/1
plants	land plants	Orchidaceae	*Octarrhena pusilla*			C		2/2
plants	land plants	Orchidaceae	*Dipodium ensifolium*	leafy hyacinth orchid		C		2/2
plants	land plants	Orchidaceae	*Dockrillia nugentii*			C		1/1
plants	land plants	Orchidaceae	*Microtis parviflora*	slender onion orchid		C		1/1
plants	land plants	Orchidaceae	*Bulbophyllum lilianae*			C		1/1
plants	land plants	Orchidaceae	*Arthrochilus dockrillii*			C		2/2
plants	land plants	Orchidaceae	*Dendrobium canaliculatum*			C		1/1
plants	land plants	Orchidaceae	*Thelymitra queenslandica*			C		1/1
plants	land plants	Oxalidaceae	*Oxalis chnoodes*			C		1/1
plants	land plants	Pallaviciniaceae	*Symphyogyna*					1/1
plants	land plants	Pennantiaceae	*Pennantia cunninghamii*	brown beech		C		2/2
plants	land plants	Phyllanthaceae	*Antidesma erostre*			C		2/2
plants	land plants	Phyllanthaceae	*Glochidion hylandii*			C		1/1
plants	land plants	Phyllanthaceae	*Phyllanthus dallachyanus subsp. (Irvinebank P.I.Forster PIF14675)*			C		1/1
plants	land plants	Phyllanthaceae	*Glochidion harveyanum var. harveyanum*			C		1/1
plants	land plants	Phyllanthaceae	*Glochidion sessiliflorum var. pedicellatum*			C		1/1
plants	land plants	Phyllanthaceae	*Phyllanthus tenellus*		Y			1/1
plants	land plants	Piperaceae	*Peperomia enervis*			C		1/1
plants	land plants	Pittosporaceae	*Pittosporum rubiginosum*			C		1/1
plants	land plants	Pittosporaceae	*Pittosporum trilobum*			C		1/1
plants	land plants	Plantaginaceae	*Plantago major*	greater plantain	Y			1/1
plants	land plants	Plantaginaceae	*Mecardonia procumbens*		Y			1/1
plants	land plants	Plantaginaceae	*Veronica plebeia*	trailing speedwell		C		2/2

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plants	land plants	Plantaginaceae	*Scoparia dulcis*	scoparia	Y			2/2
plants	land plants	Poaceae	*Panicum simile*			C		1/1
plants	land plants	Poaceae	*Leersia hexandra*	swamp rice grass		C		1/1
plants	land plants	Poaceae	*Eragrostis sp. (Lakefield NP J.R.Clarkson+ 7010)*			C		1/1
plants	land plants	Poaceae	*Dimeria sp. (Mosquito Point J.R.Clarkson+ 9994)*			C		1/1
plants	land plants	Poaceae	*Microlaena stipoides var. stipoides*			C		2/2
plants	land plants	Poaceae	*Setaria pumila subsp. subtesselata*		Y			1/1
plants	land plants	Poaceae	*Hyparrhenia rufa subsp. altissima*		Y			1/1
plants	land plants	Poaceae	*Phyllostachys bambusoides*		Y			1/1
plants	land plants	Poaceae	*Hyparrhenia filipendula*	tambookie grass		C		1/1
plants	land plants	Poaceae	*Sporobolus pyramidalis*		Y			1/1
plants	land plants	Poaceae	*Schizachyrium fragile*	firegrass		C		1/1
plants	land plants	Poaceae	*Eragrostis parviflora*	weeping lovegrass		C		1/1
plants	land plants	Poaceae	*Ottochloa nodosa*			C		1/1
plants	land plants	Poaceae	*Paspalum urvillei*	vasey grass	Y			1/1
plants	land plants	Poaceae	*Eragrostis brownii*	Brown's lovegrass		C		1/1
plants	land plants	Poaceae	*Eragrostis sororia*			C		1/1
plants	land plants	Poaceae	*Oplismenus aemulus*	creeping shade grass		C		1/1
plants	land plants	Poaceae	*Panicum mitchellii*			C		1/1
plants	land plants	Poaceae	*Urochloa decumbens*		Y			1/1
plants	land plants	Poaceae	*Axonopus compressus*		Y			1/1
plants	land plants	Poaceae	*Eragrostis elongata*			C		1/1
plants	land plants	Poaceae	*Eragrostis mexicana*	Mexican lovegrass	Y			1/1
plants	land plants	Poaceae	*Paspalidium distans*	shotgrass		C		1/1
plants	land plants	Poaceae	*Sporobolus fertilis*	giant Parramatta grass	Y			2/2
plants	land plants	Poaceae	*Axonopus fissifolius*		Y			1/1
plants	land plants	Poaceae	*Cymbopogon refractus*	barbed-wire grass		C		1/1
plants	land plants	Poaceae	*Ectrosia agrostoides*			C		1/1
plants	land plants	Poaceae	*Paspalum paniculatum*	Russell River grass	Y			1/1
plants	land plants	Podocarpaceae	*Prumnopitys amara*			C		1/1
plants	land plants	Polygalaceae	*Xanthophyllum octandrum*			C		3/3
plants	land plants	Polygalaceae	*Comesperma rhyoliticum*			C		1/1
plants	land plants	Polygalaceae	*Salomonia ciliata*			C		1/1
plants	land plants	Polypodiaceae	*Belvisia mucronata var. mucronata*			C		1/1
plants	land plants	Polypodiaceae	*Pyrrosia confluens var. dielsii*			C		1/1
plants	land plants	Polypodiaceae	*Dictymia brownii*	strap fern		C		2/2
plants	land plants	Polypodiaceae	*Crypsinus simplicissimus*			C		1/1
plants	land plants	Polypodiaceae	*Grammitis stenophylla*			C		1/1
plants	land plants	Polytrichaceae	*Dawsonia polytrichoides*			C		1/1
plants	land plants	Porellaceae	*Porella crawfordii*			C		1/1
plants	land plants	Proteaceae	*Lomatia milnerae*			C		1/1
plants	land plants	Proteaceae	*Banksia aquilonia*			C		2/2
plants	land plants	Proteaceae	*Persoonia tropica*			C		7/7
plants	land plants	Proteaceae	*Alloxylon flammeum*			V	V	1/1
plants	land plants	Proteaceae	*Helicia nortoniana*			C		1/1
plants	land plants	Proteaceae	*Cardwellia sublimis*			C		1/1

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plants	land plants	Proteaceae	*Carnarvonia araliifolia var. montana*			C		1/1
plants	land plants	Proteaceae	*Bleasdalea bleasdalei*			C		6/6
plants	land plants	Proteaceae	*Darlingia darlingiana*			C		4/4
plants	land plants	Proteaceae	*Helicia lamingtoniana*			C		1/1
plants	land plants	Proteaceae	*Buckinghamia celsissima*	spotted silky oak		C		1/1
plants	land plants	Proteaceae	*Stenocarpus reticulatus*			C		3/3
plants	land plants	Proteaceae	*Darlingia ferruginea*			C		1/1
plants	land plants	Pteridaceae	*Cheilanthes*					1/1
plants	land plants	Pteridaceae	*Pteris umbrosa*	jungle bracken		C		1/1
plants	land plants	Pteridaceae	*Adiantum silvaticum*			C		1/1
plants	land plants	Pteridaceae	*Monogramma acrocarpa*			C		1/1
plants	land plants	Pterobryaceae	*Calyptothecium*					1/1
plants	land plants	Pterobryaceae	*Pterobryidium australe*			C		1/1
plants	land plants	Pterobryaceae	*Muellerobryum whiteleggei*			C		1/1
plants	land plants	Ptychomniaceae	*Garovaglia elegans subsp. dietrichiae*			C		1/1
plants	land plants	Ptychomniaceae	*Garovaglia*					1/1
plants	land plants	Putranjivaceae	*Drypetes acuminata*			C		2/2
plants	land plants	Pylaisiadelphaceae	*Isopterygium albescens*			C		1/1
plants	land plants	Radulaceae	*Radula ocellata*			C		1/1
plants	land plants	Restionaceae	*Dapsilanthus ramosus*			C		1/1
plants	land plants	Rhamnaceae	*Cryptandra debilis*			C		1/1
plants	land plants	Rhizogoniaceae	*Pyrrhobryum spiniforme*			C		1/1
plants	land plants	Ripogonaceae	*Ripogonum danesii*			C		1/1
plants	land plants	Rosaceae	*Rubus moluccanus var. trilobus*			C		1/1
plants	land plants	Rubiaceae	*Gynochthodes oresbia*			C		1/1
plants	land plants	Rubiaceae	*Psychotria sp. (Utchee Creek H.Flecker NQNC5313)*			C		1/1
plants	land plants	Rubiaceae	*Spermacoce sp. (Lorim Point A.Morton AM1237)*			C		2/2
plants	land plants	Rubiaceae	*Atractocarpus fitzalanii subsp. fitzalanii*			C		1/1
plants	land plants	Rubiaceae	*Atractocarpus fitzalanii subsp. tenuipes*			C		2/2
plants	land plants	Rubiaceae	*Pavetta australiensis var. pubigera*			C		1/1
plants	land plants	Rubiaceae	*Scleromitrion polycladum*			NT		1/1
plants	land plants	Rubiaceae	*Gynochthodes jasminoides*			C		1/1
plants	land plants	Rubiaceae	*Cyclophyllum multiflorum*			C		1/1
plants	land plants	Rubiaceae	*Amaracarpus nematopodus*			C		2/2
plants	land plants	Rubiaceae	*Richardia brasiliensis*	white eye	Y			1/1
plants	land plants	Rubiaceae	*Gynochthodes umbellata*			C		2/2
plants	land plants	Rubiaceae	*Gynochthodes retropila*			C		4/4
plants	land plants	Rubiaceae	*Antirhea*					1/1
plants	land plants	Rubiaceae	*Ixora oreogena*			C		1/1
plants	land plants	Rubiaceae	*Bobea myrtoides*			C		3/3
plants	land plants	Rubiaceae	*Antirhea tenuiflora*			C		1/1
plants	land plants	Rubiaceae	*Psydrax laxiflorens*			C		2/2
plants	land plants	Rubiaceae	*Opercularia diphylla*			C		1/1
plants	land plants	Rubiaceae	*Atractocarpus merikin*			C		1/1
plants	land plants	Rutaceae	*Clausena brevistyla*	clausena		C		1/1
plants	land plants	Rutaceae	*Boronia occidentalis*			C		2/2

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Rutaceae	*Halfordia kendack*	saffron heart		C		2/2
plants	land plants	Rutaceae	*Acronychia vestita*			C		3/3
plants	land plants	Rutaceae	*Flindersia acuminata*	silver silkwood		C		1/1
plants	land plants	Rutaceae	*Acronychia acronychioides*			C		1/1
plants	land plants	Rutaceae	*Acronychia parviflora*			C		2/2
plants	land plants	Rutaceae	*Flindersia pimenteliana*	maple silkwood		C		8/8
plants	land plants	Rutaceae	*Acronychia crassipetala*			C		3/3
plants	land plants	Rutaceae	*Melicope broadbentiana*			C		1/1
plants	land plants	Rutaceae	*Flindersia bourjotiana*			C		8/8
plants	land plants	Rutaceae	*Zanthoxylum veneficum*			C		1/1
plants	land plants	Rutaceae	*Melicope xanthoxyloides*			C		2/2
plants	land plants	Salicaceae	*Casearia grayi*			C		2/2
plants	land plants	Salicaceae	*Casearia costulata*			C		1/1
plants	land plants	Salicaceae	*Casearia dallachii*			C		1/1
plants	land plants	Sapindaceae	*Synima cordierorum*			C		1/1
plants	land plants	Sapindaceae	*Mischocarpus lachnocarpus*			C		1/1
plants	land plants	Sapindaceae	*Mischarytera lautereriana*	corduroy tamarind		C		2/2
plants	land plants	Sapindaceae	*Mischocarpus macrocarpus*			C		1/1
plants	land plants	Sapindaceae	*Sarcotoechia lanceolata*			C		4/4
plants	land plants	Sapindaceae	*Rhysotoechia mortoniana*			C		2/2
plants	land plants	Sapindaceae	*Toechima erythrocarpum*			C		1/1
plants	land plants	Sapindaceae	*Sarcotoechia protracta*			C		4/4
plants	land plants	Sapindaceae	*Cnesmocarpon dasyantha*			C		2/2
plants	land plants	Sapindaceae	*Castanospora alphandii*	brown tamarind		C		2/2
plants	land plants	Sapindaceae	*Alectryon semicinereus*			C		1/1
plants	land plants	Sapindaceae	*Cupaniopsis papillosa*			C		2/2
plants	land plants	Sapindaceae	*Sarcotoechia cuneata*			C		3/3
plants	land plants	Sapindaceae	*Sarcopteryx martyana*			C		2/2
plants	land plants	Sapindaceae	*Lepiderema ixiocarpa*			C		4/4
plants	land plants	Sapindaceae	*Harpullia rhyticarpa*			C		1/1
plants	land plants	Sapindaceae	*Synima reynoldsiae*			C		2/2
plants	land plants	Sapindaceae	*Arytera pauciflora*			C		2/2
plants	land plants	Sapindaceae	*Dodonaea uncinata*			NT		2/2
plants	land plants	Sapindaceae	*Guioa lasioneura*			C		1/1
plants	land plants	Sapindaceae	*Guioa acutifolia*	northern guioa		C		1/1
plants	land plants	Sapindaceae	*Mischocarpus pyriformis subsp. pyriformis*			C		1/1
plants	land plants	Sapindaceae	*Cupaniopsis flagelliformis var. flagelliformis*			C		1/1
plants	land plants	Sapindaceae	*Guioa montana*			C		2/2
plants	land plants	Sapotaceae	*Pleioluma brownlessiana*			C		2/2
plants	land plants	Sapotaceae	*Planchonella asterocarpon*			C		2/2
plants	land plants	Sapotaceae	*Planchonella euphlebia*			C		4/4
plants	land plants	Smilacaceae	*Smilax aculeatissima*			C		1/1
plants	land plants	Solanaceae	*Solanum viridifolium*			C		1/1
plants	land plants	Solanaceae	*Cestrum elegans*		Y			1/1
plants	land plants	Solanaceae	*Solanum macoorai*			C		1/1
plants	land plants	Solanaceae	*Solanum hamulosum*			E		1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Solanaceae	*Solanum americanum*		Y			2/2
plants	land plants	Solanaceae	*Solanum lasiocarpum*		Y			1/1
plants	land plants	Solanaceae	*Solanum mauritianum*	wild tobacco	Y			1/1
plants	land plants	Solanaceae	*Solanum parvifolium*			C		1/1
plants	land plants	Solanaceae	*Solanum parvifolium subsp. tropicum*			C		1/1
plants	land plants	Sphenostemonaceae	*Sphenostemon lobosporus*			C		1/1
plants	land plants	Stemonuraceae	*Irvingbaileya australis*			C		2/2
plants	land plants	Sterculiaceae	*Firmiana papuana*	lacewood		V		1/1
plants	land plants	Sterculiaceae	*Franciscodendron laurifolium*			C		3/3
plants	land plants	Stylidiaceae	*Stylidium eriorhizum*			C		2/2
plants	land plants	Symplocaceae	*Symplocos stawellii*			C		1/1
plants	land plants	Symplocaceae	*Symplocos hayesii*			C		2/2
plants	land plants	Symplocaceae	*Symplocos glabra*			C		2/2
plants	land plants	Thelypteridaceae	*Pneumatopteris sogerensis*			C		1/1
plants	land plants	Thuidiaceae	*Thuidium*					2/2
plants	land plants	Thymelaeaceae	*Pimelea linifolia subsp. linifolia*			C		1/1
plants	land plants	Thymelaeaceae	*Pimelea linifolia*			C		1/1
plants	land plants	Thymelaeaceae	*Pimelea plurinervia*			C		3/3
plants	land plants	Urticaceae	*Elatostema reticulatum*	rainforest spinach		C		2/2
plants	land plants	Verbenaceae	*Verbena incompta*		Y			1/1
plants	land plants	Verbenaceae	*Stachytarpheta jamaicensis*	Jamaica snakeweed	Y			1/1
plants	land plants	Verbenaceae	*Lantana camara*	lantana	Y			1/1
plants	land plants	Violaceae	*Viola hederacea subsp. hederacea*			C		1/1
plants	land plants	Viscaceae	*Viscum whitei subsp. whitei*			C		2/2
plants	land plants	Vitaceae	*Cissus vinosa*			C		2/2
plants	land plants	Xyridaceae	*Xyris complanata*	yellow-eye		C		1/1

CODES

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

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

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

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

Appendix B

Consolidated Species List

Scientific Name	Common Name	Order	Family	EPBC	QLD	Invasive
Acacia leptostachya	Townsville wattle	Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia aulacocarpa	Golden flowered salwood	Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia calyculata		Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia crassicarpa	northern wattle	Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia disparrima	southern salwood	Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia flavescens	Yellow Wattle	Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia implexa	hickory wattle	Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia melanoxylon	Australian blackwood	Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia simsii	Sims' Wattle	Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia sp.		Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia umbellata		Fabales	Leguminosae (Mimosaceae)	-	-	-
Acacia whitei	White's Wattle	Fabales	Leguminosae (Mimosaceae)	-	-	-
Acmena smithii	Lilly Pilly	Myrtales	Myrtaceae	-	-	-
Allocasuarina inophloia	woolly oak	Fagales	Casuarinaceae	-	-	-
Allocasuarina littoralis	black sheoak	Fagales	Casuarinaceae	-	-	-
Allocasuarina torulosa	Rose she-oak	Fagales	Casuarinaceae	-	-	-
Alloteropsis semialata	Cockatoo Grass	Poales	Poaceae	-	-	-
Alphitonia excelsa	Red Ash	Rosales	Rhamnaceae	-	-	-
Ancistrachne uncinulata	Hooky Grass	Poales	Poaceae	-	-	-
Angophora floribunda	Rough-barked apple	Myrtales	Myrtaceae	-	-	-
Aristida Calycina	dark wiregrass	Poales	Poaceae	-	-	-
Arundinella nepalensis	Reed Grass	Poales	Poaceae	-	-	-
Banksia aquilonia	northern banksia	Proteales	Proteaceae	-	-	-
Brachychiton populneus	Kurrajong	Malvales	Sterculiaceae	-	-	-
Breynia oblongifolia	coffee bush	Malpighiales	Phyllanthaceae	-	-	-
Brunoniella australis	Blue Trumpet	Lamiales	Acanthaceae	-	-	-
Bursaria incana	Prickly pine	Apiales	Pittosporaceae	-	-	-
Caladenia fuscata	Dusky fingers	Asparagales	Orchidaceae	-	-	-
Callitris intratropica	Blue Cypress	Pinales	Cupressaceae	-	-	-
Capillipedium spicigerum	Scented-top Grass	Poales	Poaceae	-	-	-
Capparis canescens	Wild Orange	Brassicales	Capparaceae	-	-	-
Casuarina cunninghamiana	River she-oak	Fagales	Casuarinaceae	-	-	-
Centella asiatica	Gotu Kola	Apiales	Apiaceae	-	-	-
Chamaecrista rotundifolia	roundleaf sensitive pea	Fabales	Leguminosae (Caesalpiniaceae	-	-	-
Cheilanthes sieberi	poison rock fern	Polypodiales	Pteridaceae	-	-	-
Coleus amoenus		Lamiales	Lamiaceae	-	Vulnerable	-
Corymbia abergiana	range bloodwood	Myrtales	Myrtaceae	-	-	-
Corymbia citriodora	Lemon Scented Gum	Myrtales	Myrtaceae	-	-	-
Corymbia clarksoniana	Clarksons Bloodwood	Myrtales	Myrtaceae	-	-	-
Corymbia intermedia	Pink Bloodwood	Myrtales	Myrtaceae	-	-	-
Corymbia sp.		Myrtales	Myrtaceae	-	-	-
Corymbia tessellaris	Moreton Bay Ash	Myrtales	Myrtaceae	-	-	-
Corymbia trachyphloia	Brown Bloodwood	Myrtales	Myrtaceae	-	-	-
Cymbidium sauve	Grassy boat-lip	Asparagales	Orchidaceae			
Cymbopogon sp.		Poales	Poaceae	-	-	-
Cyperus sp.		Poales	Cyperaceae	-	-	-
Denhamia sp.		Celastrales	Celastraceae	-	-	-
Desmodium rhytidophyllum	Rusty tick-trefoil	Fabales	Leguminosae (Fabaceae)	-	-	-
Desmodium sp.		Fabales	Leguminosae (Fabaceae)	-	-	-
Dianella caerulea	blue flax-lily	Asparagales	Hemerocallidaceae	-	-	-
Dianella longifolia	Pale Flax-lily	Asparagales	Hemerocallidaceae	-	-	-
Dianella revoluta	black anther flax-lily	Asparagales	Hemerocallidaceae	-	-	-
Dianella sp.		Asparagales	Hemerocallidaceae	-	-	-
Dioscorea transversa	Dioscoreaceae	Dioscoreales		-	-	-
Dipodium ensifolium	Leafy hyacinth-orchid	Asparagales	Orchidaceae	-	-	-
Dodonaea lanceolata		Sapindales	Sapindaceae	-	-	-
Dodonaea uncinata		Sapindales	Sapindaceae	-	Near Threatened	-
Drosera burmannii	sundew, tropical sundew	Caryophyllales	Droseaceae	-	-	-
Drosera hookeri		Caryophyllales	Droseaceae	-	-	-
Enneapogon sp.		Poales	Poaceae	-	-	-
Entolasia stricta	wiry panic	Poales	Poaceae	-	-	-
Eremophila sp.		Lamiales	Scrophulariaceae	-	-	-
Eucaluptus shirleyi	Shirley's silver leafed ironbar	Myrtales	Myrtaceae	-	-	-
Eucalyptus crebra	Narrow-leaved ironbark	Myrtales	Myrtaceae	-	-	-
Eucalyptus exserta	Queensland peppermint	Myrtales	Myrtaceae	-	-	-
Eucalyptus granitica	Granite ironbark	Myrtales	Myrtaceae	-	-	-
Eucalyptus lockyeri	Lockyer's box	Myrtales	Myrtaceae	-	-	-
Eucalyptus melanophloia	Silver-leaved ironbark	Myrtales	Myrtaceae	-	-	-

Scientific Name	Common Name	Order	Family	EPBC	QLD	Invasive
Eucalyptus platyphylla	White gum	Myrtales	Myrtaceae	-	-	-
Eucalyptus portuensis	White mahogany	Myrtales	Myrtaceae	-	-	-
Eucalyptus reducta	Tindal's stringybark	Myrtales	Myrtaceae	-	-	-
Eucalyptus resinifera	Red mahogany	Myrtales	Myrtaceae	-	-	-
Eucalyptus shirleyi	Shirley's silver leafed ironbar	Myrtales	Myrtaceae	-	-	-
Eucalyptus tereticornis	Blue gum	Myrtales	Myrtaceae	-	-	-
Euclyptus portuensis	White mahogany	Myrtales	Myrtaceae	-	-	-
Euroschinus falcata	Maiden's blush	Sapindales	Anacardiaceae	-	-	-
Eustrephus latifolius	Wombat Berry	Asparagales	Laxmanniaceae	-	-	-
Gahnia aspera	Round sawsedge	Poales	Cyperaceae	-	-	-
Gastrolobium grandiflorum	Wallflower poison	Fabales	Leguminosae (Fabaceae)	-	-	-
Geodorum densiflorum	Shepherd's crook orchid (pink hodding orchid)	Asparagales	Orchidaceae	-	-	-
Glycine clandestina	Twining glycine	Fabales	Leguminosae (Fabaceae)	-	-	-
Glycine tabacina	variable glycine	Fabales	Leguminosae (Fabaceae)	-	-	-
Grevillea glauca	Cobblers peg tree	Proteales	Proteaceae	-	-	-
Grevillea parallela	White grevillea	Proteales	Proteaceae	-	-	-
Grevillea pteridifolia	Honeysuckle	Proteales	Proteaceae	-	-	-
Grewia latifolia	Dogs balls	Malvales	Sparrmanniaceae	-	-	-
Hakea benthamii	Broad leaved hakea	Proteales	Proteaceae	-	-	-
Heteropogon contortus	Black Speargrass	Poales	Poaceae	-	-	-
Hibbertia aspera	Rough guinea flower	Dilleniales	Dilleniaceae	-	-	-
Hibbertia bicarpellata		Dilleniales	Dilleniaceae	-	-	-
Hibbertia stricta	Erect guinea-flower	Dilleniales	Dilleniaceae	-	-	-
Homoranthus porteri		Myrtales	Myrtaceae	Vulnerable	Vulnerable	-
Hovea sp.		Fabales	Leguminosae (Fabaceae)	-	-	-
Imperata cylindrica	Cogon grass	Poales	Poaceae	-	-	-
Ischaemum australe	Large Bluegrass	Poales	Poaceae	-	-	-
Jacksonia thesioides		Fabales	Leguminosae (Fabaceae)	-	-	-
Jasminum simplicifolium	Stiff jasmine	Lamiales	Oleaceae	-	-	-
Lantana camara	Lantana	Lamiales	Verbenaceae			Yes
Laxmannia gracilis	Slender wire lily	Asparagales	Laxmanniaceae	-	-	-
Lepidosperma laterale	variable swordsedge	Poales	Cyperaceae	-	-	-
Leptosema oxylobioides		Fabales	Leguminosae (Fabaceae)	-	-	-
Leptospermum sp.		Myrtales	Myrtaceae	-	-	-
Leucopogon sp.		Myrtales	Myrtaceae	-	-	-
Lomandra hystrix	Mat Rush	Asparagales	Laxmanniaceae	-	-	-
Lomandra longifolia	spiky-headed mat-rush	Asparagales	Laxmanniaceae	-	-	-
Lomandra multiflora	Many-flowered Mat-rush	Asparagales	Laxmanniaceae	-	-	-
Lophostemon confertus	Brush Box	Myrtales	Myrtaceae	-	-	-
Lophostemon suaveolens	Swamp mahogany	Myrtales	Myrtaceae	-	-	-
Melaleuca bracteata	Rver tea-tree	Myrtales	Myrtaceae	-	-	-
Melaleuca sp.		Myrtales	Myrtaceae	-	-	-
Melaleuca viminalis	Weeping bottlebrush	Myrtales	Myrtaceae	-	-	-
Melaleuca viridiflora	broad-leaved paperbark	Myrtales	Myrtaceae	-	-	-
Melastoma sp.		Myrtales	Melastomataceae	-	-	-
Melichrus adpressus		Ericales	Ericaceae	-	-	-
Melichrus urceolatus	Urn heath	Ericales	Ericaceae	-	-	-
Melinis repens	Red Natal grass	Poales	Poaceae	-	-	-
Neolitsea dealbata	hairy-leaved bolly gum	Laurales	Lauraceae	-	-	-
Notelaea microcarpa	Mock-olive	Lamiales	Oleaceae	-	-	-
Oplismenus aemulus	Basketgrass	Poales	Poaceae	-	-	-
Pandanus sp.		Pandanales	Pandanaceae	-	-	-
Panicum effusum	hairy panic	Poales	Poaceae	-	-	-
Persoonia falcata	Milky Plum	Proteales	Proteaceae	-	-	-
Persoonia tropica		Proteales	Proteaceae	-	-	-
Petalostigma pubescens		Malpighiales		-	-	-
Pimelea linifolia	slender rice flower	Malvales	Thymelaeaceae	-	-	-
Pittosporum sp.		Apiales	Pittosporaceae	-	-	-
Platysace valida		Apiales	Apiaceae	-	-	-
Polyscias australiana	Ivory Basswood	Apiales	Araliaceae	-	-	-
Pomaderris alphitonioides	Yellow ash	Rosales	Rhamnaceae	-	-	-
Pomaderris argyrophylla	Silver Pomaderris	Rosales	Rhamnaceae	-	-	-
Pomaderris sp.		Rosales	Rhamnaceae	-	-	-
Praxelis clematidea	Praxelis	Asterales	Asteraceae	-	-	-
Prostanthera clotteniana		Lamiales	Lamiaceae	Critically Endangered	Critical	-
Prostanthera sp.		Lamiales	Lamiaceae	-	-	-
Pteridium esculentum	Bracken fern	Polypodiales	Dennstaedtiaceae	-	-	-

Scientific Name	Common Name	Order	Family	EPBC	QLD	Invasive
Rapanea variabilis	Muttonwood	Polypodiales	Primulaceae	-	-	-
Rubus sp.		Rosales	Rosaceae	-	-	-
Sarcochilus ceciliae	Fairy bells	Asparagales	Orchidaceae	-	-	-
Sida hackettiana	Spiked Sida	Malvales	Malvaceae	-	-	-
Sida sp		Malvales	Malvaceae	-	-	-
Smilax australis	Smilax	Liliales	Smilacaceae	-	-	-
Stylosanthes humilis	Townsville stylo	Fabales	Leguminosae (Fabaceae)	-	-	-
Syncarpia glomulifera	Turpentine tree	Myrtales	Myrtaceae	-	-	-
Themeda quadrivalvis	Grader grass	Poales	Poaceae	-	-	-
Themeda triandra	Kangaroo grass	Poales	Poaceae	-	-	-
Thysanotus tuberosus	Common fringe-lily	Asparagales	Laxmanniaceae	-	-	-
Trema aspera	Peach leaf poison bush	Rosales	Ulmaceae	-	-	-
Triplarina nitchaga		Myrtales	Myrtaceae	Vulnerable	Vulnerable	-
Utricularia biloba	moth bladderwort	Lamiales	Lentibulariaceae			
Utricularia caerulea	blue bladderwort	Lamiales	Lentibulariaceae	-	-	-
Utricularia uliginosa	Asian bladderwort	Lamiales	Lentibulariaceae	-	-	-
Xanthorrhoea johnsonii	Grass Tree	Asparagales	Xanthorrhoeaceae	-	-	-

Class	Family	Scientific name	Common name	NC Act	EPBC Act	Jan-21	Mar-21	Jun-21	Oct-21	BUS Jun-21	BUS Oct-21
amphibians	Hylidae	*Litoria dentata*	bleating treefrog	C					x		
amphibians	Hylidae	*Litoria latopalmata*	broad palmed rocketfrog	C		x	x	x			
amphibians	Hylidae	*Litoria inermis*	bumpy rocketfrog	C		x			x		
amphibians	Hylidae	*Litoria caerulea*	common green treefrog	C		x		x			
amphibians	Hylidae	*Litoria fallax*	eastern sedgefrog	C		x					
amphibians	Hylidae	*Litoria wilcoxii*	eastern stony creek frog	C		x	x				
amphibians	Hylidae	*Litoria gracilenta*	graceful treefrog	C		x					
amphibians	Limnodynastidae	*Limnodynastes convexiusculus*	marbled frog	C		x	x				
amphibians	Myobatrachidae	*Uperoleia mimula*	mimicking gungan	C		x	x				
amphibians	Myobatrachidae	*Uperoleia altissima*	Montane Gungan	C			x				
amphibians	Hylidae	*Litoria rothii*	northern laughing treefrog	C		x					
amphibians	Limnodynastidae	*Platyplectrum ornatum*	ornate burrowing frog	C		x	x				
amphibians	Limnodynastidae	*Limnodynastes terraereginae*	scarlet sided pobblebonk	C		x					
amphibians	Microhylidae	*Cophixalus australis*	southern ornate nursery-frog	C		x	x				
amphibians	Limnodynastidae	*Limnodynastes tasmaniensis*	spotted grassfrog	C		x					
amphibians	Hylidae	*Litoria nasuta*	striped rocketfrog	C		x					
birds	Corcoracidae	*Struthidea cinerea*	apostlebird	C				x			
birds	Anhingidae	*Anhinga novaehollandiae*	Australasian darter	C				x	x		
birds	Oriolidae	*Sphecotheres vieilloti*	Australasian figbird	C		x			x		
birds	Podicipedidae	*Tachybaptus novaehollandiae*	Australasian grebe	C				x	x		
birds	Motacillidae	*Anthus novaeseelandiae*	Australasian pipit	C		x		x	x		
birds	Megapodiidae	*Alectura lathami*	Australian brush turkey	C		x			x		
birds	Falconidae	*Falco longipennis*	Australian hobby	C						x	
birds	Artamidae	*Gymnorhina tibicen*	Australian magpie	C		x		x	x	x	x
birds	Aegothelidae	*Aegotheles cristatus*	Australian owlet-nightjar	C		x					
birds	Corvidae	*Corvus coronoides*	Australian raven	C				x	x	x	x
birds	Acrocephalidae	*Acrocephalus australis*	Australian reed-warbler	C					x		
birds	Monarchidae	*Monarcha melanopsis*	black-faced monarch	SL	M	x					
birds	Apodidae	*Aerodramus terraereginae*	Australian swiftlet	C					x	x	x
birds	Anatidae	*Chenonetta jubata*	Australian wood duck	C		x			x		
birds	Alcedinidae	*Ceyx azureus*	azure kingfisher	C		x		x	x		
birds	Meliphagidae	*Cissomela pectoralis*	banded honeyeater	C		x			x		
birds	Strigidae	*Ninox connivens*	barking owl	C		x			x		
birds	Campephagidae	*Coracina lineata*	barred cuckoo-shrike	C					x		
birds	Columbidae	*Geopelia humeralis*	bar-shouldered dove	C					x	x	x
birds	Turdidae	*Zoothera lunulata*	Bassian thrush	C		x		x			
birds	Accipitridae	*Milvus migrans*	black kite	C				x			
birds	Meliphagidae	*Melithreptus gularis*	black-chinned honeyeater	C		x					
birds	Cuculidae	*Chalcites osculans*	black-eared cuckoo	C					x		
birds	Campephagidae	*Coracina novaehollandiae*	black-faced cuckoo-shrike	C		x		x	x	x	x
birds	Artamidae	*Artamus cinereus*	black-faced woodswallow	C					x		
birds	Charadriidae	*Elseyornis melanops*	black-fronted dotterel	C					x		
birds	Meliphagidae	*Entomyzon cyanotis*	blue-faced honeyeater	C		x		x	x		
birds	Halcyonidae	*Dacelo leachii*	blue-winged kookaburra	C		x		x	x		
birds	Pachycephalidae	*Colluricincla boweri*	Bower's shrike-thrush	C			x				
birds	Meliphagidae	*Bolemoreus frenatus*	bridled honeyeater	C		x		x	x	x	
birds	Columbidae	*Macropygia amboinensis*	brown cuckoo-dove	C		x			x		
birds	Falconidae	*Falco berigora*	brown falcon	C		x			x	x	
birds	Accipitridae	*Accipiter fasciatus*	brown goshawk	C		x			x		x
birds	Meliphagidae	*Lichmera indistincta*	brown honeyeater	C		x		x	x	x	x
birds	Phasianidae	*Coturnix ypsilophora*	brown quail	C					x		
birds	Climacteridae	*Climacteris picumnis*	brown treecreeper	C				x	x		
birds	Cuculidae	*Cacomantis variolosus*	brush cuckoo	C		x		x	x		x
amphibians	Bufonidae	*Rhinella marina*	cane toad			x	x	x			
birds	Rallidae	*Gallirallus philippensis*	buff-banded rail	C					x		
mammals	Acrobatidae	*Acrobates pygmaeus*	feathertail glider	C		x					
birds	Halcyonidae	*Tanysiptera sylvia*	Buff-breasted paradise kingfisher	C				x			
birds	Acanthizidae	*Acanthiza reguloides*	buff-rumped thornbill	C		x		x	x		x
birds	Burhinidae	*Burhinus grallarius*	bush stone-curlew	C		x	x		x		
birds	Ardeidae	*Bubulcus ibis*	cattle egret	C				x	x		
birds	Cuculidae	*Scythrops novaehollandiae*	channel-billed cuckoo	C		x			x		x
birds	Estrildidae	*Lonchura castaneothorax*	chestnut-breasted mannikin	C				x	x		
birds	Orthonychidae	*Orthonyx spaldingii*	chowchilla	C					x		
birds	Campephagidae	*Coracina tenuirostris*	cicadabird	C		x		x	x		x
birds	Accipitridae	*Accipiter cirrocephalus*	collared sparrowhawk	C		x		x	x		x
birds	Columbidae	*Phaps chalcoptera*	common bronzewing	C		x		x	x		
birds	Columbidae	*Ocyphaps lophotes*	crested pigeon	C		x	x	x	x		
birds	Psittacidae	*Platycercus elegans*	crimson rosella	C				x			
birds	Sturnidae	*Acridotheres tristis*	common myna			x		x	x		
birds	Coraciidae	*Eurystomus orientalis*	dollarbird	C		x			x		x
birds	Meliphagidae	*Myzomela obscura*	dusky honeyeater	C		x				x	
birds	Rallidae	*Gallinula tenebrosa*	dusky moorhen	C		x					
birds	Artamidae	*Artamus cyanopterus*	dusky woodswallow	C					x		
birds	Cuculidae	*Eudynamys orientalis*	eastern koel	C		x			x		x
mammals	Bovidae	*Bos taurus*	domestic cattle			x	x	x	x		
birds	Meliphagidae	*Acanthorhynchus tenuirostris*	eastern spinebill	C				x	x	x	x
mammals	Canidae	*Canis familiaris* (*dingo*)	dingo			x	x	x			
birds	Psophodidae	*Psophodes olivaceus*	eastern whipbird	C		x					
birds	Petroicidae	*Eopsaltria australis*	eastern yellow robin	C		x		x	x		
birds	Casuariidae	*Dromaius novaehollandiae*	emu	C		x	x	x	x	x	
birds	Acanthizidae	*Gerygone palpebrosa*	fairy gerygone	C		x					x
birds	Cuculidae	*Cacomantis flabelliformis*	fan-tailed cuckoo	C				x	x	x	x
birds	Halcyonidae	*Todiramphus macleayii*	forest kingfisher	C		x		x	x		x
birds	Meliphagidae	*Ptilotula fusca*	fuscous honeyeater	C		x			x		
birds	Pachycephalidae	*Pachycephala pectoralis*	golden whistler	C				x	x	x	x
birds	Artamidae	*Cracticus torquatus*	grey butcherbird	C		x		x	x	x	x
birds	Rhipiduridae	*Rhipidura albiscapa*	grey fantail	C		x		x	x	x	
birds	Accipitridae	*Accipiter novaehollandiae*	grey goshawk	C		x					
birds	Pachycephalidae	*Colluricincla harmonica*	grey shrike-thrush	C		x	x	x	x	x	x
birds	Anatidae	*Anas gracilis*	grey teal	C					x		
birds	Pomatostomidae	*Pomatostomus temporalis*	grey-crowned babbler	C		x		x	x		
birds	Anatidae	*Aythya australis*	hardhead	C					x		
birds	Ardeidae	*Ardea intermedia*	intermediate egret	C				x	x		

Class	Family	Scientific name	Common name	NC Act	EPBC Act	Jan-21	Mar-21	Jun-21	Oct-21	BUS Jun-21	BUS Oct-21
birds	Petroicidae	*Microeca fascinans*	jacky winter	C				x	x		x
birds	Acanthizidae	*Sericornis magnirostra*	large-billed scrubwren	C					x		
birds	Caprimulgidae	*Caprimulgus macrurus*	Large-tailed Nightjar	C		x	x				
birds	Halcyonidae	*Dacelo novaeguineae*	laughing kookaburra	C		x	x	x	x	x	x
birds	Monarchidae	*Myiagra rubecula*	leaden flycatcher	C		x		x	x	x	x
birds	Petroicidae	*Microeca flavigaster*	lemon-bellied flycatcher	C					x		
birds	Meliphagidae	*Meliphaga lewinii*	Lewin's honeyeater	C		x		x	x	x	x
birds	Meliphagidae	*Philemon citreogularis*	little friarbird	C		x			x	x	x
birds	Psittacidae	*Parvipsitta pusilla*	little lorikeet	C		x		x	x	x	
birds	Phalacrocoracidae	*Microcarbo melanoleucos*	little pied cormorant	C		x			x		
birds	Apodidae	*Apus pacificus*	fork-tailed swift	SL	M	x					
birds	Pachycephalidae	*Colluricincla megarhyncha*	little shrike-thrush	C				x	x	x	x
birds	Artamidae	*Artamus minor*	little woodswallow	C					x		
mammals	Dasyuridae	*Antechinus godmani*	Atherton antechinus	C		x					
birds	Meliphagidae	*Xanthotis macleayanus*	Macleay's honeyeater	C				x			
birds	Monarchidae	*Grallina cyanoleuca*	magpie-lark	C		x		x	x	x	
birds	Charadriidae	*Vanellus miles*	masked lapwing	C		x		x	x		
birds	Artamidae	*Artamus personatus*	masked woodswallow	C					x		
birds	Nectariniidae	*Dicaeum hirundinaceum*	mistletoebird	C		x		x	x	x	
birds	Falconidae	*Falco cenchroides*	nankeen kestrel	C					x	x	x
birds	Meliphagidae	*Philemon corniculatus*	noisy friarbird	C		x		x	x	x	x
birds	Meliphagidae	*Manorina melanocephala*	noisy miner	C		x		x	x	x	x
birds	Oriolidae	*Oriolus sagittatus*	olive-backed oriole	C		x			x		x
birds	Megapodiidae	*Megapodius reinwardt*	orange-footed scrubfowl	C		x	x				
mammals	Emballonuridae	*Saccolaimus flaviventris*	Yellow-bellied Sheathtail Bat	C		x					
birds	Accipitridae	*Aviceda subcristata*	Pacific baza	C		x			x		x
birds	Anatidae	*Anas superciliosa*	Pacific black duck	C		x		x	x		
birds	Turnicidae	*Turnix varius*	painted button-quail	C				x			
birds	Psittacidae	*Platycercus adscitus*	pale-headed rosella	C		x	x	x	x	x	x
birds	Columbidae	*Geopelia striata*	peaceful dove	C		x		x	x	x	x
birds	Falconidae	*Falco peregrinus*	peregrine falcon	C		x			x		
birds	Cuculidae	*Centropus phasianinus*	pheasant coucal	C		x	x	x	x	x	x
birds	Artamidae	*Cracticus nigrogularis*	pied butcherbird	C		x		x	x	x	x
birds	Artamidae	*Strepera graculina*	pied currawong	C		x	x	x	x	x	x
birds	Anatidae	*Malacorhynchus membranaceus*	pink-eared duck	C				x			
birds	Anatidae	*Dendrocygna eytoni*	plumed whistling-duck	C				x			
birds	Rallidae	*Porphyrio porphyrio*	purple swamphen	C					x		
birds	Meropidae	*Merops ornatus*	rainbow bee-eater	C		x		x	x	x	x
birds	Psittacidae	*Trichoglossus haematodus*	rainbow lorikeet	C		x		x	x	x	x
birds	Maluridae	*Malurus melanocephalus*	red-backed fairy-wren	C		x		x	x	x	x
birds	Estrildidae	*Neochmia temporalis*	red-browed finch	C		x		x	x	x	x
birds	Cacatuidae	*Calyptorhynchus banksii*	red-tailed black-cockatoo	C		x		x	x	x	x
birds	Psittacidae	*Aprosmictus erythropterus*	red-winged parrot	C		x		x	x		
birds	Monarchidae	*Myiagra inquieta*	restless flycatcher	C							x
birds	Pachycephalidae	*Pachycephala rufiventris*	rufous whistler	C		x		x	x	x	x
birds	Meliphagidae	*Conopophila rufogularis*	rufous-throated honeyeater	C					x		
birds	Halcyonidae	*Todiramphus sanctus*	sacred kingfisher	C		x			x		
birds	Psittacidae	*Trichoglossus chlorolepidotus*	scaly-breasted lorikeet	C		x		x	x	x	x
amphibians	Myobatrachidae	*Pseudophryne covacevichae*	Magnificent Broodfrog	V	V		x				
birds	Meliphagidae	*Myzomela sanguinolenta*	scarlet honeyeater	C		x		x	x	x	x
birds	Cuculidae	*Chalcites lucidus*	shining bronze-cuckoo	C					x		
birds	Timaliidae	*Zosterops lateralis*	silvereye	C		x					
birds	Meliphagidae	*Gavicalis virescens*	singing honeyeater	C						x	
birds	Strigidae	*Ninox novaeseelandiae*	Southern boobook	C				x			
birds	Tytonidae	*Tyto novaehollandiae kimberli*	masked owl (northern subspecies)	V	V	x					
birds	Dicruridae	*Dicrurus bracteatus*	spangled drongo	C		x			x		x
birds	Meliphagidae	*Acanthagenys rufogularis*	spiny-cheeked honeyeater	C				x	x		
birds	Ptilonorhynchidae	*Ailuroedus maculosus*	spotted catbird	C				x			
birds	Eurostopodidae	*Eurostopodus argus*	spotted nightjar	C		x					
birds	Pardalotidae	*Pardalotus punctatus*	spotted pardalote	C		x		x		x	
birds	Columbidae	*Geophaps scripta peninsulae*	squatter pigeon (northern subspecies)	C		x		x	x	x	
birds	Threskiornithidae	*Threskiornis spinicollis*	straw-necked ibis	C					x		
birds	Pardalotidae	*Pardalotus striatus*	striated pardalote	C					x	x	x
birds	Cacatuidae	*Cacatua galerita*	sulphur-crested cockatoo	C		x		x	x	x	x
mammals	Felidae	*Felis catus*	cat			x		x			
birds	Podargidae	*Podargus strigoides*	tawny frogmouth	C		x	x		x		
birds	Columbidae	*Lopholaimus antarcticus*	topknot pigeon	C		x					
mammals	Macropodidae	*Notamacropus agilis*	agile wallaby	C		x	x	x	x		
birds	Corvidae	*Corvus orru*	Torresian crow	C		x		x	x	x	x
birds	Hirundinidae	*Petrochelidon nigricans*	tree martin	C				x			
birds	Neosittidae	*Daphoenositta chrysoptera*	varied sittella	C		x			x		x
birds	Campephagidae	*Lalage leucomela*	varied triller	C		x			x	x	
birds	Paradisaeidae	*Ptiloris victoriae*	Victoria's riflebird	C					x		
birds	Accipitridae	*Aquila audax*	wedge-tailed eagle	C		x		x	x	x	x
birds	Acanthizidae	*Smicrornis brevirostris*	weebill	C		x			x		x
birds	Accipitridae	*Haliastur sphenurus*	whistling kite	C		x		x			
birds	Campephagidae	*Coracina papuensis*	white-bellied cuckoo-shrike	C		x		x	x	x	x
birds	Artamidae	*Artamus leucorynchus*	white-breasted woodswallow	C		x		x			
birds	Petroicidae	*Poecilodryas superciliosa*	white-browed robin	C		x					
birds	Meliphagidae	*Phylidonyris niger*	white-cheeked honeyeater	C					x		
birds	Ardeidae	*Egretta novaehollandiae*	white-faced heron	C				x	x		
birds	Ardeidae	*Ardea pacifica*	white-necked heron	C				x	x		
birds	Acanthizidae	*Gerygone olivacea*	white-throated gerygone	C		x		x	x	x	x
birds	Meliphagidae	*Melithreptus albogularis*	white-throated honeyeater	C		x		x	x	x	x
birds	Eurostopodidae	*Eurostopodus mystacalis*	white-throated nightjar	C		x					
mammals	Macropodidae	*Osphranter robustus*	common wallaroo	C		x		x			
birds	Rhipiduridae	*Rhipidura leucophrys*	willie wagtail	C		x		x	x	x	x
mammals	Macropodidae	*Macropus giganteus*	eastern grey kangaroo	C		x	x	x	x		
birds	Acanthizidae	*Acanthiza nana*	yellow thornbill	C				x			
birds	Monarchidae	*Machaerirhynchus flaviventer*	yellow-breasted boatbill	C					x		
birds	Meliphagidae	*Caligavis chrysops*	yellow-faced honeyeater	C		x		x	x	x	x
birds	Meliphagidae	*Meliphaga notata*	yellow-spotted honeyeater	C				x	x		
birds	Accipitridae	*Erythrotriorchis radiatus*	red goshawk	E	V						

Class	Family	Scientific name	Common name	NC Act	EPBC Act	Jan-21	Mar-21	Jun-21	Oct-21	BUS Jun-21	BUS Oct-21
birds	Meliphagidae	*Manorina flavigula*	yellow-throated miner	C					x	x	
mammals	Macropodidae	*Petrogale mareeba*	Mareeba rock wallaby	C		x		x			
mammals	Macropodidae	*Dendrolagus lumholtzi*	Lumholtz tree-kangaroo	NT				x			
mammals	Macropodidae	*Thylogale stigmatica*	Red-legged pademelon	C				x			
mammals	Macropodidae	*Notamacropus rufogriseus*	red-necked wallaby	C				x			
mammals	Macropodidae	*Wallabia bicolor*	swamp wallaby	C		x	x	x	x		
mammals	Macropodidae	*Notamacropus parryi*	whiptail wallaby	C		x		x			
birds	Rhipiduridae	*Rhipidura rufifrons*	rufous fantail	SL	M			x	x		
mammals	Miniopteridae	*Miniopterus orianae oceanensis*	Eastern Bentwing Bat	C		x					
mammals	Miniopteridae	*Miniopterus australis*	Little Bentwing Bat	C		x		x			
mammals	Molossidae	*Ozimops ridei*	Eastern Freetail Bat	C		x					
birds	Monarchidae	*Myiagra cyanoleuca*	satin flycatcher	SL	M				x		
mammals	Molossidae	*Ozimops lumsdenae*	Northern Freetail Bat	C		x					
mammals	Molossidae	*Austronomus australis*	White-striped Mastiff Bat	C		x					
mammals	Muridae	*Mus musculus*	house mouse			x					
mammals	Muridae	*Hydromys chyrsogaster*	water rat	C		x		x	x		
mammals	Ornithorhynchidae	*Ornithorhynchus anatinus*	platypus	SL		x			x		
mammals	Peramelidae	*Perameles nasuta*	long-nosed bandicoot	C		x		x	x		
mammals	Peramelidae	*Isoodon macrourus*	northern brown bandicoot	C		x	x	x			
reptiles	Elapidae	*Pseudechis porphyriacus*	red-bellied black snake	C					x		
mammals	Petauridae	*Petaurus minor*	northern greater glider	V	V	x	x	x	x		
mammals	Petauridae	*Petaurus notatus*	Krefft's glider	C		x					
mammals	Petauridae	*Petaurus norfolcensis*	squirrel glider	C		x					
mammals	Petauridae	*Petaurus breviceps*	Sugar Glider	C			x				
mammals	Petauridae	*Petaurus australis*	Yellow-bellied Glider	E	E		x				
mammals	Phalangeridae	*Trichosurus vulpecula*	common brushtail possum	C		x	x	x	x		
mammals	Potoroidae	*Aepyprymnus rufescens*	rufous bettong	C		x	x	x	x		
birds	Monarchidae	*Symposiarchus trivirgatus*	spectacled monarch	SL	M				x		
mammals	Pseudocheiridae	*Pseudocheirus peregrinus*	common ringtail possum	C		x	x	x			
mammals	Pteropodidae	*Syconycteris australis*	common blossom bat	C				x			
mammals	Pteropodidae	*Pteropus scapulatus*	little red flying-fox	C		x			x		
mammals	Rhinolophidae	*Rhinolophus megaphyllus*	Eastern Horseshoe Bat	C		x		x			
mammals	Suidae	*Sus scrofa*	pig			x	x				
mammals	Tachyglossidae	*Tachyglossus aculeatus*	short-beaked echidna	SL		x	x		x		
mammals	Vespertilionidae	*Scotorepens sanborni*	Northern Broad-nosed Bat	C		x					
mammals	Vespertilionidae	*Vespadelus pumilus*	Eastern Forest Bat	C		x		x			
mammals	Vespertilionidae	*Chalinolobus gouldii*	Gould's Wattled Bat	C		x					
mammals	Vespertilionidae	*Chalinolobus nigrogriseus*	Hoary Wattled Bat	C		x					
reptiles	Scincidae	*Saproscincus basiliscus*	Basilisk shadeskink	C			x				
reptiles	Agamidae	*Pogona barbata*	bearded dragon	C		x					
reptiles	Varanidae	*Varanus tristis*	black-tailed monitor	C		x	x				
reptiles	Scincidae	*Carlia rostralis*	black-throated rainbow-skink	C		x		x			
reptiles	Agamidae	*Hypsilurus boydii*	Boyd's Forest Dragon	C			x				
amphibians	Hylidae	*Litoria serrata*	Tapping green-eyed Tree Frog	V			x				
reptiles	Colubridae	*Boiga irregularis*	brown tree snake	C					x		
reptiles	Gekkonidae	*Heteronotia binoei*	Bynoe's gecko	C		x		x			
reptiles	Boidae	*Morelia spilota*	carpet python	C		x					
reptiles	Carphodactylidae	*Carphodactylus laevis*	Chameleon Gecko	C			x				
reptiles	Scincidae	*Menetia greyii*	common dwarf skink	C		x					
mammals	Vespertilionidae	*Nyctophilus bifax*	Northern long-eared bat	C		x		x			
reptiles	Scincidae	*Ctenotus taeniolatus*	copper-tailed skink	C		x					
reptiles	Gekkonidae	*Gehyra dubia*	dubious dtella	C		x					
reptiles	Elapidae	*Pseudonaja textilis*	eastern brown snake	C		x		x	x		
reptiles	Scincidae	*Lerista fragilis*	eastern mulch slider	C		x	x				
reptiles	Scincidae	*Ctenotus robustus*	eastern striped skink	C					x		
reptiles	Agamidae	*Intellagama lesueurii*	eastern water dragon	C		x		x	x		
reptiles	Scincidae	*Eulamprus quoyii*	Eastern water skink	C		x			x		
reptiles	Scincidae	*Morethia taeniopleura*	fire-tailed skink	C					x		
reptiles	Colubridae	*Tropidonophis mairii*	freshwater snake	C		x					
reptiles	Colubridae	*Dendrelaphis punctulatus*	green tree snake	C		x	x	x			
reptiles	Colubridae	*Tropidonophis mairii*	keelback	C					x		
reptiles	Varanidae	*Varanus varius*	lace monitor	C		x	x				
reptiles	Scincidae	*Carlia jarnoldae*	lined rainbow-skink	C		x					
reptiles	Scincidae	*Bellatorias frerei*	major skink	C		x		x			
reptiles	Agamidae	*Diporiphora nobbi*	nobbi	C		x	x	x			
reptiles	Scincidae	*Concinnia brachysoma*	northern bar-sided skink	C				x			
reptiles	Carphodactylidae	*Saltuarius cornutus*	Northern Leaf-tailed Gecko	C			x				
birds	Apodidae	*Hirundapus caudacutus*	White-throated Needletail	V	V		x				
reptiles	Diplodactylidae	*Oedura coggeri*	northern spotted velvet gecko	C		x					
reptiles	Scincidae	*Carlia rubigo*	orange-flanked rainbow skink	C		x					
reptiles	Elapidae	*Tropidechis carinatus*	rough-scaled snake	C					x		
reptiles	Chelidae	*Wollumbinia latisternum*	saw-shelled turtle	C					x		
reptiles	Colubridae	*Stegonotus australis*	slaty-grey snake	C		x	x				
reptiles	Varanidae	*Varanus scalaris*	spotted tree-monitor	C				x	x		
reptiles	Scincidae	*Cryptoblepharus virgatus*	striped snake-eyed skink	C		x					
reptiles	Agamidae	*Diporiphora australis*	tommy roundhead	C		x	x		x		
reptiles	Elapidae	*Demansia psammophis*	yellow-faced whipsnake	C		x					
reptiles	Varanidae	*Varanus panoptes*	yellow-spotted monitor	C					x		
reptiles	Diplodactylidae	*Amalosia rhombifer*	zig-zag gecko	C		x					

Appendix C

Refined Likelihood of Occurrence

Flora

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Acacia purpureopetala, purple-flowered wattle	PMST	CE	V	The species is confined to the Herberton district in the Einasleigh Uplands biogeographic region of north-eastern Queensland. It grows on steep, granite or metamorphic rocky slopes, at altitudes of 780-880 m in eucalypt woodland. Associated vegetation includes (Mount Emerald) *Eucalyptus tindaliae, E. pachycalyx, E. abergiana, Homoranthus porteri,* and *Leptospermum amboinense,* (Herberton) *E. rhodops* and *E. medicris*, (Irvinebank) *E. cloeziana, E. crebra, Corymbia trachyphloia, Acacia calyculata, A. humifusa* and *A. leptoloba.* Its distribution is not known to overlap with any EPBC listed TECs (DoE 2014d).	**Unlikely to occur** The Project area is outside the species' distribution (SPRAT 2021) and, with the exception of *Homoranthus porteri* and *Eucalyptus crebra*, the associated vegetation (DoE 2014d) has not been recorded within the Project area (Wildnet or ALA). In areas where *Homoranthus porteri* has been recorded, detailed protected plants surveys have been undertaken in accordance with the Flora Survey Guidelines – Protected Plants (DES, 2020) and no individuals of *Acacia purpureopetala* have been observed. Similarly, no individuals of *Acacia purpureopetala* have been observed within *E. crebra* woodland within the Project area.
Alloxylon flammeum, red silky oak	PMST Wildlife Online	V	V	The species occurs in the Atherton Tablelands, from Danbulla to Upper Barron River. The species grows in rainforest on basalt and complex notophyll vine forests on metamorphics, and on humus-rich gravelly loam from granite, at altitudes of 700–820 m above sea level. This distribution of this species overlaps with the EPBC listed TEC, Mabi Forest (Complex Notophyll Vine Forest 5b) (DEWHA 2008c)	**Potential to occur** There is one record of *Alloxylon flammeum* from 2004 in a patch of Mabi Forest TEC within the Study area, approximately 1.2 km from the Project area boundary (ALA). No Mabi Forest TEC has been mapped or ground-truthed within the Project area.
Aponogeton bullosus	PMST Wildlife Online	E	E	The species occurs between Tully and Cairns, and west of Ravenshoe. This species grows in cool, rapid-flowing freshwater rivers and streams in both sunny and shady areas. The species occurs in Wooroonooran and Tully Falls National Park. This distribution of this species overlaps	**Potential to occur** There are ALA records of *Aponogeton bullosus* in the Millstream, Ravenshoe State Forest and Tully Falls National Park, all of which overlap with the Study area but

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				with the EPBC listed TEC, Mabi Forest (Complex Notophyll Vine Forest 5b) (DEWHA 2008d).	not the Project area. No Mabi Forest TEC has been mapped or ground-truthed within the Project area.
Arthraxon hispidus, hairy-joint grass	PMST	V	V	In Queensland, the species is found in or on the edges of rainforest and in wet eucalypt forest, often near creeks or swamps and has been recorded in shaded small gullies, on creek banks, and on sandy alluvium in creek beds in open forests, as well as with bog mosses in mound springs. The distribution of the species overlaps with the following EPBC listed TECs: • Semi-evergreen vine thickest of the Brigalow Belt and Nandewar Bioregions • The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin • Brigalow (*Acacia harpophylla* dominant and co-dominant) • White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (DEWHA 2008e)	**Unlikely to occur** There have been no records of *Arthraxon hispidis* within the Study area (Wildnet or ALA). There are no mapped or ground-truthed occurrences of the concurrent EPBC listed TECs within the Study area.
Calochlaena villosa	Wildlife Online	-	NT	This prostate tree fern species is found in Australia (Queensland only), Indonesia and Papua New Guinea, with the global population considered stable. It is found at altitudes between 500 m and 3,000 m although it is predominantly found above 1,000 m. It usually forms clumps and occurs in a range of habitats including	**Potential to occur** There is one record of this species within the Study area, in open eucalypt forest within Koombooloomba National Park dating from 1999 at an approximate altitude of 740 m (ALA). The species has not been recorded within

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				lowland and montane forest, grassland and in secondary regrowth (Williams 2019a).	the Project area and was not observed during field surveys.
Canarium acutifolium	PMST	V	V	The species occurs between Mossman and Tully in north Queensland and has been recorded in mesophyll vine forest along rivers and creeks at altitudes of 5-200 m above sea level. The distribution of the species is not known to overlap with EPBC listed TECs (DEWHA 2008f).	**Unlikely to occur** All known records of the species are from the coastal region to the east of the Tablelands (ALA). The lowest point of the Project area is 670 m asl and no mesophyll vine forest has been mapped or ground-truthed within the Study area.
Carronia pedicellata	PMST	E	E	The species occurs from Bellenden Ker to Mission Beach with disjunct populations in the Noah and Cooper Creek catchments near Cape Tribulation. It has been recorded in Wooroonooran and Clump Mountain National Parks. The species grows in complex mesophyll or notophyll vine forest of deep soils derived from basalt, granite or metamorphic substrates at altitudes from near sea level to 520 m. The distribution of the species overlaps with the EPBC listed TEC, Mabi Forest (Complex Notophyll Vine Forest 5b) (DEWHA 2008g).	**Unlikely to occur** All known records of the species are from the eastern side of the Tablelands (ALA). The lowest point of the Project area is 670 m asl and there are no mapped or ground-truthed occurrences of the Mabi Forest TEC within the Project area.
Chingia australis	PMST	E	E	The species occurs between Wooroonooran National Park and Daintree National Park, north Queensland. The species occurs in rainforest on steep creek banks and ridge slopes often inhabiting well-lit sites such as swampy ground in lowland forest or creek banks. Preferred habitats include mesophyll vine forest and upland simple notophyll vine forest, on clay soil (basalt and mudstone),	**Potential to occur** The species has not been recorded within the Study area as part of the desktop assessments (Wildnet or ALA) and it was not observed during the field surveys. Nevertheless, the Project area is within the known range of the species and suitable habitat is available.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				metamorphic and granite substrates. Reliant on moisture, this species grows in proximity to water courses and requires disturbance such as road cuttings, treefalls, landslips or flood scouring for establishment on exposed mineral soil (Herbert 2006).	
Coleus amoenus	Wildlife Online	-	V	Listed as potentially associated with RE 7.12.52 (*Eucalyptus resinifera, Corymbia intermedia, Allocasuarina littoralis, Syncarpia glomulifera, E. drepanophylla +/- E. reducta* woodland on granite and rhyolite in the dry to moist rainfall zone)	**Known to occur** Recorded at multiple locations within the Project area, within REs 7.12.65, 7.12.52, 7.12.66 and 7.12.34
Corybas abellianus, nodding helmet orchid	Wildlife Online	-	NT	This species is found in highland rainforests on the McIlwraith Range and the Atherton Tablelands as far south as Tully Falls. It is generally found at altitudes between 600 m and 1100 m. It forms small colonies among ferns and tussocks, growing in rich loamy soil (CANBR 2016).	**Potential to occur** This species has been historically recorded (2002 and 2009) within Tully Falls National Park, within the Study area but not the Project area (ALA). There is very limited suitable rainforest habitat exist within the Project area and the species was not observed during field surveys.
Corymbia rhodops, red-throated bloodwood	PMST	V	V	The species is known from the Herberton-Irvinebank area southwest of Cairns and on the slopes of the Windsor Tableland near Mount Carbine. It grows in dry sclerophyll forest with numerous other eucalypt species, preferring ridges or hill slopes with coarse sandy soils. All known populations occur in remnant vegetation. The distribution of the species is not known to overlap with any listed TECs (DEWHA 2008h)	**Unlikely to occur** The Project area is outside the species' distribution (as documented in SPRAT 2021) and it has not previously been recorded within the Study area (Wildnet or ALA). Vegetation communities within the Project area are primarily wet forest rather than dry, nevertheless some marginal habitat for the species is present.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Cyathea celebica	Wildlife Online	-	NT	This tree fern has a trunk up to 6 m high and 30 cm in diameter. It occurs in tropical rainforest, forest margins and near streams in Australia (Queensland only), Indonesia and Papua New Guinea. The elevational range is recorded as 30 m to 2,28 0m however most specimens have been collected below 1,000 m (Williams 2019b).	**Potential to occur** The species has been historically recorded in the north-eastern part of the Study area (in 1976, 1981 and 2001, ALA). It has not been previously recorded within the Project area and was not observed during field surveys. There is limited potential habitat within the Project area.
Cycas platyphylla	PMST	V	V	The species occurs from the Petford district, west of the Atherton Tableland with three disjunct populations recorded from Taravale, Wandovale and the White Mountains. The species occurs in sparse *Eucalyptus sideroxylon* woodland with a grassy understorey, often on rocky slopes in shallow red stony loams. Its distribution is not known to overlap with any EPBC listed TECs (DEWHA 2008i).	**Unlikely to occur** There are no known records of the species within the Study area (Wildnet or ALA) and it was not recorded during field surveys. Its preferred habitat has not been mapped or ground-truthed within the Project area.
Dichanthium setosum, bluegrass	PMST	V	LC	The species occurs from the Leichhardt, Morton, North Kennedy and Port Curtis regions. The species is associated with heavy basaltic black soils and stony red-brown hard-setting loam with clay subsoil and is found in moderately disturbed areas including cleared woodland, grassy roadsides, grazed land and highly disturbed pastures. In grassy woodlands, the species can be found where the habitat has been variously grazed, nutrient-enriched and water-enriched, an indication that disturbance benefits the species. Its distribution overlaps with the following EPBC listed TECs:	**Unlikely to occur** There are no known records of the species within the Study area (Wildnet or ALA) and it was not recorded during field surveys. There are no mapped or ground-truthed occurrences of the concurrent EPBC listed TECs within the Study area.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				• Semi-evergreen vine thickest of the Brigalow Belt and Nandewar Bioregions • The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin • Bluegrass (*Dichanthium spp.*) dominant grasslands of the Brigalow Belt Bioregion • Brigalow (*Acacia harpophylla* dominant and co-dominant) • White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland • Upland Wetlands of the New England Tablelands and the Monaro Plateau (DEWHA 2008j)	
Diplazium cordifolium	PMST	V	V	This species is found around Cairns, Herberton, and Wooroonooran. Occurrence includes in rainforest along creek banks, usually below 80-100 m altitude although one population grows at 475 m altitude in Palmerston Valley, north Queensland. Its distribution is not known to overlap with any EPBC listed TECs (DEWHA 2008k).	**Unlikely to occur** There are no known records of the species within the Study area (Wildnet or ALA) and it was not recorded during field surveys. The lowest point of the Project area is 670 m asl and there are limited rainforest communities within the Project area.
Diuris oporina, northern white donkey's tail	Wildlife Online	-	NT	This species is endemic to northern Queensland, growing on ridges and slopes in forest and woodland on the drier parts of the Atherton and Evelyn Tablelands (Jones 2006).	**Potential to occur** There is one record of the species within the Study area from 2004, from the adjacent property managed by Bush

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
					Heritage (ALA). It has not been observed within the Project area but suitable habitat is present.
Dodonaea uncinata	Wildlife Online	-	NT	This species is confined to the Mount Spec area NW of Townsville, in open forest or woodland, usually in sandstone soils (George 1985).	**Known to occur** Recorded at 12 locations within the Project area, all within RE 7.12.65.
Euphorbia carissoides (syn. *Chamaesyce carissoides*)	PMST	V	V	Confined to areas between Georgetown and east to Stannary Hills, with a disjunct occurrence near Hopevale, north Queensland. Habitat includes cliff lines, among rocky outcrops and hillsides in shrubland and eucalypt low open woodland communities in generally shallow soils derived from sandstone, granite and rhyolite substrates (DEWHA 2008l).	**Potential to occur** There are no known records of the species within the Study area (Wildnet or ALA) and it was not recorded during the field surveys. Nevertheless, the Project area is within the known range of the species and suitable habitat is available.
Firmiana papuana, lacewood	Wildlife Online	-	V	This species is native to Papua New Guinea and Australia (north Queensland only). It is a large canopy tree that grows in lowland forest to an upper elevation of 700 m (Jimbo 2020). It is usually found in drier, more seasonal rainforest or in marginal situations, and usually grows on red soils derived from basalt (CANBR 2019).	**Potential to occur** There are six records of this species within the northern part of the Study area, outside the Project area, the most recent of which dates from 2008 (ALA). It was not recorded during field surveys and the majority of the Project area is higher than the species' upper elevation limit
Grevillea glossadenia	PMST	V	V	Found west of Atherton Tablelands between Walkamin, Irvinebank, Herberton and Watsonville, north Queensland. Localities include Mt Emerald, Mt Misery, Cooloomon Ck, Little Cooloomon Ck, Emu Ck, Granite Ck and Barkerville. The species occurs in eucalypt woodland or low open forest, in shallow to skeletal granitic soils on rolling hills,	**Unlikely to occur** The Project area is outside the species' distribution (as documented in SPRAT 2021) and there are no known records of the species within the Study area (Wildnet or ALA). It was not recorded during the field surveys.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				gravel terraces near stream beds and may favour disturbed sites including along roadsides and mining tracks. It occurs in areas of 1000-1300 mm rainfall and can tolerate forests as low as -8°C. Associated vegetation includes *Eucalyptus cloeziana, E. pachycalyx, E. reducta, E. cullenii, E. atrata, Corymbia abergiana, C. leichhardtii, C. trachyphloia, C. watsoniana, C. citriodora, Callitris intratropica, Alphitonia excelsa, Acacia purpureapetala, Homoranthus porteri, Leptospermum amboinense,* and *Xanthorrhoea johnsonii*. The distribution of the species is not known to overlap with EPBC listed TECs (DEWHA 2008m).	Nevertheless, the Project area does provide suitable habitat for the species.
Homoranthus porteri	PMST Wildlife Online	V	V	Occurs from Mount Mulligan, west of Mareeba, southward near Ravenshoe and 80 km northwest of Townsville, north Queensland. Grows on sandstone pavement, rocky outcrops (including rhyolite), hillsides and scree slopes in open eucalypt woodland. Its distribution is not known to overlap with any EPBC listed TECs (DEWHA 2008b). RPS (2011) described the species as favouring the edges of rock pavements, entirely restricted to exposed ridge topography and forming almost monospecific thickets.	**Known to occur** This species was recorded 30 times in four discrete locations within the Project area, all within the vegetation community RE 7.12.65. Project infrastructure has been relocated to avoid any direct disturbance to this species.
Lastreopsis walleri	PMST Wildlife Online	V	V	This species is endemic to a few scattered locations on the Atherton Tablelands. It grows in rainforest and shaded places in open forest. The distribution of the species	**Unlikely to occur** The species has been historically recorded within the Study area where this overlaps with the Wet Tropics WHA, with the last record dating from 2006 (ALA). It was not

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				overlaps with the EPBC listed TEC, Mabi Forest (Complex Notophyll Vine Forest 5b) (DEWHA 2008n).	observed during the field surveys. There are no mapped or ground-truthed areas of Mabi Forest TEC within the Project area.
Lindsaea terrae-reginae	Wildlife Online	-	E	This terrestrial fern is poorly known but specimens have been collected from rainforest (on tree roots and under rocks, base of granitic boulders) on clayey soils (Kramer and Tindale 1976).	**Potential to occur** There is one record of the species within the Study area, from Tully Falls National Park, dating from 2009 (ALA). There are no previous records within the Project area and it was not observed during surveys. There is limited potential habitat within the Project area.
Melaleuca sylvana	Wildlife Online	-	E	Occurs in the Ravenshoe and Herberton areas in heath, forest and woodland, often on soils derived from rhyolite (Craven and Ford 2004).	**Potential to occur** The species has been recorded in the north of the Study area, along the northern boundary of Ravenshoe State Forest 1, with the most recent of these records dating from 2005 (ALA). It has not been recorded previously within the Project area and was not observed during field surveys. Nevertheless suitable habitat does occur within the Project area.
Macropteranthes montana	PMST	V	V	This species is known from a small area just south of Cape York peninsula with collections made from localities near Mount Mulligan, Chillagoe, Dimbulah, Petford, Irvinebank, Elizabeth Creek Gorge, Bulleringa National Park and south west as far as the northern Newcastle Range. The species occurs in shallow soil in low woodland or vine thicket and occurs within the Northern Gulf and Wet Tropics natural resource management regions. The distribution of this	**Potential to occur** This species has not been recorded in the desktop assessment (Wildnet or ALA) or during field surveys. There is limited potential habitat (vine thicket) within the Project area.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				species is not known to overlap with any listed TECs (DEWHA 2008o).	
Phaius australis, lesser swamp-orchid	PMST	E	E	The species is endemic to Australia and occurs in southern Queensland and northern New South Wales. Its distribution has tentatively been described as north from Lake Cathie (near Port Macquarie) but mainly north of the Evans Head area to the Barron River in northeast Queensland, but it is rare in the latter region and these populations are now thought to be destroyed. It is commonly associated with coastal wet heath / sedgeland wetlands, swampy grassland or swampy forest and often where broad-leaved paperbark or swamp mahogany are found. Typically restricted to swamp forest margins and often associated with rainforest elements such as Bangalow palm and cabbage tree palm. The distribution of this species is not known to overlap with any listed TECs (DoE 2014b).	**Unlikely to occur** This species has not been recorded in the desktop assessment (Wildnet or ALA) or during field surveys. There is no suitable habitat for the species (as described in DoE 2014b) within the Project area.
Phaius pictus	PMST	V	V	The species occurs sporadically from McIlwraith Range, Bloomfield River to Kirrama Range, north Queensland. Highly localised, the species is restricted to rainforests from 0-600 m altitude and usually occurs in sheltered humid sites in proximity to streams and seepage among forest litter on boulders. The distribution of the species is not known to overlap with any EPBC listed TECs (DEWHA 2008p).	**Unlikely to occur** There is one record of the species dating from 1973 at the eastern-most extent of the Study area, to the north of Koombooloomba Dam within the National Park. There are no known records of the species within the Project area and it was not recorded during field surveys. The lowest point of the Project area is 670 m asl and there are limited rainforest communities within the Project area.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Phlegmariurus marsupiiformis (syn. *Huperzia marsupiiformis*), water tassel-fern	PMST	V	V	The species is an epiphyte on rocks or rainforest trees, growing at altitudes >800 m above sea level (Chinnock 1998) and occurs from the Windsor Tableland to south of Tully River (Jones and Gray 1985; Chinnock 1998). The distribution of the species overlaps with the EPBC listed TEC, Mabi Forest (Complex Notophyll Vine Forest 5b) (DEWHA 2008q).	**Unlikely to occur** There is one record of the species dating from 1985 at the southeastern-most extent of the Study area, south of Koombooloomba Dam (ALA). There are no known records of the species within the Project area and it was not recorded during field surveys. There are no mapped or ground-truthed areas of Mabi Forest TEC within the Project area.
Polyphlebium endlicherianum, middle filmy fern	PMST	E	V	The species is epiphytic and lithophytic, growing on damp rocks and tree trunks in tropical rainforest, often near streams or waterfalls (SPRAT 2021).	**Unlikely to occur** There is one undated record of the species at the northeastern-most extent of the Study area, within Tully Falls National Park (ALA). There are no known records of the species within the Project area and it was not recorded during field surveys. There are limited rainforest communities within the Project area.
Prostanthera clotteniana	PMST Wildlife Online	CE	E	This species occurs in very rocky areas, with shallow acidic soil. It is confined to rocky rhyolite areas in drier woodlands on steep hills west of the Atherton-Ravenshoe area. It was thought to be extinct prior to its rediscovery in 1999. All recorded sites are on the rhyolite of the Glen Gordon and Walsh Bluff volcanics. Known locations and habitats straddle the Wet Tropics and Einasleigh Uplands bioregions. Recruitment and establishment are very slow (4-10 years) due to the species being an obligate seed generator and being severely impacted by frequent fires within known localities (DoE 2015b).	**Known to occur** Recorded in one broad location within the Project area. Project infrastructure has been relocated to avoid any direct disturbance to this species.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Scleromitrium polycladum (syn. *Oldenlandia polyclada)*	Wildlife Online	-	NT	A member of the Rubiaceae, this species is distributed across Australia (Queensland, the Northern Territory and Western Australia) and the Indo Pacific region. It is listed as associated with RE 7.3.20	**Potential to occur** There is one record of this species within the Study area, from the top of Tully Falls, dating from 2020 (ALA). It has not been previously recorded within the Project area and was not observed during field surveys. RE 7.3.20 has not been mapped or ground-truthed within the Project area.
Solanum hamulosum	Wildlife Online	-	E	This species is known only from the Atherton Tableland, growing in disturbed areas in well developed upland and mountain rainforest. It has a reported altitudinal range of 650 m to 1,500 m (CANBR 2019b).	**Potential to occur** There is one record of the species from Tully Falls National Park within the Study area, dating from 2009 (ALA). There are no previous records within the Project area and the species was not observed during field surveys. There is limited potential rainforest habitat within the Project area.
*Tephrosia leveillei (*syn. *Tephrosia flagellaris*)	PMST	V	LC	This species is currently known from the area between Chillagoe and Forty Mile Scrub (five collections) with one collection further south, near Ravenswood. It has been recorded growing on alluvial plains in *Eucalyptus cullenii* woodland with *Corymbia erythrophloia, Erythrophleum chlorostachys* and *Grevillea glauca*, and in tall open forest of Eucalyptus and Corymbia species over dense *Heteropogon contortus* on red sand. At the Ravenswood site it is recorded growing along the railway track (DEWHA 2008r).	**Unlikely to occur** There are no known records of the species within the Study area (Wildnet or ALA) and it was not recorded during field surveys. No habitat similar to that where the species has been previously recorded has been mapped or ground-truthed within the Project area.
Triplarina nitchaga	PMST	V	V	The species occurs in two small populations near Ravenshoe, north Queensland. It grows at Nitchaga Creek	**Known to occur**

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
	Wildlife Online			amongst granite outcrops near the stream, in open forest dominated by *Syncarpia glomulifera, Eucalyptus resinifera*, and *Leptospermum brachyandrum*. Whilst at Arthurs Seat, it grows on rhyolite hillside and dry gully, in open forest dominated by *Eucalyptus citriodora, E. acmenoides, E. abergiana, Homoranthus porteri*, and *Labichea nitida*. Its distribution is not known to overlap with any EPBC listed TECs (DEWHA 2008a).	Recorded in one distinct location within the Project area, at Arthur's Seat, which is a known population. Project infrastructure has been relocated to avoid any direct disturbance to this species.
*Tropilis callitrophilis (*syn *Dendrobium callitrophilum)*, thin feather orchid	PMST	V	V	The species occurs on the Evelyn, Mount Windsor, Atherton and Carbine Tablelands and some of the higher mountains between the Daintree and Bloomfield Rivers. It grows at altitudes of 760-1500 m above sea level in or close to rainforest. It is epiphytic or lithophytic and favours stringybark cypress pine, *Callitris macleayana*, but also grows on various shrubby myrtles such as *Austromyrtus*. The distribution of the species overlaps with the EPBC listed TEC, Mabi Forest (Complex Notophyll Vine Forest 5b) (DEWHA 2008s)	**Unlikely to occur** There is one undated record of the species at the eastern-most extent of the Study area, just north of Koombooloomba Dam. There are no known records of the species within the Project area and it was not recorded during field surveys. None of its preferred host species have been recorded within the Project area, and there are no mapped or ground-truthed areas of Mabi Forest TEC within the Project area.
*Vappodes lithocola (*syn. *Dendrobium lithocola)*, dwarf butterfly orchid	PMST	E	V	This species is lithophytic (rock-growing) orchid. It is highly localised, occurring in the coastal ranges between Daintree and Cairns. It is confined to Macalister Range between the Barron and Mossman rivers. This species grows in rainforest areas on rocks, boulders, cliff faces on ridges and slopes at altitudes of 300-800 m asl. It occurs in open eucalypt forests and woodlands in exposed, often harsh situations on rocks, boulders and	**Potential to occur** There are no known records of the species within the Study area (Wildnet or ALA) and it was not recorded during field surveys. Nevertheless, suitable habitat for the species does occur within the Project area.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				cliff faces. The distribution of the species is not known to overlap with any listed TECs (DEWHA 2008t).	
Zeuxine polygonoides (syn. *Rhomboda polygonoides*), velvet jewel orchid	PMST	V	V	The species is found in three locations between the Paluma Range and the Daintree River, north Queensland, at altitudes of 450-820 m above sea level and usually growing on rainforest floor in moist shady sites. It has also been found in mesophyll vine forests and simple notophyll vine forest, growing on tops of granite boulders adjacent to streams, on flat rocks and among leaf litter on metamorphic substrates, granite, or rhyolite. It has been previously recorded in the following REs: • 7.11.1a – Mesophyll vine forest in very high rainfall lowlands and foothills on metamorphics • 7.12.16a – Simple notophyll vine forest (often with Bull Kauri, *Agathis microstachya*, in cloudy wet to moist uplands on granite and rhyolite The distribution of the species overlaps with the EPBC listed TEC, Mabi Forest (Complex Notophyll Vine Forest 5b) (DEWHA 2008u).	**Potential to occur** There are no known records of the species within the Study area (Wildnet or ALA) and it was not recorded during field surveys. There are no mapped or ground-truthed areas of Mabi Forest within the Project area but there are patches of RE 7.12 16a.

Threatened Fauna

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Amphibians					
Litoria dayi, Australian lace-lid	PMST Wildlife Online	V	V	The species is endemic to the Wet Tropics and is found at altitudes between sea level and 1200 m asl. It has disappeared from many upland sites throughout the Wet Tropics but persists in the lowlands and foothills. It is a rainforest specialist, inhabiting complex, densely vegetated habitats. It prefers fast-flowing rocky streams and has been found in habitats up to 50 m from streams (TSSC 2019a).	**Potential to occur** The species has never been recorded in the Project area and has not been recorded (Wildnet and ALA) in the Study area since 1974. It was not observed during targeted wet season surveys despite other amphibians being recorded from areas of suitable habitat. There is minimal preferred habitat within the Project area
Litoria nannotis, waterfall frog	Wildlife Online PMST	Was E, de-listed as of 11/12/20	E	This species is endemic to the Wet Tropics Bioregion in north Queensland. It is a habitat specialist, restricted to perennial rocky stream habitats in rainforest or wet sclerophyll forest. The stream is the primary habitat for both males and females throughout the year. It is largely restricted to cascades and splash zones of fast-flowing streams (SPRAT; Hero and Retallick 2004).	**Potential to occur** The species has been recorded in the northern and eastern parts of the Study area, primarily but not exclusively within Tully Falls National Park. The most recent of these records dates from 2004 (ALA). The species has not been previously recorded within the Project area and was not observed during field surveys despite similar species of stream frog being observed. There is minimal preferred habitat within the Project area, in the very north of Wooroora station within the Wet Tropics WHA.
Litoria nyakalensis, mountain mistfrog	PMST	CE	CR	The species is a rainforest specialist, with an obligate association with streams. It is found in upland rainforest and wet sclerophyll forest alongside fast-	**Potential to occur** The species has been historically recorded (via Wildlife Online and ALA) within the Project area,

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				flowing streams where there is white water from riffles and cascades. It has not recorded in the Wet Tropics since 1990 and is possibly now extinct but may still persist in remote areas (TSSC 2019b).	within the Wet Tropics WHA. The last recorded observation is dated 1981. It was not observed during targeted wet season surveys despite other amphibians being recorded from areas of suitable habitat (including the site of the historic observation). The location of the historic sighting is the only suitable habitat within the Project area, in the very north of Wooroora station within the Wet Tropics WHA.
Litoria rheocola, common mistfrog	Wildlife Online PMST	Was E, de-listed as of 11/12/20	E	This species is endemic to the Wet Tropics Bioregion in north Queensland. It is a rainforest specialist, restricted to fast-flowing rocky creeks and streams in rainforest as well as wet sclerophyll forest. uses a variety of streamside vegetation and rock perches, with males showing higher fidelity to the rocky stream environment than females (SPRAT; Hero et al 2004).	**Potential to occur** The species has been recorded in the northern and eastern parts of the Study area, primarily but not exclusively within Tully Falls National Park. The most recent of these records dates from 2004 (ALA). The species has not been previously recorded within the Project area and was not observed during field surveys despite similar species of stream frog being observed. There is minimal preferred habitat within the Project area, in the very north of Wooroora station within the Wet Tropics WHA..
Litoria serrata, tapping green-eyed frog	Wildlife Online	-	V	This species was originally described from Malanda, Atherton. It is found within an elevation range of sea level to 1300 m. It occupies rainforest and adjacent wet sclerophyll forest as well as gallery forest and paperbark woodland, and is usually found near creeks or seepages, often in association with mosses and lichens (AmphibiaWeb 2019).	**Known to occur** The species was recorded near creeks during spotlighting surveys in March 2021 at two locations within the Wooroora property, towards the boundary with the Wet Tropics WHA and more than 1 km from proposed Project infrastructure.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Pseudophryne covacevichae, magnificent brood frog	PMST Wildlife Online	V	V	Until 2013 this species was known only from the Ravenshoe and Herberton areas; it was then found 160 km to the southeast. It is restricted to specific habitats, breeding in and around seepage areas in open eucalypt forests. All previous records of the species have been on rhyolites of Glen Gordon volcanics at altitudes >800 m. (TSSC 2017, McDonald et al 2000).	**Known to occur** Magnificent brood frog were recorded at multiple locations within the Project area during the March 2021 wet season surveys.
Birds					
Calidris ferruginea, curlew sandpiper	PMST	CE, migratory, marine	CR	The curlew sandpiper is a visiting migrant during Australian summer, congregating at sheltered intertidal mudflats and at the muddy margins of terrestrial wetlands. It mainly occurs on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms. It may also be recorded inland, though less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand (SPRAT).	**Potential to occur** The species has not been recorded within the Study area (Wildnet or ALA) and it was not observed on site. There is minimal, marginal habitat within the Project area.
Casuarius casuarius johnsonii, southern cassowary – southern population	Wildlife Online PMST	E	E	The southern cassowary primarily occurs in rainforests associated vegetation but also uses woodlands, melaleuca swamps, mangroves and beaches for intermittent foraging. It requires a high diversity of fruiting trees to provide year-round	**Likely to occur** There are recent records of southern cassowary within the Study area but not the Project area, with the most recent dating from 2020 (ALA). The species was not observed during the field surveys. There are

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				supply of fleshy fruit and access to freshwater multiple times a day. Its core habitat is the coastal lowlands between Ingham and Mossman, as well as uplands in the southern Atherton tablelands (Latch 2007). Appendix 2 of the Recovery Plan lists REs that are considered Essential Habitat for the species (Latch 2007).	small isolated patches of three vegetation communities listed as Essential Habitat for the southern cassowary within the Project area.
Cyclopsitta diophthalma macleayana, Macleay's fig-parrot	Wildlife Online	-	V	This species frequents rainforests, gallery forests and adjacent open forests up to 750 m above sea level. During the breeding season, territories are centred around feeding trees (*Ficus spp.*) whilst communal roosts are used outside of breeding season (Forshaw 1992).	**Potential to occur** The species has been recorded within the Study area, within the Tully Falls and Koombooloomba National Parks to the east of the Project area. The most recent of these records dates from 1995 (ALA). The species has not been previously recorded within the Project area and was not observed during field surveys. There is minimal suitable habitat within the Project area and none of its preferred feeding trees were recorded during the botanical surveys.
Erythrotriorchis radiatus, red goshawk	PMST Wildlife Online	V	E	The red goshawk is endemic to Australia. It occurs in a patchy, widespread distribution across coastal and sub-coastal regions of northern and eastern Australia. The species inhabits biodiverse, extensive, multi-species mosaics of mostly Eucalypt-dominated open forests and woodlands, in permanently watered, varied terrain. Its present association with rugged terrain may be an artefact of past patterns of	**Likely to occur** The species was known to nest historically on the Bush Heritage property 'Yourka' immediately to the south of the Project area, with the last recorded sighting in ALA dating from 2007. The Project area supports foraging and breeding habitat for the species. Targeted searches have been undertaken for nesting and foraging individuals, and no red goshawks have been recorded to date.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				habitat clearance, an interpretation supported by the pattern of early records (Czechura et al. 2010). Nests are restricted to trees that are taller than 20 m (mean height = 31 m, DERM 2012) and within 1 km of a watercourse or wetland (TSSC 2015c). Pairs are believed to remain within the nesting territory all year but may expand their home range when not breeding (SPRAT 2021; TSSC 2015c).	
Falco hypoleucos, grey falcon	PMST	V	V	The grey falcon occurs in arid and semi-arid Australia, including the Murray-Darling Basin, Eyre Basin, central Australia and Western Australia. The species is mainly found where annual rainfall is less than 500 mm, except when wet years are followed by drought, when the species might become marginally more widespread, although it is essentially confined to the arid and semi-arid zones at all times. The species frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses (TSSC 2020b)	**Unlikely to occur** There are no known historical records of the species within the Study area (Wildnet or ALA) and it was not recorded during field surveys. The Project area receives far in excess of 500 mm / annum and does not provide suitable habitat for this species.
Hirundapus caudacutus, white-throated needletail	PSMT	V, marine	V	The white-throated needletail is widespread in eastern and south-eastern Australia. It is recorded in all coastal regions of Queensland, extending inland to the western slopes of the Great Divide and occasionally onto the adjacent inland plains (SPRAT 2021). The species breeds in northern Asia and spends the non-breeding season (typically October –	**Known to occur** There are a number of historical records of white-throated needletail within the Study area, to the north, south and east of the Project area (ALA). One white-throated needletail was observed during the March 2021 field surveys, deceased apparently due to collision with the existing transmission line.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				March inclusive) in Australia where it is almost exclusively aerial, occurring from heights of less than 1 m up to more than 1,000 m above the ground. The white-throated needletail occurs over most types of habitat, including cleared areas, but is most often recorded above wooded areas (SPRAT 2021).	
Numenius madagascariensis, Eastern curlew	PMST	CE, migratory, marine	E	Within Australia, the eastern curlew has a primarily coastal distribution. It is rarely recorded inland but may flyover during migration. During the non-breeding season in Australia, the eastern curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass (DoE 2015c; BirdLife International 2017d).	**Unlikely to occur** There are no known historical records within the Study area (ALA) and the species was not observed during field surveys. There is no potential habitat for the species within the Project area.
Rostratula australis, Australian painted snipe	PMST	E, marine	E	The Australian painted snipe generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. They also use inundated or waterlogged grassland or saltmarsh, dams, rice crops, sewage farms and bore drains. Typical sites include those with rank emergent tussocks of grass, sedges, rushes or reeds, or samphire (SPRAT 2021)	**Potential to occur** There are no known historical records within the Study area (ALA) and the species was not observed during field surveys. There is only limited potential habitat available within the Project area.
Turnix olivii, buff-breasted button-quail	PMST	E	E	The buff-breasted button-quail occurs in north-eastern Queensland. It is one of the least known birds in Australia. It occurs in patches of short and	**Unlikely to occur** There are no known historical records within the Study area (ALA) and the species was not observed

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				sparse grassland, on a terrain of small stones (often on the lower slopes of hills and ridges), and sometimes in open glades amongst *Melaleuca, Acacia, Alphitonia* or *Tristania*, in rainforest or open Eucalyptus woodland. It is possible that fires that occur early in the wet season might help to maintain a suitable open habitat structure for the breeding season, although observations suggest that the rapid and dense regrowth of grasses in burnt areas following the onset of the wet season quickly renders such habitats unsuitable (SPRAT 2021) The species inhabits tropical eucalypt woodland with very sparse understorey of shrubs and grasses. It is usually seen on lower, thinly grassed slopes of hills with small *M. viridiflora* (DEWHA 2010b). The species has a reported upper elevation limit of 400 m (Debus and Kirwan 2020).	during field surveys. There is only limited potential habitat available within the Project area and the entire Project area is several hundred metres above the species' reported upper elevation limit.
Tyto novaehollandiae Kimberli, masked owl	PMST	V	V	The masked owl is native to Australia, Indonesia and Papua New Guinea (BirdLife International 2018). The distribution of the masked owl (northern) within Australia is poorly known, and three subpopulations have been suggested: Kimberley, Northern Territory and Cape York (SPRAT 2021). In Queensland it occurs along the southern rim of the Gulf of Carpentaria, Cape York Peninsula and south to Atherton Tablelands and the Einasleigh-Burdekin divide (SPRAT 2021).	**Known to occur** There are a number of historical records of masked owl within the Study area, to the north and south of the Project area (ALA). During the January 2021 surveys masked owl was recorded vocalising at two locations on the Glen Gordon property; on multiple occasions alongside Blunder Creek (within riparian vegetation dominated by *Eucalyptus tereticornis* and *Casuarina cunninghamiana*) and once within mixed Eucalypt woodland dominated by *Corymbia intermedia, E. resinifera* and *E. portuensis*.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				The masked owl (northern) has been recorded from riparian forest, open forest, *Melaleuca* swamps and the edges of mangroves, as well as the edges of sugar cane fields (SPRAT 2021). It requires large old-growth trees with large hollows for nesting (SPRAT 2021). It usually nests in patches of closed forest and feeds largely on small to medium sized terrestrial mammals. The subspecies probably breeds in March-October and nests are 7-8 km apart (SPRAT 2021). It is sedentary and territorial (SPRAT 2021).	

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Mammals					
Bettongia tropica, northern bettong	PMST Wildlife Online	E	E	The species is endemic to northern Queensland. It has a small, fragmented distribution and only occurs within a thin strip of sclerophyll forest along the western margin of the rainforest, in the ecotone between rainforest and savannah woodland. The species has undergone a large contraction in its range and no longer occurs in the Dawson Valley or greater Ravenshoe area (TSSC 2016b). Extant populations of northern bettongs occur in a range of eucalypt forest types associated with the western edge of the rainforests in the Wet Tropics bioregion and the eastern edge of the open eucalypt woodlands in the Einasleigh Upland bioregion. This narrow band of habitats consists of a cline of eucalypt forest types from very tall and wet *Eucalyptus grandis* dominated forests through tall *E. resinifera-Syncarpia glomulifera* dominated forests to medium height and drier *E. citriodora* or *E. platyphylla* dominated forests (Dennis 2001).	**Potential to occur** The only known record of the species within the Study area dates from 1922 (ALA) and it is reported to no longer occur in the Ravenshoe area. The species was not recorded during field surveys, nevertheless suitable habitat is present within the Project area.
Dasyurus hallucatus, northern quoll	PMST Wildlife Online	E	LC	Habitat occupied by the species usually includes some form of rocky area or structurally diverse woodland or forest used for shelter purposes with surrounding vegetated habitats used for foraging and dispersal. Shelter habitat is important for breeding and refuge from fire / predation. Recent surveys throughout Queensland have suggested the	**Likely to occur** There is a record of the species dating from 2010 in the northwest of the Study area, near Mount Garnet, as well as much older records from Ravenshoe (to the north) and Tully Falls National Park (to the east), also both within the Study area (ALA). Despite nearly 5,000 camera trap nights in suitable habitat, there

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				species is more likely to be present in high relief areas that have shallower soils, greater cover of boulders, less fire impact and were closer to permanent water (Hill and Ward 2010, TSSC 2005, SPRAT 2021).	have been no observations of northern quoll within the Project area. Nevertheless, there is suitable habitat distributed across the Project area.
Dasyurus maculatus gracilis, spotted-tailed quoll – northern subspecies	PMST Wildlife Online	E	E	This is a forest-dependent species that occupies a wide range of habitat types, all characterised by relatively high and predictable seasonal rainfall (> 600 mm/yr). The northern subspecies is confined to upland closed forests (mostly > 900 m altitude) in the upper catchments of rivers draining east and west of the eastern escarpment in the Wet Tropics bioregion. Preferred vegetation comprises simple and complex notophyll vine forest, simple microphyll vine-fern forest and simple microphyll vine-fern thicket. Denning occurs in tree hollows, logs and rock crevasses (SPRAT 2021).	**Likely to occur** The species has not been recorded within the Project area but there are a number of historic records within the broader Study area, from Tully Falls National Park to the east (the most recent of these dating from 1994) (ALA). There is limited preferred habitat for the species within the Project area, mostly along the eastern boundary.
Dendrolagus lumholtzi, Lumholtz's tree-kangaroo	Wildlife Online	-	NT	This species occurs mostly at high altitudes along the western edge of the Atherton Tablelands. It is mostly restricted to rainforest habitats but also extends along riparian vegetation through primarily open forest habitats and, less abundantly, wet sclerophyll forests. It is mainly nocturnal and predominantly arboreal. The species shows strong site fidelity, with individuals remaining within their home range even when this is threatened by clearing or disturbance; as such, it has been known to occupy forest fragments	**Known to occur** The species was recorded on camera trap within a small patch of rainforest vegetation that will not be intersected by any Project infrastructure.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				< 20 ha. Populations in such fragments may have limited long-term viability (Woinarski & Burbridge 2016b).	
Hipposideros semoni, Semon's leaf-nosed bat	PMST	V	E	This species is distributed in coastal Queensland from Cape York to just south of Cooktown. It is known to roost in caves, rock fissures, mines, boulder piles and tree hollows. It forages in tropical rainforest, monsoon forest, wet sclerophyll forest and open savannah woodland; they appear to prefer rainforest (SPRAT).	**Unlikely to occur** There are no known records of the species from the Study area (Wildnet or ALA) and it was not recorded during field surveys. Nevertheless, there is minimal potential habitat within the Project area.
Macroderma gigas, ghost bat	PMST	V	E	The species range is discontinuous and only 14 breeding sites are currently known. It roosts in caves, rock crevices and old mines. It is carnivorous, feeding on small mammals (including other bats), birds, reptiles, frogs and large insects (TSSC 2016a).	**Potential to occur** There is an undated record of the species outside of the Study area to the west, at Mount Garnet (ALA). A call signal potentially belonging to ghost bat was recorded on an anabat during the wet season surveys, noting that this species is difficult to definitively identify on call alone. Further investigations were undertaken in the dry season surveys, focusing on areas where there may be potential cave roosts (as identified through detailed LiDAR analysis). There is very limited potential roosting habitat for ghost bat within the Project area, no further potential call signals were recorded during the dry season and no individuals were caught in harp traps or observed tangled in barbed wire fences around the property (other bat species were recorded in this manner).

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Mesembriomys gouldii rattoides, black-footed tree-rat	PMST	V	LC	This is a nocturnal mammal whose distribution is poorly known. It has been recorded mostly from eucalypt forests and woodlands (but not rainforests) around Mareeba. There are also records sparsely scattered across the Cape York region and there are recent records from AWC's Picaninny Plains and Brooklyn wildlife sanctuaries. It dens in tree hollows and forages on the ground and in trees, foraging at least 500 m from a roost site. It has a home range of 60-70 ha. Its diet comprises mostly fruits and seeds but also includes some invertebrates, flowers and grass (TSSC 2015a). The species has an upper elevation limit of 700 m (Woinarski and Burbidge, 2016a). It forages on the fruits of *Pandanus spiralis*, and uses the dense foliage of this vegetation as daytime roost sites (Rankmore and Friend 2008).	**Potential to occur** There is one undated record of the species outside the Study area to the west, at Mount Garnet (ALA). It was not observed during field surveys but some potential habitat occurs on site.
Murina florium, tube-nosed insectivorous bat	Wildlife Online	-	V	The species occurs from Paluma to Shipton's Flat, north Queensland, at altitudes of near sea level to 1200 m (Clague 2012; DES 2018). It is most commonly found in rainforests with emergent *Eucalyptus grandis* (DES 2018) but also in tall eucalypt forests (Schulz et al. 2008) and may be particularly associated with areas where rainforests and wet sclerophyll forests meet (Reardon et al. 2010). Roosting habitat is within the canopy in small groups in foliage 'nests', dead leaf clusters, arboreal termitaria, epiphytic fern fronds, and domed nests of	**Potential to occur** The species has been recorded the west of the Study area, within Tully Falls and Koombooloomba National Parks; the most recent of these records dates from 1995 (ALA). The species has not been previously recorded within the Project area. One call file from the Anabat deployment in January 2021 potentially corresponds with this species, however the species is difficult to accurately identify based on call alone. There is limited suitable habitat for the tube-nosed insectivorous bat within the Project area

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				scrub and fern-wrens (Burbidge et al. 2014). Forages in the forest canopy and shrub layer (Whybird 1996).	and these areas were targeted with harp traps in June 2021; the species was not recorded.
Ornithorhynchus anatinus, platypus	Wildlife Online	-	SL	The platypus is restricted to streams and suitable freshwater bodies, including some shallow water storage lakes. Its food is almost exclusively comprised of benthic macroinvertebrates so the species is water-dependent. It occupies resting or nesting burrows in earth banks or accumulated stream debris or low dense vegetation (Woinarski and Burbridge 2016c).	**Known to occur** Platypus were observed in Blunder Creek on the Glen Gordon property during the wet season surveys.
Petauroides volans minor, northern greater glider	PMST Wildlife Online	V	V	The species has an elevation range from sea level to 1200 m asl. It is largely restricted to eucalypt forests and woodlands, and is typically in higher abundance in taller, montane, moist eucalypt forests with relatively old trees and abundant hollows. Distribution may be patchy, even in suitable habitat. It favours forests with a diversity of eucalypt species and has low persistence in small forest fragments, due to low dispersal ability; native forest patches of at least 160 km^2 are required to maintain viable populations (TSSC 2016c).	**Known to occur** This species recorded at multiple locations across the Project area during wet season fauna surveys.
Petaurus australis unnamed subsp., yellow-bellied glider – Wet Tropics subspecies	PMST Wildlife Online	E	E	This species is found in tall open wet eucalypt forest adjacent to rainforest on the western fringe of the Wet Tropics WHA. It is found at altitudes above 700 m altitude (SPRAT 2021).	**Known to occur** This species was recorded during wet season surveys in the north-eastern most part of the Project area, within the Wet Tropics QHA.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				Known RE associations include 7.8.15ab, 7.8.16ab, 7.12.21ab, 7.12.22abde and 7.12.27b. These forests are typically dominated by *E. grandis* and *E. resinifera*, often with *B. integrifolia* and *Syncarpia glomulifera*. YBG habitat is associated with other species of conservation interest: northern bettong, magnificent brood frog, *Dodonea uncinata* and *Prostanthera clotteniana* (TSSC 2020a).	
Phascolarctus cinereus, koala (combined populations of Queensland, New South Walkes and the Australian Capital Territory)	PMST Wildlife Online	V	V	The koala inhabits a range of temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by species from the genus *Eucalyptus*. It is limited to < 800 m asl (DSEWPC 2012c). Its diet is restricted mainly to Eucalyptus species, it may also consume *Corymbia, Angophora and Lophostemon* and at time supplement its diet with *Leptospermum* and *Melaleuca* (TSSC 2012b).	**Potential to occur** There are two historical records for koala within the Study area, both are > 5 km from the Project area (ALA). The species has not been recorded within the Project area and no evidence was observed during the field surveys. Nevertheless, suitable habitat is present within the Project area.
Pteropus conspicillatus, spectacled flying-fox	PMST Wildlife Online	E	E	The species is restricted to tropical rainforest areas for camps, although it will feed on eucalypts in tall open forests adjoining rainforest communities. It will forage up to 50 km from the camp in a night. The EPBC listed TEC, Mabi Forest (Complex Notophyll Vine Forest 5b) is considered a key habitat for the species (SPRAT 2021, TSSC 2019c).	**Likely to occur** The National Flying Fox Monitoring programme (DAWE 2021b) reports a spectacled flying-fox camp at Malaan, east of Ravenshoe and just outside the Study area. The desktop assessment also indicates the species' presence in the Ravenshoe Forest Reserve 1 which is within the Study Area, and abuts the Project area immediately to the north (ALA). There is limited rainforest habitat within the Project

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
					area to support a camp, but potential foraging habitat is widespread.
Pteropus poliocephalus, grey-headed flying-fox	PMST	V	-	The grey-headed flying-fox is distributed in a coastal belt from southern QLD, NSW, eastern Victoria and rarely into South Australia, and is found infrequently in inland areas elsewhere. It is a highly colonial species, forming camps in tall closed forest near streams, rivers or estuaries. Its primary food source is blossom from *Eucalyptus* and related genera but in some areas it will also use a variety of rainforest fruits. None of the vegetation communities it uses for foraging produce continuous food resources throughout the year, so the species has adopted complex migration traits in response to ephemeral and patchy resources (TSSC 2001). The species is usually found on coastal lowlands and slopes below altitudes of 200 m. They will forage within 40 km of a camp (DAWE 2021a).	**Unlikely to occur** There are no known grey-headed flying-fox camps recorded in the Atherton Tablelands in the National Flying Fox Monitoring programme (DAWE 2021b) and no known records of the species in Wildnet or ALA. The lowest part of the Part area is approximately 670 m.
Rhinolophus robertsi, large-eared horseshoe bat	PMST	V	E	The species occurs in north-eastern QLD, within the Wet Tropics and Einasleigh Uplands bioregions. It forages within dense stands of vegetation: rainforests, riparian forests, eucalypt open forests and woodlands. It is insectivorous. It is thought to roost mainly in tree hollows and vegetation, or open habitats such as under creek banks, rock piles and relatively shallow caves (TSSC 2016e).	**Potential to occur** There are no known records of the species within the Study area (Wildnet and ALA), and it was not recorded during field surveys whereas other species within the *Rhinolophus* genera were. Nevertheless, suitable habitat is present within the Project area.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Saccolaimus saccolaimus nudicluniatus, bare-rumped sheath-tailed bat	PMST	V	E	The species is distributed in north-eastern QLD and the top end of the Northern Territory, and it mostly inhabits lowland areas. It is considered to be an obligate hollow-roosting species, with roosts occurring in *E. platyphylla* and *E. tetradonta*. Known habitats include poplar gum woodland and Darwin stringybark woodland. It is presumed to feed on aerial insects well above the tree canopy (SPRAT 2021, TSSC 2016f).	**Potential to occur** There are no known records of the species within the Study area, with ALA indicating all records within FNQ from the coastal plain only. Notwithstanding the above, potential roosting (*E. platyphylla* dominated woodland) and foraging habitat is present.
Tachyglossus aculeatus, short-beaked echidna	Wildlife Online	-	SL	This species is found in various open woodland types, savannah and rainforest (Aplin et al 2016).	**Known to occur** The species was recorded in multiple camera trap images across the Project area and suitable habitat is widespread.
Reptiles					
Delma mitella, Atherton delma, legless lizard	PMST	V	NT	The species is known from the eastern side of the Atherton Tablelands in north-eastern QLD. It is known only from tall open forests and rainforest interfaces, within the Wet Tropics bioregion. The distribution of the species is not known to overlap with any EPBC-listed TECs (DEWHA 2008v).	**Unlikely to occur** There is one historic record of the species at the very eastern edge of the broader Study area, dating from 1967 (ALA). The Project area is on the western side of the Atherton Tablelands and there are no records of the species within the Project area.
Egernia rugosa, yakka skink	PMST	V	V	This species is endemic to QLD where its distribution is patchy. Populations have been recorded throughout the Einsaleigh Uplands bioregion. It is found in open dry sclerophyll forest or woodland, often taking refuge among dense ground	**Unlikely to occur** Only the southern-most part of the Project area is within the range of the species (as documented by SPRAT). There are no historic records of the species within either the Project area or the broader Study

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				vegetation, large hollow logs, cavities in soil-bound roots of fallen trees and beneath rocks. They seldom venture far from shelter sites and are extremely secretive. Core habitat for the species is within the Mulga Lands and Brigalow Belt South Bioregions. It is generally not found in rocky habitats (DoE 2014c).	area (ALA). The vast majority of the Project area comprises rocky habitats which are not suitable for the species.

Migratory Species

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Actitis hypoleucos, common sandpiper	PMST	Wetlands migratory, marine	SLC	The species utilises coastal and inland wetlands and is found amongst muddy margins or rocky shores associated with mangroves, estuaries and deltas of streams, and upstream banks including lakes, pools, billabongs, reservoirs, dams and claypans, and occasionally jetties and piers (Geering et al. 2007; Higgins and Davies 1996). Roosting and foraging occur mostly amongst mangroves; however, the species has been found to roost and feed in adjoining grasslands (Higgins and Davies 1996).	**Potential to occur** The species has previously been recorded within the Study area but not the Project area, with the last recorded sighting dating from 1979 (ALA). It was not observed during field surveys. There is limited potential habitat for the species within the Project area.
Apus pacificus, fork-tailed swift	PMST	Marine migratory, marine	SLC	The species is a non-breeding visitor to all states and territories in Australia (Higgins 1999) with records in north-east Queensland from near Cooktown to Townsville. The species mostly occurs over inland plains but sometimes above foothills, settled areas,	**Known to occur** The species was recorded within the Project area during the diurnal bird surveys in January 2021.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				treeless grasslands, above rainforests, wet sclerophyll forest, open forest or plantations of pines (Higgins 1999, BirdLife International 2019d), or in coastal areas over cliffs and beaches. The species exhibits foraging and movement that is completely aerial, with heights from 1-300 m above ground (SPRAT 2021).	
Calidris acuminata, sharp-tailed sandpiper	PMST	Migratory, marine	SLC	The species utilises muddy edges of shallow fresh or brackish wetlands with inundated or emergent sedges, grass, and mangroves. These include lagoons, swamps, lakes and pools near the coast, dams, waterholes, soaks, bore drains and swamps, saltpans and hypersaline salt-lakes inland, intertidal mudflats in sheltered bays, inlets, estuaries or seashores (SPRAT 2021). The species forages amongst inundated vegetation within wetlands or intertidal mudflats, whilst roosting occurs in mangroves (Minton and Whitelaw 2000), in vegetation at the edges of wetlands, sandy beaches and stony shores (Higgins and Davies 1996).	**Potential to occur** The species was not observed in field surveys and has been historically recorded within 5 km of the Project area (ALA). Minimal suitable habitat for this species is present in the Project area.
Calidris melanotos, pectoral sandpiper	PMST	Wetlands migratory, marine	SLC	The species prefers shallow, fresh to saline wetlands that have open fringing mudflats and low, emergent or fringing vegetation and is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands (SPRAT 2021).	**Potential to occur** The species has not previously been recorded within the Study area (ALA) and was not observed during field surveys. There is limited suitable habitat for the species.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Crocodylus porosus, salt-water crocodile	PMST	Marine migratory, marine	V	In Queensland, the species inhabits reef, coastal floodplains, tidal rivers, billabongs, and swamps (Webb et al. 1987) up to 150 km inland (Webb et al. 1983).	**Unlikely to occur** The species has not previously been recorded within the Study area (ALA) and was not observed during field surveys. There is no suitable habitat for the species in the Project area.
Cuculus optatus, Oriental cuckoo	PMST	Migratory	SLC	The species has been recorded in conifer and mixed forests, riparian shrub thickets, forest bogs, burned-out and clear-cut areas at the final stages of overgrowing (BirdLife International 2019c).	**Potential to occur** The species has not previously been recorded within the Study area (Wildnet or ALA) and was not observed during field surveys.
Gallinago hardwickii, Latham's snipe	PMST	Migratory, marine	SLC	The species occurs in permanent and ephemeral wetlands at altitudes up to 2000 m above sea level. The species preferred habitat includes open, freshwater wetlands with low, dense vegetation (swamps, flooded grasslands or heathlands, bogs) or habitat with saline or brackish water during migration and have been found in modified or artificial habitats close to human activity. Foraging and roosting habitat are characterised by areas of mud exposed or beneath shallow water with low, dense vegetation. The species is highly dispersive, moving in response to rainfall and availability of food (SPRAT 2021).	**Potential to occur** The species has been previously recorded within the Study area, in the General Plain wetland to the west of the Project area, in 2014 and 2015 (ALA). There is minimal suitable habitat within the Project area.
Hirundo rustica, barn swallow	PMST	Migratory, marine	SLC	The species occurs from sea level up to 3000 m above sea level and has been recorded in open country in coastal lowlands, near water, towns and cities, and also in or over freshwater wetlands,	**Potential to occur** The species has not previously been recorded within the Study area (Wildnet or ALA) and was not

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				paperbark *Melaleuca* woodland, mesophyll shrub thickets and tussock grasslands (Schodde and Mason 1999). The species prefers areas with accessible artificial structures such as barns, sheds and bridges for nesting and overhead wires or bare branches and twigs for perching, sunning and preening (Cramp 1988; Turner and Rose 1989).	observed during field surveys. However, there is suitable habitat for the species.
Monarcha melanopsis, black-faced monarch	PMST Wildlife Online	Migratory, marine	SLC	The species is restricted to far northern Queensland, being a summer breeding migrant from New Guinea. The species is predominantly found in rainforests, eucalypt woodlands, coastal scrub and damp gullies, but may be found in more open woodland when migrating (BirdLife International 2016a).	**Known to occur** Recorded within the Project area during the diurnal bird surveys in January 2021.
Monarcha trivirgatus, syn *Symposiachrus trivigatus*, spectacled monarch	PMST	Migratory, marine	SLC	The species inhabits dense rainforests and moist eucalypt forests of eastern and north-eastern Australia, including waterside vegetation and mangroves (BirdLife International 2017a).	**Known to occur** Recorded within the Project area during the October 2021 BUS.
Motacilla cinerea, grey wagtail	PMST	Migratory, marine	SLC	The species inhabits fast-flowing mountain streams and rivers with exposed rocks and shoals, often in forested areas, but is also found in lowland watercourses and canals where artificial waterfalls, weirs, millraces or lock gates are present. Species preferred habitat during non-breeding season includes farmyards, sewage farms, forest tracks, tea estates and town centres. Breeding habitat includes rock ledges, crevices in riverbanks, ledges in walls,	**Potential to occur** The species has not previously been recorded within the Study area (Wildnet or ALA) and was not observed during field surveys. However, there is suitable habitat for the species.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
				under bridges or in drainpipes (BirdLife International 2017b).	
Motacilla flava, yellow wagtail	PMST	Migratory, marine	SLC	The species occurs in damp or wet habitats with low vegetation including damp meadows, marshes, waterside pastures, sewage farms and bogs to damp steppe and grassy tundra (BirdLife International 2019a).	**Potential to occur** The species has not previously been recorded within the Study area (Wildnet or ALA) and was not observed during field surveys. There is limited suitable habitat for the species within the Project area.
Myiagra cyanoleuca, satin flycatcher	PMST	Migratory, marine	SLC	The species inhabits heavily vegetated gullies in eucalypt-dominated forests and taller woodlands near wetlands or watercourses, and coastal forests, woodlands, mangroves, dry open woodland with grassy ground cover during migration (BirdLife International 2017c). The species is mostly absent from rainforests (SPRAT 2021).	**Known to occur** Recorded within the Project area during the October 2021 BUS.
Pandion haliaetus, osprey	PMST	Migratory, marine	SLC	The species inhabits a wide range of habitats that are within 3-5 km of water bodies including salt marsh, mangrove swamp, cypress swamp, lake, bog, reservoirs or rivers that are abundant with fish (del Hoyo et al. 1994; BirdLife International 2019b). Nesting habitat includes large dead trees on cliffs but also include artificial platforms such as power poles, communication towers and buildings which have been found to have more successful fledging during breeding (del Hoyo et al. 1994; BirdLife International 2019b).	**Potential to occur** There is a single record of the species dating from 2004 at the north-eastern extent of the Study area (ALA). It was not observed in field surveys and there is limited potential habitat within the Project area.

Species Name	Data Source	EPBC Act Status	NC Act Status	Habitat and Ecology	Likelihood of Occurrence
Rhipidura rufifrons, rufous fantail	PMST	Migratory, marine	SLC	The species inhabits dense, shady undergrowth of gullies in moist eucalypt forests and rainforests. The species prefers habitat with deep shading and is often seen close to the ground. The species may be found in more open habitats during migration (SPRAT).	**Known to occur** The species has previously been recorded on the boundary of the Project area with the Wet Tropics WHA, in 1995 (ALA). One individual was recorded on camera trap during the field surveys.
Tringa nebularia, common greenshank	PMST	Migratory, marine	SLC	The species occurs in sheltered coastal habitats typically with large mudflats, saltmarshes, mangroves, or seagrass with fringing or emergent vegetation. These include embayments, harbours, river estuaries, deltas and lagoons, ephemeral and permanent wetlands such as swamps, lakes, dams, rivers, creeks, billabongs, waterholes and inundated floodplains, claypans and saltflats. The species has also been found in artificial wetlands (BirdLife International 2016b).	**Potential to occur** There is a single record of the species within the Study area, dating from 2015 (ALA). It was not observed during field surveys and there is minimal potential habitat within the Project area.

Appendix D

Preliminary Vegetation Management Plan

Preliminary Vegetation Management Plan

Chalumbin Wind Farm

Prepared for:
Chalumbin Wind Farm Pty Ltd

December 2021

Document Information

DOCUMENT	Preliminary Vegetation Management Plan
ATTEXO REF	EPU-004
DATE	10-12-2021
PREPARED BY	Selina Carruthers - Ecologist
REVIEWED BY	Nikki O'Donnell – Principal Consultant – Biodiversity and Impact Assessment

Quality Information

REVISION	DATE	DETAILS	AUTHORISATION	
			Name/Position	Signature
0	10-12-21	Issued for use	Chris Cantwell Partner & Principal Consultant	

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1.0 Introduction

1.1 Background

Chalumbin Wind Farm Pty Ltd (CWF), a subsidiary of Epuron Projects Pty Ltd (Epuron), proposes to develop the Chalumbin Wind Farm Project (the Project) at a location approximately 15 km south-west of Ravenshoe in Far North Queensland within the Tablelands Regional Council Local Government Area (LGA), see **Figure 1.1**. The Project area (which encompasses the land parcels within which infrastructure is proposed, including parts of the Wooroora Road reserve) is a total of 31,620.9 ha. The Project footprint to construct and operate the Project (i.e. maximum area of disturbance) is a much smaller area within these land parcels, being a total of 1,132 ha (3.58 % of the Project area).

1.2 Purpose

The purpose of this Preliminary Vegetation Management Plan (VMP) is to ensure appropriate guidelines and methods are in place to manage potential impacts to vegetation associated with Project development and operation activities. This VMP describes the activities to manage any vegetation clearing required as part of Project construction, to maintain retained vegetation, and to restore vegetation and habitat in temporarily disturbed areas.

This VMP has also been prepared to comply with Performance Outcome PO5 under State Code 23: Wind Farm Development. Specifically, the objectives of this VMP are to:

- Assess potential impacts to native vegetation communities and threatened flora species identified in the Ecological Assessment Report (EAR) for the Project; and
- Identify appropriate actions for avoidance, mitigation and management of potential impacts to native vegetation and threatened flora species, and to maintain these ecological values in the Project area.

1.3 Project Description

1.3.1 Project Components

The Project is proposed to consist of up to 94 wind turbines, linking access tracks and associated infrastructure including a new Powerlink connection substation and wind farm collector substations, permanent meteorological monitoring masts (met masts), medium and high-voltage underground and overhead powerlines, temporary construction compound, laydown and stockpile areas, and temporary and permanent site offices for asset management and operation and maintenance facilities. The full description of the Project is provided in section 3.0 of the Planning Report to support the Development Application for the Project.

1.3.2 Project Stages

The Project has three stages, and activities associated with each stage are summarised in the following sections.

1.3.2.1 Construction

Construction is expected to commence in early 2023, subject to approvals and commercial considerations. The construction phase is expected to last for a period of approximately 24-18 months, with approximately 250 to 350 staff employed during the peak construction period.

1.3.2.2 Operations

The operational life of the wind farm is expected to be 30 years. Approximately 15 to 30 full-time jobs will be generated during operation, typically 10 to 20 technicians along with a Project Manager, administration, and other support roles. This will include environmental roles on an as-needed basis to assist in operational monitoring.

1.3.2.3 Decommissioning

Infrastructure may be repowered with new equipment for a further 30-year operating life, or decommissioned, with the site rehabilitated to facilitate continuation of the current land use (agriculture) or alternative land use. If decommissioned, most above-ground infrastructure apart from roads (which are left to benefit the landholders) will be removed (e.g., all turbines, transmission lines, etc). The land will then be rehabilitated in line with development permit conditions and specific landowner agreements. Some infrastructure may remain in-situ depending on landowner preferences.