

### **TOWNSVILLE PORT EXPANSION PROJECT**

Additional Information to the Environmental Impact Statement



#### **APPENDIX A7**

**Terrestrial Ecology Likelihood Supporting Information** 



#### **Species Likelihood Table**

Table 1 has been updated in order to reflect changes in species status under the *Nature Conservation Act 1992*. Text with strikethrough font represents species which did not occur in the updated searches.

Footnotes are provided at the bottom of the table to provide further information on abbreviations and references. Numbers located in the 'Sources' column correlate to relevant data sources detailed in Footnote 5. Footnote 6 and 7 correlate to updated searches undertaken in 2016.

Table 1 Table of threatened, migratory and marine species detected during desktop reviews and site surveys

Species Name	Common Name <sup>1</sup>	EPBC Act Status <sup>2</sup>	NC Act Status <sup>2</sup>	Migratory³	Marine³	Preferred Habitat	Likelihood of Occurrence in Region	Likelihood to Occur in Project Area	Sensitivity to Project	Comments⁴	Sources <sup>5</sup>
Birds											
Accipiter fasciatus					¥	This a raptor species occurring in riparian areas and water holes among a range of woodland and open forests. It is a partially migratory species that will exploit farming areas in addition to dry scrublands, forests and woodlands. This species is also known to occupy areas of open paperbark, monsoon and riverine forest and wetland with sparse trees, parks and gardens.	Present	Unlikely	Low	Species identified using habitat near the mouth of the Ross River by GHD and Driscoll	3
Accipiter novaehollandiae	<del>grey goshawk</del>		NT.			The grey goshawk is found in most forest types, especially tall closed forests, including rainforests.	Possible	Unlikely	Low	Species identified on Magnetic Island by MICDA and MINCA	4
Actitis hypoleucos	common sandpiper		SL	Y	Y	Inhabits coastal and interior wetlands where it forages along the narrow muddy edges of billabongs, river pools, mangroves and reefs or rock beaches.	Present	Present flyover	Low	Species identified using habitat near the mouth of the Ross River by Driscoll and historical records	1, 2, 3
Aerodramus terraereginae	Australian swiftlet		N <del>T</del> C			Skies over coastal ranges, gorges, islands and woodlands.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	2
Anseranas semipalmata	magpie goose		С		¥	Shallow wetlands (usually <1 m deep) with dense growth of rushes and sedges. Wetlands associated with floodplains of rivers and large shallow wetlands formed by runoff.	Possible	Unlikely	Low	Suitable habitat in the broader area	1, 2
Apus pacificus	fork-tailed swift		SL	Y	Υ	Low to very high airspace over varied habitat, rainforest to semi-desert.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	1

Species Name	Common Name <sup>1</sup>	EPBC Act Status <sup>2</sup>	NC Act Status <sup>2</sup>	Migratory³	Marine <sup>3</sup>	Preferred Habitat	Likelihood of Occurrence in Region	Likelihood to Occur in Project Area	Sensitivity to Project	Comments⁴	Sources <sup>5</sup>
Pandion cristatus	eastern osprey		SL			Littoral and coastal habitats and terrestrial wetlands and offshore islands.	Present	Present Flyover	Low	Suitable habitat in the broader area	7
Ardea modesta	eastern great egret		SL	Y	Y	Wetlands, flooded pastures, dams, estuarine mudflats, mangroves and reefs.	Present	Present, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 3
Ardea ibis	cattle egret		SL	Y	Y	The cattle egret is found in grasslands, woodlands and wetlands, and is not common in arid areas. It also uses pastures and croplands, especially where drainage is poor. Will also forage at garbage dumps, and is often seen with cattle and other stock.	Present	Present, flyover	Low	Suitable habitat in the broader area	1, 2, 3
Ardea intermedia	intermediate egret				¥	It is distributed throughout eastern Australia and significant coastal areas of the Northern Territory, being absent from more arid ones. The intermediate egret has similar habitat preferences to the little and great egret, found in shallows of wetlands and shallow margins of inland rivers and lakes.	Present	Possible, flyover	Low	Historical records of this species in the area	3
Arenaria interpres	ruddy turnstone		SL	Υ	Y	Inhabits beaches and coasts with exposed rocks, stony or shell beaches, mudflats and exposed reefs.	Possible	Possible, flyover	Low	Suitable habitat in the broader area, historic records	1. 3
Sula dactylatra	masked booby		SL			The masked booby lives on the open ocean. It only comes on land to breed and raise its young.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	7
Sula sula	red-footed booby		SL			Breeds on islands in most tropical oceans. When not breeding it spends most of the time at sea, and is therefore rarely seen away from breeding colonies. It nests in large colonies, laying one chalky blue egg in a stick nest.	Present	Possible, flyover	Low	Suitable habitat in the broader area	7
Sula leucogaster	brown booby		SL			Nests on islands, covering a wide range of vegetation types, geologic features, and weather patterns. Found at sea in nonbreeding season.	Present	Possible, flyover	Low	Suitable habitat in the broader area	7

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Plegadis falcinellus	glossy ibis		SL			A wide variety of inland wetland habitats such as shallow lakes, swamps and marshes, ponds, rivers, floodplains, wet meadows and irrigated agricultural fields, as well as occasionally using coastal lagoons, mudflats and estuaries.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	7
Calidris acuminata	sharp-tailed sandpiper		SL	Y	Y	The species prefers the grassy edges of shallow inland freshwater wetlands. It is also found around swage farms, flooded fields, mudflats, mangroves, rocky shores and beaches. Its breeding habitat in Siberia is the peat-hummock and lichen tundra of the high Arctic.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3
Calidris alba	sanderling		SL	Υ	Υ	Open sandy beaches.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by Driscoll	1, 2, 3
Calidris canutus	red knot		SL	Υ	Y	Tidal sands and mudflats.	Present	Present, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3
Calidris ferruginea	curlew sandpiper			Y	Y	Inter-tidal mudflats of estuaries, lagoons, mangrove channels, lakes, dams, floodwaters and flooded saltbush around inland lakes.	Present	Present, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3
Calidris ruficollis	red-necked stint		SL	Y	Y	Tidal and inland mudflats, salt marshes, beaches, salt fields and temporary floodwaters.	Present	Present, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3
Calidris tenuirostris	great knot		SL	Y	Y	Sheltered coastal habitats with large, inter-tidal mudflats or sandflats, including inlets, bays, harbours, estuaries, lagoons, sandy spits, islets and sometimes on exposed reefs or rock platforms.	Present	Present, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3

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Charadrius leschenaultii	greater sand plover		SL	Y	Y	Coastal species, foraging on inter-tidal sand and mudflats in estuaries, and roosting during high tide on sandy beaches or rocky shores. Individuals have also been recorded on inshore reefs, rock platforms, small rocky islands and sand cays on coral reefs. Occasional sightings have also occurred on near-coast saltlakes, brackish swamps, shallow freshwater wetlands and grassed paddocks.	Present	Present, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3
Charadrius mongolus	lesser sand plover		SL	Y	Y	Occurs mainly on sheltered sandy, shelly or muddy beaches or estuaries with large inter-tidal mudflats or sandbanks. Roosts during high tide on sandy beaches and rocky shores, often with other waders.	Present	Present, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3
Charadrius ruficapillus	red-capped plover		С		Y	Estuaries, beaches, inland lakes.	Present	Present, flyover	Low	Species identified using habitat near the mouth of the Ross River by Driscoll	1, 2, 3
Charadrius veredus	oriental plover			Y	Y	Found generally inland; in open grasslands in arid and semi-arid zones; and less often in estuarine or littoral environments. This species prefers flat inland plains, sparsely vegetated short grass with hard bare ground including claypans, playing fields, lawns and cattle camps. The oriental plover may move to lightly-wooded grasslands with the onset of the wet season.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	1
Fregata ariel	lesser frigatebird		SL	Υ	Υ	It is common in tropical seas, breeding on remote islands, including Christmas Island.	Present	Possible, flyover	Low	Suitable habitat in the broader area	7
Sterna hirundo	common tern		SL	Y	Υ	Are marine, pelagic and coastal.	Present	Possible, flyover	Low	Suitable habitat in the broader area	7
Sterna sumatrana	black-naped tern		SL	Y	Y	Associated with small, offshore sand and coral cays, coral reefs and lagoons, and sandy and rocky islands and islets, and in the surrounding seas. The species is only occasionally recorded in inshore waters.	Present	Possible, flyover	Low	Suitable habitat in the broader area	7

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Onychoprion anaethetus	bridled tern		SL	Y	Y	Breed on islands. Nests are usually found in rocky areas or on coral, concealed in crevices or caves up to 1.5 m deep, under rocks, among talus or coral rubble, on ledges of cliffs, or on the ground beneath low shrubs, roots of Pandanus, vines or among grasses.	Present	Possible, flyover	Low	Suitable habitat in the broader area	7
Sternula albifrons	little tern		SL	Y	Y	Inhabit sheltered coastal environments, including lagoons, estuaries, river mouths and deltas, lakes, bays, harbours and inlets, especially those with exposed sandbanks or sand-spits.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll and on Magnetic Island by MICDA and MINCA Suitable habitat nearby at the mouth of Ross River.	1, 2, 3, 7
Chlidonias leucopterus	white-winged tern		SL	Y	Y	Mostly inhabits fresh, brackish or saline, and coastal or subcoastal wetlands. White-winged terns frequent tidal wetlands, such as harbours, bays, estuaries and lagoons, and their associated tidal sandflats and mudflats. Terrestrial wetlands, including swamps, lakes, billabongs, rivers, floodplains, reservoirs, saltworks, sewage ponds and outfalls are also inhabited. Wetlands may be open, or with floating emergent or marginal vegetation. They rarely occur on inland wetlands in Australia.	Present	Possible, flyover	Low	Historical records of this species in the area by Driscoll	3
Coracina novaehollandiae	black-faced cuckoo-shrike		С		Y	This common species is widely dispersed throughout most of the Australian continent in habitats ranging from rainforest, eucalypt forests and woodlands, riparian vegetation, farming areas and gardens. Breeding pairs return to the same breeding site every year.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by GHD and Driscoll	3

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Coracina papuensis	white-bellied cuckoo-shrike		С		Y	A common species in the Townsville area, and is found from mid-South Australia to Queensland and the Northern Territory, with an inland extension to the arid zone. Preferred habitat includes sclerophyll and gallery forest, rainforest, woodland and mangroves.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by GHD	3
Cuculus optatus	oriental cuckoo, horsfield's cuckoo			Y	Y	It mainly inhabits forests, occurring in coniferous, deciduous and mixed forest. It feeds mainly on insects and their larvae, foraging for them in trees and bushes as well as on the ground. It is usually secretive and hard to see.	Present	Possible, flyover	Low	Suitable habitat in the broader area	5
Motacilla flava	yellow wagtail			Y	Y	Yellow Wagtails can turn up just about anywhere in Australia but always in quite rich open-country habitats with disturbed ground and some water. Sewage farms, dams and grassy margins to lakes are all potential habitat.	Present	Possible,	Low		5
Egretta sacra	eastern reef egret		С	Υ	Y	Freshwater marshes and inland waters also rocky and sandy shoreline and/or beaches, tidal mud flats.	Present	Present, flyover	Low	Historical records of this species in the area by Driscoll	3
Ephippiorhynchus asiaticus	black-necked stork		NT C			Inhabits open freshwater environments along the margins of billabongs, lagoons, swamps, floodplains, dams and their adjacent grasslands, pastures and woodlands. They also forage in or around estuaries and along inter-tidal shorelines, such as saltmarshes, mudflats and sandflats, and mangrove vegetation.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Driscoll, Maunsell and on Magnetic Island by MICDA and MINCA	2, 3
Erythrotriorchis radiatus	red goshawk	V	E			It inhabits tropical grassy woodlands mostly in undulating stony lands. The red goshawk occurs in coastal and subcoastal areas in wooded and forested lands. They are found in habitats that support high bird numbers and biodiversity, especially medium to large species which the goshawk requires for prey. The red goshawk nests in large trees and are year-round residents.	Possible	Unlikely	Low	Suitable habitat in the broader area	1

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Esacus magnirostris	beach stone-curlew		V		Y	The beach stone-curlew occurs on open, undisturbed beaches, islands, reefs and estuarine inter-tidal sand and mudflats. The species prefers beaches with estuaries or mangroves nearby. The species also frequents river mouths, offshore sandbars associated with coral atolls, reefs and rock platforms and coastal lagoons.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Driscoll, Maunsell and on Magnetic Island by MICDA and MINCA	2, 3
Gallinago hardwickii	latham's snipe		SL	Y	Y	Open, freshwater wetlands with low, dense vegetation e.g. swamps, flooded grasslands or heathlands, around bogs and other water bodies.	Possible	Unlikely	Low	Suitable habitat in the broader area	2
Gallinago megala	swinhoe's snipe			Y	Y	During the non-breeding season Swinhoe's snipe occurs at the edges of wetlands, such as wet paddy fields, swamps and freshwater streams. The species is also known to occur in grasslands, drier cultivated areas (including crops of rapeseed and wheat) and market gardens. Habitat specific to Australia includes the dense clumps of grass and rushes round the edges of fresh and brackish wetlands. This includes swamps, billabongs, river pools, small streams and sewage ponds. They are also found in drying claypans and inundated plains pitted with crab holes.	Possible	Unlikely	Low	Suitable habitat in the broader area	1
Gallinago stenura	pin-tailed snipe			Y	Y	During non-breeding period the pin-tailed snipe occurs most often in or at the edges of shallow freshwater swamps, ponds and lakes with emergent, sparse to dense cover of grass/sedge or other vegetation. The species is also found in drier, more open wetlands such as claypans in more arid parts of the species range. It is also commonly seen at sewage ponds; not normally in saline or inter-tidal wetlands.	Unlikely	Unlikely	Low		1

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Geophaps scripta scripta	squatter pigeon (southern subspecies)	¥	¥			Inhabits open grassy woodlands on sandy soils with gravelly ridges. The squatter pigeon (southern) occurs mainly in grassy woodlands and open forests that are dominated by eucalypts, but is also found in disturbed landscapes used for grazing.	Pessible	Unlikely	Low	Suitable habitat in the broader area	1
Haematopus fuliginosus	sooty oystercatcher		NT C			Inhabits rocky shorelines, rocky islets, boulders below cliffs and reefs.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Driscoll and on Magnetic Island by MICDA and MINCA	2, 3, 4
Haliaeetus leucogaster	white-bellied sea eagle		С	¥	Y	Usually coastal, over islands, reefs and headlands, beaches, bays and estuaries, mangroves, lagoons and floodplains. Breeding territories for the white-bellied sea eagle are located close to water, and mainly in tall open forest or woodland. Absence of vegetation at the site means that nesting and/or breeding birds are unlikely to be present.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Maunsell, GHD and Driscoll	1, 2, 3
Haliastur indus	brahminy kite		С		Y	The brahminy kite is a bird of the coast, particularly mangrove swamps and estuaries. It is sometimes seen over forests and along rivers.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by GHD and in historical records	3
Haliastur sphenurus	whistling kite		С		Y	This raptor is widely distributed throughout Australia but avoids dense forests and arid areas where trees are absent, and is one of the most commonly encountered birds outside of built up areas. Habitat consists of cane fields, farmlands, woodlands and forest where there is a water supply in close proximity and they are frequently observed responding to fires and scavenging carrion from roads.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by GHD	3

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Tringa brevipes	grey-tailed tattler		SL	Y	Y	Inter-tidal pools, shallows, soft surfaces of mudflats, sand beaches, rock ledges and reefs.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Driscoll	1, 3
Tringa incana	wandering tattler			Y	Y	Open reefs and rocky shores.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	1
Himantopus himantopus	black-winged stilt		С		Y	The black-winged stilt is a social species, and is usually found in small groups. Black-winged stilts prefer freshwater and saltwater marshes, mudflats, and the shallow edges of lakes and rivers.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Driscoll	1, 2, 3
Hirundapus caudacutus	white-throated needletail			Y	Y	Breeds outside Australia. Low to very high, open airspace over oceans, forests and deserts. At times gathers over ranges, headlands, often in humid, unsettled weather preceding thunderstorms. In Australia, the white-throated needletail is almost exclusively aerial and are recorded most often above wooded areas. The species breeds in wooded lowlands and sparsely vegetated hills, as well as mountains covered with coniferous forests.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	1
Hirundo rustica	barn swallow		SL	Y	Υ	Welcome swallows visit a wide variety of habitats with the exception of the more heavily forested regions and drier inland areas. Open habitats and towns usually near water.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	1, 2
Hydroprogne caspia	caspian tern		SL	Y	Y	Species frequents sheltered sea coasts, estuaries, inlets, bays, harbours, coastal lagoons, saltmarshes and saltpans, also occurring inland on fresh or saline wetlands including large lakes, inland seas, large rivers, creeks, floodlands, reservoirs and sewage ponds.	Present	Present	Low	Species identified by Driscoll	3

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Limicola falcinellus	broad-billed sandpiper		SL	Y	Y	Sheltered coastal estuaries, lagoons with soft inter-tidal mudflats; muddy coastal creeks, swamps, occasionally reefs.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by Driscoll	1, 2, 3
Limosa lapponica	bar-tailed godwit		SL	Y	Y	Coastal mudflats, sandbars, shores of estuaries, salt marsh and sewerage ponds.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3
Limosa limosa	black-tailed godwit		SL	Y	Y	Sheltered bays, estuaries and lagoons with large inter-tidal mudflats and/or sandflats. In inland areas, found on mudflats and in water less than 10 cm deep, around muddy lakes and swamps. Has also been recorded in wet fields and sewerage treatment works.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3
Fregetta grallaria grallaria	white- billed Storm Petrel	V	С			In the non-breeding season, it reaches and forages over near-shore waters along the continental shelf of mainland Australia. It breeds, in Australian territory, on offshore islets and rocks in the Lord Howe Island group.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	6
Neochmia ruficauda ruficauda	star Finch (eastern, southern)	Ε	Ε			The Star Finch (eastern) occurs mainly in grasslands and grassy woodlands that are located close to bodies of fresh water.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	6
Macronectes giganteus	southern giant petrel	E	E	¥	¥	Breeds in sub Antarctic. Marine, over open seas and inshore waters; favours edge of continental shelf and edge of pack ice.	Possible	Unlikely	Low	Suitable habitat in the broader area	2
Merops ornatus	rainbow bee-eater		SL	Y	Y	Open country of woodlands, open forest, semi- arid scrub, grasslands, clearings in heavier forests, farmlands; avoids heavy forest. In breeding season, requires open clearing or paddock with loamy soil soft enough for nest tunnelling, yet firm enough to support the tunnel.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by GHD and Driscoll	1, 2, 3

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Ardenna tenuirostris	short-tailed shearwater		SL	Y	Y	It is a migratory species that breeds mainly on small islands in Bass Strait and Tasmania.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by GHD and Driscoll	7
Ardenna pacifica	wedge-tailed shearwater		SL	Y	Y	The Wedge-tailed Shearwater is a pelagic, marine bird known from tropical and subtropical waters.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by GHD and Driscoll	7
Monarcha melanopsis	black-faced monarch			Y	Y	Rainforest, mangroves, eucalypt forests and woodlands.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by GHD and Driscoll	1, 3
Monarcha trivirgatus	spectacled monarch			Υ	Y	Usually rainforests, eucalypt forests and mangroves; often in moist gullies of dense wet eucalypt forests.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	1
Myiagra cyanoleuca	satin flycatcher			Υ	Υ	Forests and woodlands, mangroves, coastal heath scrubs but avoids rainforests.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	1
Neochmia ruficauda ruficauda	star finch (eastern), star finch (southern)	€	€	¥	¥	The star finch is a largely sedentary inhabitant of grasslands and riparian grassy woodlands near water. It is vulnerable to grazed areas and has all but disappeared from areas where rainfall is unreliable. The star finch (eastern) occurs mainly in grasslands and grassy woodlands that are located close to bodies of freshwater.	Possible	Unlikely	Low	Suitable habitat in the broader area	1
Nettapus eoromandelianus albipennis	Australian cotton pygmy- goose		NT C		¥	Tropical lowlands: well-vegetated deep freshwater pools, lakes, lagoons; also marshes, swamps, slow-flowing rivers, streams.	Possible	Unlikely	Low	Suitable habitat in the broader area	1

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Numenius madagascariensis	eastern curlew	CE	E V	Y	Y	The eastern curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large inter-tidal mudflats or sandflats, often with beds of seagrass.  Occasionally, the species occurs on ocean beaches (often near estuaries), and coral reefs, rock platforms, or rocky islets. The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, and sometimes use the mangroves.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Maunsell, Driscoll and on Magnetic Island by MICDA and MINCA	1, 2, 3
Numenius minutus	little curlew		SL	Y	Y	Little curlews may gather in large flocks on coastal and inland grasslands and black soil plains in northern Australia, near swamps and flooded areas. They also feed on playing fields, paddocks and urban lawns.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by Driscoll	1, 2, 3
Numenius phaeopus	whimbrel		SL	Y	Y	Mudflats of estuaries, lagoons, occasionally sandy beaches, reefs and salt lakes.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3
Philomachus pugnax	ruff		SL	Υ	Υ	Breeds in grassy fields. Winters on estuaries and marshes.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	2
Pluvialis fulva	pacific golden plover		SL	Y	Y	Estuaries, inter-tidal mudflats, beaches, reefs, salt marshes and offshore islands.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3
Pluvialis squatarola	grey plover		SL	Y	Y	Marine shores and estuaries, sand bars, beaches, rock platforms and reef flats.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2, 3

Species Name	Common Name <sup>1</sup>	EPBC Act Status <sup>2</sup>	NC Act Status <sup>2</sup>	Migratory <sup>3</sup>	Marine³	Preferred Habitat	Likelihood of Occurrence in Region	Likelihood to Occur in Project Area	Sensitivity to Project	Comments <sup>4</sup>	Sources <sup>5</sup>
Poephila cincta cincta	black-throated finch	E	E	Y	Y	Open woodland, scrubby plains, <i>Pandanus</i> sp. flats with deep cover of grasses, never far from water. The black-throated finch (southern) occurs mainly in grassy, open woodlands and forests, typically dominated by <i>Eucalyptus</i> , <i>Corymbia</i> and <i>Melaleuca</i> or other habitats often along or near watercourses, or in the vicinity of freshwater.	Possible	Unlikely	Low	Suitable habitat in the broader area	1
Recurvirostra novaehollandia	red-necked avocet				Υ	Found in large shallow freshwater or saltwater wetlands and estuarine mudflats.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	1
Rhipidura rufifrons	rufous fantail		SL	Υ	Y	Rainforest, dense wet eucalypt and monsoon forests, paperbark and mangrove swamps, riverside vegetation, open country on migration.	Possible	Possible, flyover	Low	Suitable habitat in the broader area	1, 2
Rostratula australis	Australian painted snipe	¥ E	V	Y	Y	Shallow inland wetlands, brackish or freshwater that are permanently or temporarily inundated. The Australian painted snipe generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands and also use inundated or waterlogged grassland or saltmarsh, dams and bore drains. The Australian painted snipe prefers to breed in areas with overhanging vegetation.	Possible	Unlikely	Low	Suitable habitat in the broader area	1
Tyto novaehollandiae kimberli	masked owl (northern)	V	V			In northern Australia, the Masked Owl has been recorded from riparian forest, rainforest, open forest, Melaleuca swamps and the edges of mangroves, as well as along the margins of sugar cane fields.	Possible	Unlikely	Low	No suitable habitat in the area	6
Tadorna radjah	radjah shelduck		NT C	Υ	Υ	Favours shallow pools and mudbanks or the shallow fringes of deep pools.	Possible	Unlikely	Low	Suitable habitat in the broader area	2
Thalasseus bengalensis	lesser crested tern			Y	Y	The species inhabits tropical and subtropical sandy and coral coasts and estuaries, breeding on low-lying offshore islands, coral flats, sandbanks and flat sandy beaches, foraging in the surf and over offshore waters.	Present	Possible, flyover	Low	Species identified by Driscoll	3

Species Name	Common Name <sup>1</sup>	EPBC Act Status <sup>2</sup>	NC Act Status <sup>2</sup>	Migratory³	Marine³	Preferred Habitat	Likelihood of Occurrence in Region	Likelihood to Occur in Project Area	Sensitivity to Project	Comments⁴	Sources <sup>5</sup>
Thalasseus bergii	crested tern		С		Υ	The species inhabits tropical and subtropical coastlines, foraging in the shallow waters of lagoons, coral reefs, estuaries, bays, harbours and inlets, along sandy, rocky, coral or muddy shores, on rocky outcrops in open sea, in mangrove swamps and also far out to sea on open water. It shows a preference for nesting on offshore islands, low-lying coral reefs, sandy or rocky coastal islets, coastal spits, lagoon mudflats, and artificial islets in saltpans and sewage works, within three kilometres of the coast.	Present	Possible, flyover	Low	Species identified by Driscoll	3
Threskiornis molucca	Australian ibis		С		Y	Habitat for this species consists of wetlands and pastures of both freshwater and tidal influence. Mangrove habitats are also frequented and the Australian white ibis has been expanding its range into expanding agricultural areas over the past decades.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by GHD	3
Todiramphus sanctus	sacred kingfisher		С		Y	The sacred kingfisher is widely spread across the Australian continent, with the exception of the arid interior. Habitats occupied by this species include open forest areas, woodlands, scrublands and mangroves and riparian vegetation. Nesting for this species is reliant on the availability of hollows in trees and termite mounds with occasional burrows excavated in river banks and fence posts.	Present	Unlikely	Low	Species identified using habitat near the mouth of the Ross River by GHD	3
Tringa brevipes	grey-tailed tattler		SL	Y	Y	The grey-tailed tattler is often found on sheltered coasts with reefs and rock platforms or with intertidal mudflats. It can also be found at inter-tidal rocky, coral or stony reefs as well as platforms and islets that are exposed at low tide. It has been found around shores of rock, shingle, gravel or shells and also on inter-tidal mudflats in embayments, estuaries and coastal lagoons, especially fringed with mangroves.	Present	Present	Low	Species identified by Driscoll Port area	3

Species Name	Common Name <sup>1</sup>	EPBC Act Status <sup>2</sup>	NC Act Status <sup>2</sup>	Migratory³	Marine <sup>3</sup>	Preferred Habitat	Likelihood of Occurrence in Region	Likelihood to Occur in Project Area	Sensitivity to Project	Comments⁴	Sources <sup>5</sup>
Tringa glareola	wood sandpiper		SL	Y	Y	The wood sandpiper uses well-vegetated, shallow, freshwater wetlands, such as swamps, billabongs, lakes, pools and waterholes. They are typically associated with emergent, aquatic plants or grass, and dominated by taller fringing vegetation, such as dense stands of rushes or reeds, shrubs, or dead or live trees, and often with fallen timber. hey are also found at some small wetlands only when they are drying.	Possible	Unlikely	Low	Suitable habitat in the broader area	1, 2
Tringa nebularia	common greenshank		SL	Y	Y	The common greenshank is found in a wide variety of inland wetlands and sheltered coastal habitats of varying salinity. It occurs in sheltered coastal habitats, typically with large mudflats and saltmarsh, mangroves or seagrass. Habitats include embayments, harbours, river estuaries, deltas and lagoons and are recorded less often in round tidal pools, rock-flats and rock platforms.	Present	Present	Low	Species identified by Driscoll. Port and Ross River sandspit	3
Tringa stagnatilis	marsh sandpiper		SL	Y	Y	Coastal and inland salt or freshwater wetlands: estuaries, mudflats, mangroves, beaches, swamps, lakes, dams, billabongs, and temporary floodwaters.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2
Xenus cinereus	terek sandpiper		SL	Y	Y	Coastal mudflats, lagoons, creeks and estuaries. Favours mudbanks and sandbanks near mangroves, but also rocky pools and reefs. Roosts communally, often with related wader species.	Present	Present	Low	Species identified using habitat near the mouth of the Ross River by Maunsell and Driscoll	1, 2

Species Name	Common Name¹	EPBC Act Status <sup>2</sup>	NC Act Status <sup>2</sup>	Migratory <sup>a</sup>	Marine <sup>3</sup>	Preferred Habitat	Likelihood of Occurrence in Region	Likelihood to Occur in Project Area	Sensitivity to Project	Comments⁴	Sources <sup>5</sup>
Mammals	T T	ı	T	T	1		ı		T		T
Dasyurus hallucatus	northern quoll	E				Most abundant in rocky eucalypt woodlands but occurs in a variety of habitats. The most successful breeding occurs near creek lines, and dens are usually in hollow tree trunks. The northern quoll has declined significantly across most of its range in recent years. The northern quoll is a solitary carnivorous marsupial that makes its dens in rock crevices, tree holes or occasionally termite mounds, and is predominantly nocturnal.	Possible	Highly unlikely	Low	Rediscovered on Magnetic Island by Turner and Batianoff	1
Phascolarctos cinereus	koala	V				They live in a range of temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by eucalypt species.	Possible	Unlikely	Low	No suitable habitat in the area	6
Hipposideros semoni	semon's leaf-nosed bat	Е	Е			Inhabits caves, mines and buildings, tree hollows and forages a wide range of habitats including rainforest and savannah woodland.	Possible	Unlikely	Low	Suitable habitat in the broader area	1
Saccolaimus saccolaimus nudicluniatus	bare-rumped sheathtail Bat	CE	Е			The Bare-rumped Sheathtail Bat occurs mostly in lowland areas, typically in a range of woodland, forest and open environment.	Possible	Unlikely	Low	No suitable habitat in the broader area	6
Pteropus conspicillatus	spectacled flying fox	٧				The spectacled flying fox occurs in north-east Queensland, north of Cardwell and is restricted to tropical rainforest areas.	Unlikely	Unlikely	Low	No suitable habitat in the broader area. Species range north of Cardwell	1
Rhinolophus philippinensis (large form)	greater large-eared horseshoe bat	Е	Е			The greater large-eared horseshoe bat is found in lowland rainforest, along gallery forest-lined creeks in open eucalypt forest, <i>Melaleuca</i> forest with rainforest understorey, open savannah woodland and tall riparian woodland of <i>Melaleuca</i> , forest red gum ( <i>E. tereticornis</i> ) and Moreton Bay ash ( <i>E. tesselaris</i> ) Daytime roosting habitat for the greater large-eared horseshoe bat includes caves and underground mines located in rainforest, and open eucalypt forest and woodland. Roosts have also been observed in	Possible	Unlikely	Low	Suitable habitat in the broader area	1

Species Name	Common Name <sup>1</sup>	EPBC Act Status <sup>2</sup>	NC Act Status <sup>2</sup>	Migratory³	Marine <sup>3</sup>	Preferred Habitat	Likelihood of Occurrence in Region	Likelihood to Occur in Project Area	Sensitivity to Project	Comments⁴	Sources <sup>5</sup>
						road culverts, and it is suspected that the species uses basal hollows of large trees, dense vegetation, rockpiles and areas beneath creekbanks.					
Taphozous australis	coastal sheathtail bat		V			This species is believed to be unevenly distributed throughout its range, due to its reliance on coastal roosts. The coastal sheathtail bat forages within approximately one kilometre of the ocean, including sand dune scrub, mangroves, <i>Melaleuca</i> swamps, coastal heathlands, open eucalypt forest, and grasslands.	Present	Possible, flyover	Low	Species identified using habitat near the mouth of the Ross River by GHD and recorded on Magnetic Island by Turner and Batianoff	3
Xeromys myoides	water mouse, false water rat	V	V			The species occupies coastal mangrove and saltmarsh habitats. The water mouse lives in mangrove communities, adjacent freshwater lagoons, swamps and sedged lakes close to coastal foredunes. In central Queensland, the species has only been captured in fringing mangroves in the high inter-tidal zone dominated by <i>Ceriops tagal</i> and/or <i>Bruguiera</i> spp. despite extensive searching in other mangrove habitats.	Possible	Highly unlikely	Low	Suitable habitat in the broader area	1
Reptiles											
Acanthophis antarcticus	common death adder		NT.			This species is found in a wide variety of well-drained habitats, including rainforests and wet sclerophyll forests, woodland, shrublands, grasslands and coastal heathlands, preferring sites with deep fixed leaf litter. The importance of these habitats to this species is not known.	Present	Highly unlikely	Low	Mapped Essential habitat on Magnetic Island and by MICDA and MINCA	4
Crocodylus porosus	saltwater crocodile, estuarine		V	Y	Υ	Saltwater crocodiles inhabit coastal rivers and swamps extending well inland via major rivers and billabongs. They are a tropical species, extending south to Rockhampton.	Possible	Likely	Low	Suitable habitat in the broader area	2

Species Name	Common Name <sup>1</sup>	EPBC Act Status <sup>2</sup>	NC Act Status <sup>2</sup>	Migratory <sup>3</sup>	Marine <sup>3</sup>	Preferred Habitat	Likelihood of Occurrence in Region	Likelihood to Occur in Project Area	Sensitivity to Project	Comments⁴	Sources <sup>5</sup>
Delma labialis	striped-tailed delma	¥	<b>∀</b> C			A terrestrial to fossorial species found in dry open woodland and tall wet forest.	Present	Highly unlikely	Low	Mapped Essential habitat on Magnetic Island and identified by Turner and Batianoff	1, 4
Denisonia maculata	ornamental snake	V	V			The Ornamental Snake's preferred habitat is within, or close to, habitat that is favoured by its prey - frogs. The species is known to prefer woodlands and open forests associated with moist areas, particularly gilgai (melon-hole) mounds and depressions in Queensland Regional Ecosystem Land Zone 4.	Possible	Highly unlikely	Low	No suitable habitat	6
Egernia rugosa	yakka skink	V	V			Yakka skinks occur in a wide variety of habitats including poplar box, alluvial soils, low ridges, cypress on sands, belah, mulga and eucalypt woodland, log piles and rabbit warrens. They are considered to be a habitat generalist. Usually found in open dry sclerophyll forest or woodland. Skinks often take refuge among dense ground vegetation, hollow logs, cavities in soil-bound root systems of fallen trees and beneath rocks. The species is restricted to dry woodlands and outcrops of Queensland's eastern interior.	Possible	Highly unlikely	Low	Suitable habitat in the broader area	1
Lampropholis mirabilis	saxicoline sunskink		NT			Inhabits rocky areas in thickets of hoop pine and pockets of rainforest.	Present	Highly unlikely	Low	Mapped Essential habitat on Magnetic Island	1, 4

Species Name	Common Name <sup>1</sup>	EPBC Act Status <sup>2</sup>	NC Act Status <sup>2</sup>	Migratory <sup>3</sup>	Marine³	Preferred Habitat	Likelihood of Occurrence in Region	Likelihood to Occur n Project Area	Sensitivity to Project	Comments⁴	Sources <sup>5</sup>
Menetia sadlieri	sadliers dwarf skink		¥			The Sadlier's skink is endemic to Queensland and is known only from Magnetic Island, off Townsville. The species may occur on parts of the nearby mainland, but no targeted surveys have been conducted to clarify this. Basic habitat requirements are poorly understood. Most surveyed species have been from the low-lying areas on Magnetic Island. In the lowland areas, Sadlier's skinks appear to prefer seasonally dry Melaleuca swamps and areas with thick leaf litter. It is not known whether the skink occurs on the granite boulder hills that dominate the island.	Possible	Highly unlikely	Low	Identified by Turner and Batianoff	4
Plants											
A <del>cacia jackesiana</del>			NT			Grows in brown loam, over Argentine schist, in open eucalypt woodland.	Possible	Highly unlikely	Low	Species identified using habitat on Magnetic Island by MICDA and MINCA	4
Bonamia dietrichiana			NT			This species occurs in vine thicket vegetation.	Present	Highly unlikely	Low	Mapped Essential habitat on Magnetic Island and by MICDA and MINCA	4
Cassia sp. (Paluma Range G.Sankowsky + 450)	<del>golden shower</del>		NT			Grows in monsoon forest, vine forest, rain forest, open forest and woodlands.	Possible	Highly unlikely	Low	Species identified using habitat on Magnetic Island by MICDA and MINCA	4
Corchorus hygrophilus			¥			Occurs on vine forest margins or in sclerophyll forest adjacent to vine forest. It grows among boulders and on soils derived from granite or limestone.	Possible	Highly unlikely	Low	Species identified using habitat on Magnetic Island by MICDA and MINCA	4
Croton magneticus		¥	¥			This species grows in deciduous vine thickets on soils derived from sandstone, granite or acid agglomerate substrates.	Present	Highly unlikely	Low	Mapped essential habitat on Magnetic Island and by MICDA and MINCA	4

Species Name	Common Name <sup>1</sup>	EPBC Act Status <sup>2</sup>	NC Act Status <sup>2</sup>	Migratory³	Marine³	Preferred Habitat	Likelihood of Occurrence in Region	Likelihood to Occur in Project Area	Sensitivity to Project	Comments⁴	Sources <sup>5</sup>
Grewia graniticola			NT			A shrub, recorded in woodlands on hill slopes or coastal dunes, in sandy or skeletal soil.	Present	Highly unlikely	Low	Species identified using habitat on Magnetic Island by MICDA and MINCA	2, 4
Hydrocharis dubia	frogbit	¥	¥			Floating in deep water or rooted in shallow pools, lakes and slow moving streams.	Possible	Highly unlikely	Low	Suitable habitat in the broader area	+
Leucopogon cuspidatus		¥				Mountain tops on poor skeletal soils, amongst granite or serpentinite outcrops.	Possible	Highly unlikely	Low	Suitable habitat in the broader area	1
Marsdenia brevifolia	scrubby bush pear	V	V			Most plants restricted to the hills of Magnetic Island.	Possible	Highly unlikely	Low	Species identified using habitat on Magnetic Island by MICDA and MINCA	4
Peripleura scabra			NT C			Limited habitat information available for this species.	Possible	Highly unlikely	Low	Species identified using habitat on Magnetic Island by MICDA and MINCA	4
Solanum sporadotrichum			NT C			The species is now better known and its range is extended north to west of Townsville and it has been recorded from vine thicket, rainforest margins and Argyrodendron-dominated rainforest.	Possible	Highly unlikely	Low	Species identified using habitat on Magnetic Island by MICDA and MINCA	4
Taeniophyllum muelleri	minute orchid, ribbon root orchid	¥				Epiphytic vine on the branches of rainforest trees in coastal areas. <i>Taeniophyllum muelleri</i> is a rainforest species, epiphytic on the trunks, branches and branchlets of trees.	Possible	Highly unlikely	Low	Suitable habitat in the broader area	1

Common and scientific names for birds follow Christidis and Boles (2008); other names follow EPBC Act lists of threatened species (DSEWPC, 2012).

<sup>2</sup> CE - Critically Endangered; E - Endangered; V - Vulnerable; NT - Near Threatened; C - Common; SLC - Special Least Concerned;

Y - Yes

References: (Driscoll V., 2009), (GHD, 2009), (Maunsell AECOM, 2008), (MICDA & MINCA, 2004), (Turner & Batianoff, ?, 2007), (Turner & Batianoff, 2007)

<sup>1 -</sup> EPBC Protected Matters Search; 2 - Wildlife Online Search; 3 - Previous Surveys; 4 - Other literature

EPBC Protected Matters Search; January 2016

Wildlife Online Search January 2016



# **EPBC Act Protected Matters Report**

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

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

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

Report created: 28/01/16 12:59:33

**Summary** 

**Details** 

Matters of NES
Other Matters Protected by the EPBC Act

Caveat

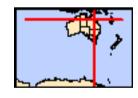
**Acknowledgements** 

**Extra Information** 



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

Coordinates
Buffer: 5.0Km



## **Summary**

### Matters of National Environmental Significance

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

World Heritage Properties:	1
National Heritage Places:	1
Wetlands of International Importance:	1
Great Barrier Reef Marine Park:	2
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	30
Listed Migratory Species:	63

## Other Matters Protected by the EPBC Act

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

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

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

Commonwealth Land:	4
Commonwealth Heritage Places:	None
Listed Marine Species:	105
Whales and Other Cetaceans:	12
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Commonwealth Reserves Marine:	None

#### **Extra Information**

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

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	35
Nationally Important Wetlands:	2
Key Ecological Features (Marine)	None

# **Details**

# Matters of National Environmental Significance

World Heritage Properties		[ Resource Information ]
Name	State	Status
Great Barrier Reef	QLD	Declared property
National Heritage Properties		[ Resource Information ]
Name	State	Status
Natural		
Great Barrier Reef	QLD	Listed place
Wetlands of International Importance (Ramsar)		[ Resource Information ]
Name		Proximity
Bowling green bay		Within 10km of Ramsar
Great Barrier Reef Marine Park		[ Resource Information ]
Type	Zone	IUCN
Conservation Park	CP-19-4059	IV
General Use	GU-16-6004	VI
Listed Threatened Species		[ Resource Information ]
Name	Status	Type of Presence
Birds		
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Foraging, feeding or related behaviour known to occur within area
Erythrotriorchis radiatus  Pod Coobouds [042]	Vulnorable	Chasias ar angeige habitat
Red Goshawk [942]	Vulnerable	Species or species habitat known to occur within area
Fregetta grallaria grallaria		
White-bellied Storm-Petrel (Tasman Sea), White- bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area
Neochmia ruficauda ruficauda		
Star Finch (eastern), Star Finch (southern) [26027]	Endangered	Species or species habitat likely to occur within area
Numenius madagascariensis		
Eastern Curlew [847]	Critically Endangered	Roosting known to occur within area
Poephila cincta cincta		
Black-throated Finch (southern) [64447]	Endangered	Species or species habitat likely to occur within area
Rostratula australis		
Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Tyto novaehollandiae kimberli		
Masked Owl (northern) [26048]	Vulnerable	Species or species habitat
, , , , , , , , , , , , , , , , , , ,		likely to occur within area
Mammals		
Balaenoptera musculus		
Blue Whale [36]	Endangered	Species or species habitat may occur within area
Dasyurus hallucatus		
Northern Quoll [331]	Endangered	Species or species habitat likely to occur

Name	Status	Type of Presence
		within area
Hipposideros semoni Semon's Leaf-nosed Bat, Greater Wart-nosed	Endangered	Species or species habitat
Horseshoe-bat [180]	Endangered	may occur within area
Megaptera novaeangliae		
Humpback Whale [38]	Vulnerable	Breeding known to occur
•		within area
Phascolarctos cinereus (combined populations of Qld, Koala (combined populations of Queensland, New	NSW and the ACT)  Vulnerable	Species or species habitat
South Wales and the Australian Capital Territory)	Valificiable	may occur within area
[85104] <a href="https://example.com/Pteropus conspicillatus">Pteropus conspicillatus</a>		
Spectacled Flying-fox [185]	Vulnerable	Species or species habitat
		likely to occur within area
Rhinolophus robertsi		
Large-eared Horseshoe Bat, Greater Large-eared	Endangered	Species or species habitat
Horseshoe Bat [87639]		may occur within area
Saccolaimus saccolaimus nudicluniatus		
Bare-rumped Sheathtail Bat [66889]	Critically Endangered	Species or species habitat
		likely to occur within area
Xeromys myoides	Mulio o mala la	Onnelse sesses to the
Water Mouse, False Water Rat, Yirrkoo [66]	Vulnerable	Species or species habitat may occur within area
Districts		-,
Plants  Marsdenia brevifolia		
[64585]	Vulnerable	Species or species habitat
		may occur within area
Reptiles		
Caretta caretta		<b>5</b>
Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area
Chelonia mydas		
Green Turtle [1765]	Vulnerable	Breeding known to occur within area
Denisonia maculata		within area
Ornamental Snake [1193]	Vulnerable	Species or species habitat
		may occur within area
Dermochelys coriacea		<b>-</b>
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area
Egernia rugosa		
Yakka Skink [1420]	Vulnerable	Species or species habitat
		may occur within area
Eretmochelys imbricata	V. d	
Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur
		within area
<u>Lepidochelys olivacea</u> Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Breeding likely to occur
	Lindarigorod	within area
Natator depressus  Flatback Turtle [50257]	Vulnoroblo	Brooding known to coor
Flatback Turtle [59257]	Vulnerable	Breeding known to occur within area
Sharks		
Carcharodon carcharias Great White Shark [64470]	Vulnerable	Species or species habitat
Cloat Winto Chark [OTT/O]	Valiforable	may occur within area
Pristis pristis		
Largetooth Sawfish, Freshwater Sawfish, River	Vulnerable	Species or species habitat
Sawfish, Leichhardt's Sawfish, Northern Sawfish		known to occur within area
[60756]		
Pristis ziisron		
Pristis zijsron Green Sawfish, Dindagubba, Narrowsnout Sawfish	Vulnerable	Breeding likely to occur

Name	Status	Type of Presence
[68442]		within area
Rhincodon typus Whale Shark [66690]	Vulnorable	Chasias ar anasias habitat
Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
		·
Listed Migratory Species		[ Resource Information ]
* Species is listed under a different scientific name on t	he EPBC Act - Threatened	Species list.
Name	Threatened	Type of Presence
Migratory Marine Birds <u>Apus pacificus</u>		
Fork-tailed Swift [678]		Species or species habitat
		likely to occur within area
Sterna albifrons		
Little Tern [813]		Species or species habitat
		may occur within area
Migratory Marine Species		
Balaenoptera edeni		
Bryde's Whale [35]		Species or species habitat may occur within area
		may occur within area
Balaenoptera musculus		
Blue Whale [36]	Endangered	Species or species habitat may occur within area
		may cood. mam. area
Carcharodon carcharias  Groat White Shark [64470]	Vulnerable	Species or species habitat
Great White Shark [64470]	Vullerable	Species or species habitat may occur within area
0		·
Caretta caretta  Loggerhead Turtle [1763]	Endangered	Breeding likely to occur
Loggomeda Tartie [1700]	Endangorod	within area
Chelonia mydas	Mada a na la la	Dan adia a languaga ta garaga
Green Turtle [1765]	Vulnerable	Breeding known to occur within area
Crocodylus porosus		
Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area
		incly to occur within area
Dermochelys coriacea	Endongorod	Draading likely to occur
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area
Dugong dugon		
Dugong [28]		Species or species habitat known to occur within area
		Known to occur within area
Eretmochelys imbricata	Mada analida	Fananian faadian annalatad
Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur
		within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat
i orbeagle, Mackerer Shark [03200]		may occur within area
Lenidochelys olivaces		
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Breeding likely to occur
	<b>3</b>	within area
Manta alfredi Reef Manta Ray, Coastal Manta Ray, Inshore Manta		Species or species habitat
Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		may occur within area
Manta birostris		
Manta birostris Giant Manta Ray, Chevron Manta Ray, Pacific Manta		Species or species habitat
Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		may occur within area
Megaptera novaeangliae		
Humpback Whale [38]	Vulnerable	Breeding known to occur
		within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding known to occur

Name	Threatened	Type of Presence
		within area
Orcaella brevirostris		
Irrawaddy Dolphin [45]		Species or species habitat
		known to occur within area
Orginus area		
Orcinus orca Killor Whale, Orca [46]		Species or species habitat
Killer Whale, Orca [46]		Species or species habitat may occur within area
		may boodi within area
Pristis pristis		
Largetooth Sawfish, Freshwater Sawfish, River	Vulnerable	Species or species habitat
Sawfish, Leichhardt's Sawfish, Northern Sawfish		known to occur within area
[60756]		
Pristis zijsron  Croop Soufish Dindogubbo Norrowenout Soufish	Vulnerable	Drooding likely to occur
Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442]	vuirierable	Breeding likely to occur within area
Rhincodon typus		within area
Whale Shark [66680]	Vulnerable	Species or species habitat
• •		may occur within area
Sousa chinensis		
Indo-Pacific Humpback Dolphin [50]		Breeding known to occur
Migratory Terrestrial Species		within area
Cuculus optatus		
Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat
Oriental Cuckoo, Florsheld's Cuckoo [60051]		known to occur within area
		Milowit to occur within area
Hirundapus caudacutus		
White-throated Needletail [682]		Species or species habitat
		known to occur within area
Morono ornatuo		
Merops ornatus  Rainbow Roo cater [670]		Species or species habitat
Rainbow Bee-eater [670]		Species or species habitat may occur within area
		may boodi within area
Monarcha melanopsis		
Black-faced Monarch [609]		Species or species habitat
		known to occur within area
Manaraha trivirgatus		
Monarcha trivirgatus Spectacled Monarch [610]		Species or species habitat
Speciacied Monarch [610]		known to occur within area
		Known to occar within area
Motacilla flava		
Yellow Wagtail [644]		Species or species habitat
		likely to occur within area
Music and accordance		
Myiagra cyanoleuca Setin Elyaptober [612]		Charles or angeles habitat
Satin Flycatcher [612]		Species or species habitat known to occur within area
		MIOWIT TO GOODI WITHIN AIGA
Rhipidura rufifrons		
Rufous Fantail [592]		Species or species habitat
		likely to occur within area
Migratory Wotlanda Species		
Migratory Wetlands Species  Actitis hypoleucos		
Common Sandpiper [59309]		Foraging, feeding or related
		behaviour known to occur
		within area
Ardea alba		
Great Egret, White Egret [59541]		Breeding known to occur
A mala a libita		within area
Ardea ibis		Dung alling the Late
Cattle Egret [59542]		Breeding likely to occur within area
Arenaria interpres		within alta
Ruddy Turnstone [872]		Foraging, feeding or related
		behaviour known to occur
		within area

Name	Threatened	Type of Presence
Calidris acuminata Sharp-tailed Sandpiper [874]		Roosting known to occur within area
Calidris alba Sanderling [875]		Foraging, feeding or related behaviour known to occur within area
Calidris canutus Red Knot, Knot [855]		Foraging, feeding or related behaviour known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Foraging, feeding or related behaviour known to occur within area
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area
Charactrica (acabasas)		Foraging, feeding or related behaviour known to occur within area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]		Foraging, feeding or related behaviour known to occur within area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]		Foraging, feeding or related behaviour known to occur within area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Foraging, feeding or related behaviour known to occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Roosting may occur within area
Gallinago megala Swinhoe's Snipe [864]		Roosting likely to occur within area
Gallinago stenura Pin-tailed Snipe [841]		Roosting likely to occur within area
Heteroscelus brevipes Grey-tailed Tattler [59311]		Roosting known to occur within area
Heteroscelus incanus Wandering Tattler [59547]		Foraging, feeding or related behaviour known to occur within area
Limicola falcinellus Broad-billed Sandpiper [842]		Foraging, feeding or related behaviour known to occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area
<u>Limosa limosa</u> Black-tailed Godwit [845]		Roosting known to occur within area
Numenius madagascariensis Eastern Curlew [847]	Critically Endangered	Roosting known to occur within area
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour known to occur within area
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area

Name	Threatened	Type of Presence
Pandion haliaetus		
Osprey [952]		Breeding known to occur within area
Philomachus pugnax		
Ruff (Reeve) [850]		Foraging, feeding or related behaviour known to occur within area
Pluvialis fulva		
Pacific Golden Plover [25545]		Roosting known to occur within area
Pluvialis squatarola		
Grey Plover [865]		Foraging, feeding or related behaviour known to occur within area
Tringa glareola		Within area
Wood Sandpiper [829]		Foraging, feeding or related behaviour known to occur within area
Tringa nebularia		
Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
Tringa stagnatilis		
Marsh Sandpiper, Little Greenshank [833]		Foraging, feeding or related behaviour known to occur within area
Xenus cinereus		
Terek Sandpiper [59300]		Foraging, feeding or related behaviour known to occur within area
Other Metters Dretected by the EDDC Act		

## Other Matters Protected by the EPBC Act

## Commonwealth Land [Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

#### Name

Ardea ibis

Cattle Egret [59542]

Ruddy Turnstone [872]

Arenaria interpres

Defence - Commonwealth Centre

Defence - JEZZINE BARRACKS - TOWNSVILLE

Defence - NORTH WARD TRAINING DEPOT - TO Defence - ROSS ISLAND BARRACKS	WNSVILLE	
Listed Marine Species		[ Resource Information ]
* Species is listed under a different scientific name of	on the EPBC Act - Threate	ened Species list.
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos		
Common Sandpiper [59309]		Foraging, feeding or related behaviour known 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
Ardea alba		
Great Egret, White Egret [59541]		Breeding known to occur within area

Breeding likely to occur

Foraging, feeding or related

within area

behaviour known

Name	Threatened	Type of Presence
		to occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]		Roosting known to occur
		within area
Calidris alba		
Sanderling [875]		Foraging, feeding or related
		behaviour known to occur within area
<u>Calidris canutus</u>		within area
Red Knot, Knot [855]		Foraging, feeding or related
• • • • • • • • • • • • • • • • • • •		behaviour known to occur
		within area
Curlow Sandpiner [956]	Critically Endangered	Corogina fooding or related
Curlew Sandpiper [856]	Critically Endangered	Foraging, feeding or related behaviour known to occur
		within area
<u>Calidris ruficollis</u>		
Red-necked Stint [860]		Roosting known to occur
Calidria tanuiraatria		within area
Calidris tenuirostris  Croot Knot [862]		Forgaina fooding or related
Great Knot [862]		Foraging, feeding or related behaviour known to occur
		within area
Charadrius leschenaultii		
Greater Sand Plover, Large Sand Plover [877]		Foraging, feeding or related
		behaviour known to occur
Charadrius mongolus		within area
Lesser Sand Plover, Mongolian Plover [879]		Foraging, feeding or related
Lococi Gana i lovoi, Mongonan i lovoi [o/o]		behaviour known to occur
		within area
<u>Charadrius ruficapillus</u>		
Red-capped Plover [881]		Foraging, feeding or related behaviour known to occur
		within area
<u>Charadrius veredus</u>		Within aroa
Oriental Plover, Oriental Dotterel [882]		Foraging, feeding or related
		behaviour known to occur
<u>Cuculus saturatus</u>		within area
Oriental Cuckoo, Himalayan Cuckoo [710]		Species or species habitat
		known to occur within area
Gallinago hardwickii		D C
Latham's Snipe, Japanese Snipe [863]		Roosting may occur within area
Gallinago megala		area
Swinhoe's Snipe [864]		Roosting likely to occur
		within area
Gallinago stenura		
Pin-tailed Snipe [841]		Roosting likely to occur
Haliaeetus leucogaster		within area
White-bellied Sea-Eagle [943]		Species or species habitat
		known to occur within area
Hatanan I. J. J. J.		
Heteroscelus brevipes Crov toiled Tottler [50244]		Dooting large to
Grey-tailed Tattler [59311]		Roosting known to occur within area
Heteroscelus incanus		within area
Wandering Tattler [59547]		Foraging, feeding or related
		behaviour known to occur
Himantonus himantonus		within area
Himantopus himantopus Black-winged Stilt [870]		Roosting known to occur
Diadic williged Gill [0/0]		within area
Hirundapus caudacutus		
White-throated Needletail [682]		Species or species habitat
		known to occur within area
<u>Limicola falcinellus</u>		
Broad-billed Sandpiper [842]		Foraging, feeding or related
• • •		behaviour known

Name	Threatened	Type of Presence
		to occur within area
<u>Limosa lapponica</u> Bar-tailed Godwit [844]		Species or species habitat known to occur within area
<u>Limosa limosa</u> Black-tailed Godwit [845]		Roosting known to occur
Merops ornatus Rainbow Bee-eater [670]		within area  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 flava Yellow Wagtail [644]		Species or species habitat likely to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew [847]	Critically Endangered	Roosting known to occur within area
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour known to occur within area
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur within area
Philomachus pugnax Ruff (Reeve) [850]		Foraging, feeding or related behaviour known to occur within area
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area
Pluvialis squatarola Grey Plover [865]		Foraging, feeding or related behaviour known to occur
Recurvirostra novaehollandiae Red-necked Avocet [871]		within area  Foraging, feeding or related behaviour known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat likely to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Sterna albifrons Little Tern [813]		Species or species habitat may occur within area
Tringa glareola Wood Sandpiper [829]		Foraging, feeding or related behaviour known to occur within area

Name	Threatened	Type of Presence
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
Tringa stagnatilis  Marsh Sandpiper, Little Greenshank [833]		Foraging, feeding or related behaviour known to occur within area
Xenus cinereus Terek Sandpiper [59300]		Foraging, feeding or related behaviour known to occur within area
Fish		
Acentronura tentaculata Shortpouch Pygmy Pipehorse [66187]		Species or species habitat may occur within area
Campichthys tryoni Tryon's Pipefish [66193]		Species or species habitat may occur within area
<u>Choeroichthys brachysoma</u> Pacific Short-bodied Pipefish, Short-bodied Pipefish [66194]		Species or species habitat may occur within area
Choeroichthys suillus Pig-snouted Pipefish [66198]		Species or species habitat may occur within area
Corythoichthys amplexus Fijian Banded Pipefish, Brown-banded Pipefish [66199]		Species or species habitat may occur within area
Corythoichthys flavofasciatus Reticulate Pipefish, Yellow-banded Pipefish, Network Pipefish [66200]		Species or species habitat may occur within area
Corythoichthys intestinalis Australian Messmate Pipefish, Banded Pipefish [66202]		Species or species habitat may occur within area
Corythoichthys ocellatus Orange-spotted Pipefish, Ocellated Pipefish [66203]		Species or species habitat may occur within area
Corythoichthys paxtoni Paxton's Pipefish [66204]		Species or species habitat may occur within area
Corythoichthys schultzi Schultz's Pipefish [66205]		Species or species habitat may occur within area
Cosmocampus darrosanus D'Arros Pipefish [66207]		Species or species habitat may occur within area
Doryrhamphus excisus  Bluestripe Pipefish, Indian Blue-stripe Pipefish, Pacific Blue-stripe Pipefish [66211]		Species or species habitat may occur within area
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area
Halicampus dunckeri Red-hair Pipefish, Duncker's Pipefish [66220]		Species or species habitat may occur within area
Halicampus grayi Mud Pipefish, Gray's Pipefish [66221]		Species or species habitat may occur within area

Halicampus pitidus	
Halicampus nitidus Clittoring Dipofich [66224]	oioo or angaine helder
	ecies or species habitat y occur within area
Halicampus spinirostris  Chiny anaut Dinefiah (CC225)	acion or oponico habitat
· · ·	ecies or species habitat y occur within area
Hippichthys cyanospilos  Dive an added Dinefiels Dive anotted Dinefiels [CC228]	acion or opening habitat
· · · · · · · · · · · · · · · · · · ·	ecies or species habitat y occur within area
Hippichthys heptagonus  Madura Pipefish, Reticulated Freshwater Pipefish  Spe	ecies or species habitat
·	y occur within area
Hippichthys penicillus  Pandy Dinefish Steen paned Dinefish (CC224)	acion or opening habitat
	ecies or species habitat y occur within area
Hippocampus bargibanti	ocios or species habitat
	ecies or species habitat y occur within area
Hippocampus kuda Spottod Sophorea, Vallow Sophorea [66227]	ocios or species habitat
· · · · · · · · · · · · · · · · · · ·	ecies or species habitat y occur within area
Hippocampus planifrons  Flat-face Seaborse [66238]	ocios or species habitat
·	ecies or species habitat y occur within area
Hippocampus zebra	
·	ecies or species habitat y occur within area
Micrognathus andersonii	
·	ecies or species habitat y occur within area
Micrognathus brevirostris	
·	ecies or species habitat y occur within area
Nannocampus pictus  Deinted Dinefiels Deef Dinefiels (66262)	acion or apocion habitat
	ecies or species habitat y occur within area
Solegnathus hardwickii Pallid Pipehorse, Hardwick's Pipehorse [66272] Spe	ecies or species habitat
· · · · · · · · · · · · · · · · · · ·	y occur within area
Solenostomus cyanopterus  Robust Ghostningfish, Blue-finned Ghost Pinefish  Sne	orige or engaine habitat
$\cdot$	ecies or species habitat y occur within area
Solenostomus paegnius  Rough-spout Chost Pinefish [68/125]	or enocine habitat
· · · · · · · · · · · · · · · · · · ·	ecies or species habitat y occur within area
Solenostomus paradoxus Ornato Chostoinofish, Harloquin Chost Binofish	poine or angains habitat
	ecies or species habitat y occur within area
Syngnathoides biaculeatus  Dauble and Dinaharas, Dauble and Dinaharas	oloo ow on a sia a la alaire.
·	ecies or species habitat y occur within area
Trachyrhamphus bicoarctatus  Pantatials Dinafiah Band Stials Dinafiah Shart tailad	
·	ecies or species habitat y occur within area

Name	Threatened	Type of Presence
Trachyrhamphus longirostris Straightstick Pipefish, Long-nosed Pipefish, Straight Stick Pipefish [66281]		Species or species habitat may occur within area
Mammals		
Dugong dugon  Dugong [28]		Species or species habitat known to occur within area
Reptiles		
Acalyptophis peronii Horned Seasnake [1114]		Species or species habitat may occur within area
Aipysurus duboisii Dubois' Seasnake [1116]		Species or species habitat may occur within area
Aipysurus eydouxii Spine-tailed Seasnake [1117]		Species or species habitat may occur within area
Aipysurus laevis Olive Seasnake [1120]		Species or species habitat may occur within area
Astrotia stokesii Stokes' Seasnake [1122]		Species or species habitat may occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area
<u>Chelonia mydas</u> Green Turtle [1765]	Vulnerable	Breeding known to occur within area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area
Disteira kingii Spectacled Seasnake [1123]		Species or species habitat may occur within area
Disteira major Olive-headed Seasnake [1124]		Species or species habitat may occur within area
Enhydrina schistosa Beaked Seasnake [1126]		Species or species habitat may occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Hydrophis elegans Elegant Seasnake [1104]		Species or species habitat may occur within area
Hydrophis mcdowelli null [25926]		Species or species habitat may occur within area
Hydrophis ornatus Spotted Seasnake, Ornate Reef Seasnake [1111]		Species or species habitat may occur within area
<u>Lapemis hardwickii</u> Spine-bellied Seasnake [1113]		Species or species

		Type of Fresence
Laticauda colubrina		habitat may occur within area
a sea krait [1092]		Species or species habitat may occur within area
Laticauda laticaudata a sea krait [1093]		Species or species habitat may occur within area
Lepidochelys olivacea Olive Ridley Turtle, Pacific Ridley Turtle [1767]	Endangered	Breeding likely to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding known to occur within area
Pelamis platurus Yellow-bellied Seasnake [1091]		Species or species habitat may occur within area
Whales and other Cetaceans		[ Resource Information ]
Name Mammals	Status	Type of Presence
Balaenoptera acutorostrata  Minke Whale [33]		Species or species habitat may occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area
Delphinus delphis Common Dophin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Breeding known to occur within area
Orcaella brevirostris Irrawaddy Dolphin [45]		Species or species habitat known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area
Sousa chinensis Indo-Pacific Humpback Dolphin [50]		Breeding known to occur within area
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area
Tursiops truncatus s. str.  Bottlenose Dolphin [68417]		Species or species habitat may occur within area

Threatened

Name

Type of Presence

### **Extra Information**

Name

## 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.

Status

Type of Presence

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 habitat likely to occur within area
Sturnus vulgaris		
Common Starling [389]		Species or species habitat likely to occur within area
Frogs		
Rhinella marina		
Cane Toad [83218]		Species or species habitat likely to occur within area
Mammals		
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

Name	Status	Type of Presence
		within area
Felis catus		
Cat, House Cat, Domestic Cat [19]		Species or species habitat
Cat, Floado Cat, Bolliodio Cat [10]		likely to occur within area
		incly to occur within area
Lepus capensis		
·		Charles or angeles habitat
Brown Hare [127]		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
		micry to coour main area
Rattus norvegicus		
•		Charles or anadica habitat
Brown Rat, Norway Rat [83]		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		
		Species or species habitat
Pig [6]		Species or species habitat
		likely to occur within area
Diamete		
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,		Species or species habitat
Bullock's Heart, Cherimoya, Monkey Apple, Bobwood,		likely to occur within area
		incery to occur within area
Corkwood [6311]		
Cabomba caroliniana		
Cabomba, Fanwort, Carolina Watershield, Fish Grass,		Species or species habitat
Washington Grass, Watershield, Carolina Fanwort,		likely to occur within area
Common Cabomba [5171]		
Cryptostegia grandiflora		
Rubber Vine, Rubbervine, India Rubber Vine, India		Species or species habitat
Rubbervine, Palay Rubbervine, Purple Allamanda		likely to occur within area
[18913]		, <b>,</b>
Dolichandra unguis-cati		
•		Charles or anadica habitat
Cat's Claw Vine, Yellow Trumpet Vine, Cat's Claw		Species or species habitat
Creeper, Funnel Creeper [85119]		likely to occur within area
Eichhornia crassipes		
Water Hyacinth, Water Orchid, Nile Lily [13466]		Species or species habitat
		likely to occur within area
		•
Hymenachne amplexicaulis		
Hymenachne, Olive Hymenachne, Water Stargrass,		Species or species habitat
		•
West Indian Grass, West Indian Marsh Grass [31754]		likely to occur within area
latranha gasaynifalia		
Jatropha gossypifolia		
Cotton-leaved Physic-Nut, Bellyache Bush, Cotton-leaf		Species or species habitat
Physic Nut, Cotton-leaf Jatropha, Black Physic Nut		likely to occur within area
[7507]		
Lantana camara		
Lantana, Common Lantana, Kamara Lantana, Large-		Species or species habitat
leaf Lantana, Pink Flowered Lantana, Red Flowered		likely to occur within area
Lantana, Red-Flowered Sage, White Sage, Wild Sage		mory to boom within area
[10892]		
Opuntia spp.		
Prickly Pears [82753]		Species or species habitat
		likely to occur within area
Parkinsonia aculeata		
Parkinsonia, Jerusalem Thorn, Jelly Bean Tree,		Species or species
. and borna, bordsalom mom, belly bean mee,		Species of species

Name	Status	Type of Presence
Horse Bean [12301]		habitat likely to occur within
Parthenium hysterophorus		area
Parthenium Weed, Bitter Weed, Carrot Grass, False Ragweed [19566]		Species or species habitat likely to occur within area
Prosopis spp.		
Mesquite, Algaroba [68407]		Species or species habitat likely to occur within area
Salvinia molesta		
Salvinia, Giant Salvinia, Aquarium Watermoss, Karib Weed [13665]	a	Species or species habitat likely to occur within area
Vachellia nilotica		
Prickly Acacia, Blackthorn, Prickly Mimosa, Black Piquant, Babul [84351]		Species or species habitat likely to occur within area
Reptiles		
Reptiles Hemidactylus frenatus		
		Species or species habitat likely to occur within area
Hemidactylus frenatus		•
Hemidactylus frenatus Asian House Gecko [1708]		•
Hemidactylus frenatus Asian House Gecko [1708]  Lepidodactylus lugubris Mourning Gecko [1712]		likely to occur within area  Species or species habitat
Hemidactylus frenatus Asian House Gecko [1708] Lepidodactylus lugubris	ng	likely to occur within area  Species or species habitat
Hemidactylus frenatus Asian House Gecko [1708]  Lepidodactylus lugubris Mourning Gecko [1712]  Ramphotyphlops braminus Flowerpot Blind Snake, Brahminy Blind Snake, Cacir Besi [1258]	ng	Species or species habitat likely to occur within area  Species or species habitat likely to occur within area
Hemidactylus frenatus Asian House Gecko [1708]  Lepidodactylus lugubris Mourning Gecko [1712]  Ramphotyphlops braminus Flowerpot Blind Snake, Brahminy Blind Snake, Cacir	ng	Species or species habitat likely to occur within area  Species or species habitat
Hemidactylus frenatus Asian House Gecko [1708]  Lepidodactylus lugubris Mourning Gecko [1712]  Ramphotyphlops braminus Flowerpot Blind Snake, Brahminy Blind Snake, Cacin Besi [1258]  Nationally Important Wetlands	ng	Species or species habitat likely to occur within area  Species or species habitat likely to occur within area  [Resource Information]

## Caveat

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

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

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

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

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

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

- migratory and
- marine

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

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

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

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

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

### Coordinates

-19.24831 146.84754

## 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
- -Parks and Wildlife Commission NT, Northern Territory Government
- -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, Atherton and Canberra
- -University of New England
- -Ocean Biogeographic Information System
- -Australian Government, Department of Defence
- Forestry Corporation, NSW
- -Geoscience Australia
- -CSIRO
- -Other groups and individuals

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

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

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#### Search Crit Species List for a Defined Area

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Specie: All Type: All Status: All Record All Date: All

Latitud: 19.2158 to 19.2746 Longitu 146.8107 to 146.8776 Email: kristina.ihme@aecom.com Date st Thursday 28 Jan 2016 11:56:04 Date e) Thursday 28 Jan 2016 12:00:06

The number of records retrieved = 388

#### Disclaimer

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

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

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

Feedback about Wildlife Online should be emailed to wildlife.online@science.dsitia.qld.gov.au

#### Description of the CODES

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- 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).

The second number located after the / indicates the number of specimen records for the taxon.

Kingdom C	class Family	Scientific Name	Common Name	I	Q	Α	Sighting R Specime	n Records
animals bi	irds Accipitridae	Pandion cristatus	eastern osprey		SL		10	0
animals bi	irds Ardeidae	Ardea alba modesta	eastern great egret		SL		23	0 needs to be added to table 1
animals bi	irds Ardeidae	Ardea ibis	cattle egret		SL		1	0
animals bi	irds Burhinidae	Esacus magnirostris	beach stone-curlew		V		12	0
animals bi	irds Charadriidae	Charadrius leschenaultii	greater sand plover		SL		6	0
animals bi	irds Charadriidae	Pluvialis squatarola	grey plover		SL		4	0
animals bi	irds Charadriidae	Charadrius mongolus	lesser sand plover		SL		12	0
animals bi	irds Charadriidae	Pluvialis fulva	Pacific golden plover		SL		14	0

animals	birds	Fregatidae	Fregata ariel	lesser frigatebird	SL		1	0
animals	birds	Hirundinidae	Hirundo rustica	barn swallow	SL		1	0
animals	birds	Laridae	Anous stolidus	common noddy	SL		1	0
animals	birds	Laridae	Sterna hirundo	common tern	SL		2	0
animals	birds	Laridae	Sterna sumatrana	black-naped tern	SL		2	0
animals	birds	Laridae	Hydroprogne caspia	Caspian tern	SL		23	0
animals	birds	Laridae	Gelochelidon nilotica	gull-billed tern	SL		22	0
animals	birds	Laridae	Chlidonias leucopterus	white-winged black tern	SL		1	0
animals	birds	Laridae	Onychoprion anaethetus	bridled tern	SL		1	0
animals	birds	Laridae	Sternula albifrons	little tern	SL		8	0
animals	birds	Meropidae	Merops ornatus	rainbow bee-eater	SL		13	0
animals	birds	Procellariidae	Ardenna tenuirostris	short-tailed shearwater	SL		4	3
animals	birds	Procellariidae	Ardenna pacifica	wedge-tailed shearwater	SL		1	0
animals	birds	Rhipiduridae	Rhipidura rufifrons	rufous fantail	SL		1	0
animals	birds	Scolopacidae	Calidris tenuirostris	great knot	SL		20	0
animals	birds	Scolopacidae	Numenius madagascariensis	eastern curlew	V	CE	32	0
animals	birds	Scolopacidae	Gallinago hardwickii	Latham's snipe	SL		5	0
animals	birds	Scolopacidae	Calidris ruficollis	red-necked stint	SL		16	0
animals	birds	Scolopacidae	Calidris ferruginea	curlew sandpiper	SL	CE	7	0
animals	birds	Scolopacidae	Tringa stagnatilis	marsh sandpiper	SL		6	0
animals	birds	Scolopacidae	Philomachus pugnax	ruff	SL		2	0
animals	birds	Scolopacidae	Calidris acuminata	sharp-tailed sandpiper	SL		14	0
animals	birds	Scolopacidae	Limicola falcinellus	broad-billed sandpiper	SL		1	0
animals	birds	Scolopacidae	Calidris alba	sanderling	SL		4	0
animals	birds	Scolopacidae	Limosa limosa	black-tailed godwit	SL		7	0
animals	birds	Scolopacidae	Xenus cinereus	terek sandpiper	SL		7	0
animals	birds	Scolopacidae	Tringa brevipes	grey-tailed tattler	SL		13	0
animals	birds	Scolopacidae	Tringa glareola	wood sandpiper	SL		1	0
animals	birds	Scolopacidae	Calidris canutus	red knot	SL		4	0
animals	birds	Scolopacidae	Limosa lapponica	bar-tailed godwit	SL		23	0
animals	birds	Scolopacidae	Numenius minutus	little curlew	SL		1	0
animals	birds	Scolopacidae	Tringa nebularia	common greenshank	SL		16	0
animals	birds	Scolopacidae	Numenius phaeopus	whimbrel	SL		23	0
animals	birds	Scolopacidae	Actitis hypoleucos	common sandpiper	SL		3	0
animals	birds	Scolopacidae	Arenaria interpres	ruddy turnstone	SL		4	0
animals	birds	Sulidae	Sula dactylatra	masked booby	SL		1	0
animals	birds	Sulidae	Sula sula	red-footed booby	SL		1	0
animals	birds	Sulidae	Sula leucogaster	brown booby	SL		8	1
animals	birds	Threskiornithidae	Plegadis falcinellus	glossy ibis	SL		3	0