

Appendix 4-C

Shipping Impact Assessment Summary





Table 4C-1 Shipping Assessment Summary for Threatened Ecological Communities

TEC name	EPBC Act Status	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bulk carriers	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Littoral Rainforest and Coastal Vine Thickets of Eastern Australia	<i>Critically endangered</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Weeping Myall Woodlands	<i>Endangered</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

* Terrestrial - These communities exist in terrestrial habitats above the intertidal zone along the Queensland coast and would not be impacted directly or indirectly by Project-related shipping activities.

Table 4C-2 Shipping Impact Assessment Summary for Flora Species

Species name	EPBC Act Status	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bulk carriers	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
<i>Cycas megacarpa</i>	<i>Endangered</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
<i>Cycas ophiolitica</i>	<i>Endangered</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Curly Pinks <i>Dendrobium superbiens</i>	<i>Vulnerable</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Quassia <i>Quassia bidwillii</i>	<i>Vulnerable</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Minute Orchid, Ribbon-root Orchid <i>Taeniophyllum muelleri</i>	<i>Vulnerable</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
<i>Calophyllum Bicolor</i>	<i>Vulnerable</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Cooktown Orchid (<i>Dendrobium bigibbum</i> [<i>Vappodes bigibba</i>])	<i>Vulnerable</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Chocolate Tea Tree Orchid (<i>Dendrobium johannis</i> [<i>Cepobaculum johannis</i>])	<i>Vulnerable</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Ant Plant (<i>Myrmecodia beccarii</i>)	<i>Vulnerable</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Beach Nightshade (<i>Solanum dunalianum</i>)	<i>Vulnerable</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
<i>Spathoglottis plicata</i>	<i>Vulnerable</i>	Terrestrial*	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

* Terrestrial - These plants exist in terrestrial habitats above the intertidal zone along the Queensland coast and would not be impacted directly or indirectly by Project-related shipping activities.

Table 4C-3 Shipping Impact Assessment Summary for Fauna Species

Species name	EPBC Act Status	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Herald Petrel <i>Pterodroma heraldica</i>	<i>Critically Endangered</i>	Species or species habitat may occur within area. Pelagic. Recorded breeding in small numbers on Raine Island (outer cay of the Northern GBR) and occasionally seen at sea off the east coast of Australia.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Rare	Nil	Nil	Nil	Unlikely
Black-throated Finch (southern) <i>Poephila cincta cincta</i>	<i>Endangered</i>	Species or species habitat likely to occur within area. Terrestrial.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Red Goshawk <i>Erythrotriorchis radiatus</i>	<i>Vulnerable</i>	Species or species habitat likely to occur within area. Open forests/woodland and gallery forests predator.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) <i>Fregetta grallaria grallaria</i>	<i>Vulnerable</i>	Species or species habitat likely to occur within area. Pelagic, with Australian breeding populations located to the south around Lord Howe Island.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Rare	Nil	Nil	Nil	Unlikely
Squatter Pigeon (southern) <i>Geophaps scripta scripta</i>	<i>Vulnerable</i>	Species or species habitat known to occur. Terrestrial woodlands and forests.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Kermadec Petrel (western) <i>Pterodroma neglecta neglecta</i>	<i>Vulnerable</i>	Species or species habitat may occur within area. Pelagic. Breeds on high islands across the southern Pacific Ocean.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Rare	Nil	Nil	Nil	Unlikely
Australian Painted Snipe <i>Rostratula australis</i>	<i>Vulnerable</i>	Species or species habitat likely to occur within area. Coastal wader. Predominantly found in brackish or freshwater terrestrial wetlands.	Nil	Unlikely	Unlikely	Rare	Nil	N/A	Unlikely	Rare	Nil	Nil	Nil	Unlikely
Black-breasted Button-quail <i>Turnix melanogaster</i>	<i>Vulnerable</i>	Species or species habitat likely to occur within area. Terrestrial forests/rainforests.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Species name	EPBC Act Status	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Australasian Bittern <i>Botaurus poiciloptilus</i>	<i>Endangered Marine</i>	Coastal shorebird. Favours wetlands and sometimes occurs in estuaries.	Nil	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Royal Albatross <i>Diomedea epomophora</i>	<i>Endangered Marine</i>	Offshore, pelagic forager.	Nil	Unlikely	Unlikely	N/A	Rare	Rare	Unlikely	Rare	Nil	Nil	Nil	Unlikely
Fairy Tern <i>Sternula nereis</i>	<i>Vulnerable</i>	Coastal. Pelagic forager.	Nil	Unlikely	Unlikely	N/A	Rare	Rare	Unlikely	Rare	Nil	Nil	Nil	Unlikely
Masked Owl <i>Tyto novaehollandiae kimberli</i>	<i>Vulnerable</i>	Open forest, riparian gallery forest, rainforest, mangroves and the periphery of melaleuca swamp forest.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Northern Quoll <i>Dasyurus hallucatus</i>	<i>Endangered</i>	Terrestrial species not impacted by Project shipping.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Water Mouse, False Water Rat <i>Xeromys myoides</i>	<i>Vulnerable</i>	Terrestrial species not impacted by Project shipping.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Rare	N/A	Nil	Nil	Nil	Rare
Large-eared Pied Bat, Large Pied Bat <i>Chalinolobus dwyeri</i>	<i>Vulnerable</i>	Terrestrial species not impacted by Project shipping.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Bare-rumped Sheathtail Bat (<i>Saccolaimus saccolaimus nudicluniatus</i>)	<i>Critically endangered</i>	Terrestrial species not impacted by Project shipping.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Spectacled Flying-fox <i>Pteropus conspicillatus</i>	<i>Vulnerable</i>	Terrestrial species not impacted by Project shipping.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Collared Delma <i>Delma torquata</i>	<i>Vulnerable</i>	Terrestrial species not impacted by Project shipping.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Yakka Skink <i>Egernia rugosa</i>	<i>Vulnerable</i>	Terrestrial species not impacted by Project shipping.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Dunmall's Snake <i>Furina dunmalli</i>	<i>Vulnerable</i>	Terrestrial species not impacted by Project shipping.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Brigalow Scaly-foot <i>Paradelma orientalis</i>	<i>Vulnerable</i>	Terrestrial species not impacted by Project shipping.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Table 4C-4 Shipping Impact Assessment Summary for Estuarine and Marine Species

Species name	EPBC Status/Listing	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oils spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Dwarf Sawfish, Queensland Sawfish <i>Pristis clavata</i>	<i>Vulnerable</i>	Species or species habitat likely to occur within area. Shallow coastal and estuarine habitats.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Rare	Rare	Rare	Nil	Rare	Rare
Green Sawfish, Dindagubba, Narrowsnout Sawfish <i>Pristis zijsron</i>	<i>Vulnerable</i>	Species or species habitat may occur within area. Inshore marine waters, estuaries, river mouths, embankments and along sandy and muddy beaches.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Rare	Rare	Rare	Nil	Rare	Rare
Freshwater Sawfish <i>Pristis microdon</i>	<i>Vulnerable</i>	Main channels of large rivers over soft mud bottoms and shallow waters when travelling upstream or while hunting prey.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Rare	Rare	Rare	Nil	Rare	Rare
Speartooth Shark <i>Glyphis sp. A</i>	<i>Critically endangered</i>	Relatively shallow, turbid, upper freshwater, and brackish, reaches and associated floodplains.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Rare	Rare	Rare	Nil	Rare	Rare
Loggerhead Turtle <i>Caretta caretta</i>	<i>Endangered Migratory</i>	Foraging, feeding or related behaviour known to occur within area. Pelagic and coastal.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Nil	Rare	Unlikely

Species name	EPBC Status/Listing	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oils spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Leatherback Turtle, Leathery Turtle <i>Dermochelys coriacea</i>	<i>Endangered Migratory</i>	Species or species habitat likely to occur within area. Highly pelagic.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Nil	Rare	Unlikely
Olive Ridley Turtle, Pacific Ridley Turtle <i>Lepidochelys olivacea</i>	<i>Endangered Migratory</i>	Species or species habitat likely to occur within area. Pelagic and coastal.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Nil	Rare	Unlikely
Green Turtle <i>Chelonia mydas</i>	<i>Vulnerable Migratory</i>	Breeding known to occur within area. Pelagic and shallow benthic/coastal.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Nil	Rare	Unlikely
Hawksbill Turtle <i>Eretmochelys imbricata</i>	<i>Vulnerable Migratory</i>	Breeding known to occur within area. Pelagic, tidal and sub-tidal coral and rocky reef habitat.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Nil	Rare	Unlikely
Flatback Turtle <i>Natator depressus</i>	<i>Vulnerable Migratory</i>	Breeding known to occur within area. Pelagic and soft bottom habitats.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Nil	Rare	Unlikely
Freshwater Crocodile, Johnston's Crocodile, Johnston's River Crocodile <i>Crocodylus johnstoni</i>	<i>Marine</i>	Species or species habitat may occur within area. Freshwater and wetland species.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Rare	Rare	Rare	Nil	Unlikely	Unlikely

Table 4C-5 Shipping Impact Assessment Summary for Avian Migratory Species

Species name	EPBC Act Status/Listing	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Southern Giant-Petrel <i>Macronectes giganteus</i>	<i>Endangered Migratory</i>	Species or species habitat may occur within area. Pelagic. Predominantly found in subantarctic to Antarctic waters in summer, but disperses north during winter with birds more common off south eastern Australia.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Nil	Nil	Nil	Unlikely
Painted Snipe <i>Rostratula benghalensis s. lat.</i>	<i>Vulnerable Migratory Marine</i>	Species or species habitat likely to occur within area. Coastal shorebird, generally freshwater. Does not generally form large flocks.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Common Sandpiper <i>Actitis hypoleucos</i>	<i>Migratory Marine</i>	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Fork-tailed Swift <i>Apus pacificus</i>	Migratory Marine	Species or species habitat may occur within area. Coastal aerial forager.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Ruddy Turnstone <i>Arenaria interpres</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Sharp-tailed Sandpiper <i>Calidris acuminata</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare

Species name	EPBC Act Status/Listing	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Red Knot, Knot <i>Calidris canutus</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Curlew Sandpiper <i>Calidris ferruginea</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Red-necked Stint <i>Calidris ruficollis</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Great Knot <i>Calidris tenuirostris</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Greater Sand Plover, Large Sand Plover <i>Charadrius leschenaultii</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Lesser Sand Plover, Mongolian Plover <i>Charadrius mongolus</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Lesser Frigatebird, Least Frigatebird <i>Fregata ariel</i>	Migratory Marine	Foraging, feeding or related behaviour likely to occur within area. Pelagic.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Rare	Nil	Nil	Nil	Rare
Latham's Snipe, Japanese Snipe <i>Gallinago hardwickii</i>	Migratory Marine	Species or species habitat may occur within area. Wading species usually in freshwater habitat.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
White-bellied Sea-Eagle <i>Haliaeetus leucogaster</i>	Migratory Marine	Species or species habitat likely to occur within area. Coastal predator.	Nil	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Rare	Nil	Nil	Nil	Rare
Grey-tailed Tattler <i>Heteroscelus brevipes</i>	Migratory Marine	Roosting known to occur within area.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare

Species name	EPBC Act Status/Listing	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
White-throated Needletail <i>Hirundapus caudacutus</i>	Migratory Marine	Species or species habitat may occur within area. Coastal aerial forager.	Nil	Rare	Rare	Rare	Nil	Nil	Rare	Rare	Nil	Nil	Nil	Rare
Barn Swallow <i>Hirundo rustica</i>	Migratory Marine	Species or species habitat may occur within area. Coastal aerial forager in freshwater habitats.	Rare	Rare	Rare	Rare	Nil	Nil	Rare	Rare	Nil	Nil	Nil	Rare
Bar-tailed Godwit <i>Limosa lapponica</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Rainbow Bee-eater <i>Merops ornatus</i>	Migratory Marine	Species or species habitat may occur within area. Coastal insectivore in mangroves.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Black-faced Monarch <i>Monarcha melanopsis</i>	Migratory Marine	Breeding may occur within area. Coastal insectivore.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Spectacled Monarch <i>Monarcha trivirgatus</i>	Migratory Marine	Breeding may occur within area. Coastal insectivore.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Satin Flycatcher <i>Myiagra cyanoleuca</i>	Migratory Marine	Species or species habitat likely to occur within area. Coastal insectivore.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Australian Cotton Pygmy-goose <i>Nettapus coromandelianus albigennis</i>	Migratory Marine	Species or species habitat may occur within area. Generally a freshwater species.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Eastern Curlew <i>Numenius madagascariensis</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare

Species name	EPBC Act Status/Listing	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Little Curlew, Little Whimbrel <i>Numenius minutus</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Whimbrel <i>Numenius phaeopus</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Pacific Golden Plover <i>Pluvialis fulva</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Grey Plover <i>Pluvialis squatarola</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Rufous Fantail <i>Rhipidura rufifrons</i>	Migratory Marine	Breeding may occur within area. Coastal insectivore.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Little Tern <i>Sterna albifrons</i>	Migratory Marine	Species or species habitat may occur within area.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Marsh Sandpiper, Little Greenshank <i>Tringa stagnatilis</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Terek Sandpiper <i>Xenus cinereus</i>	Migratory Marine	Roosting known to occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Great Egret, White Egret <i>Ardea alba</i>	Migratory Marine	Species or species habitat may occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Cattle Egret <i>Ardea ibis</i>	Migratory Marine	Species or species habitat may occur within area. Coastal shorebird.	Rare	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare

Species name	EPBC Act Status/Listing	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Streaked Shearwater <i>Puffinus leucomelas</i>	Migratory	Species or species habitat may occur within area. Pelagic.	Nil	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Unlikely
Grey-headed Albatross <i>Thalassarche chrysostoma</i>	<i>Endangered Marine Migratory</i>	Offshore, pelagic forager.	Nil	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Wandering Albatross <i>Diomedea exulans</i>	<i>Vulnerable Marine Migratory</i>	Offshore, pelagic forager.	Nil	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Northern Giant-Petrel <i>Macronectes halli</i>	<i>Vulnerable Marine Migratory</i>	Offshore, pelagic forager.	Nil	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare
Sooty Albatross <i>Phoebetria fusca</i>	<i>Vulnerable Marine Migratory</i>	Offshore, pelagic forager.	Nil	Unlikely	Unlikely	Rare	Nil	Nil	Unlikely	Rare	Nil	Nil	Nil	Rare

Table 4C-6 Shipping Impact Assessment Summary for Non-Avian Migratory Species

Species name	EPBC Status/Listing	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Whale Shark <i>Rhincodon typus</i>	<i>Vulnerable Migratory</i>	Species or species habitat may occur within area. Pelagic waters.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Rare
Shortfin Mako, Mako Shark <i>Isurus oxyrinchus</i>	<i>Migratory</i>	Species or species habitat likely to occur within area. Pelagic waters.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Rare	Rare	Rare	Rare	Rare
Longfin Mako <i>Isurus paucus</i>	<i>Migratory</i>	Species or species habitat likely to occur within area. Pelagic waters.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Rare	Rare	Rare	Rare	Rare
Porbeagle, Mackerel Shark <i>Lamna nasus</i>	<i>Migratory</i>	Species or species habitat may occur within area. Pelagic waters.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Rare	Rare	Rare	Rare	Rare
Blue Whale <i>Balaenoptera musculus</i>	<i>Endangered Migratory</i>	Species or species habitat may occur within area.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Rare	Unlikely	Rare
Humpback Whale <i>Megaptera novaeangliae</i>	<i>Vulnerable Migratory</i>	Breeding known to occur within area.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Rare
Bryde's Whale <i>Balaenoptera edeni</i>	<i>Migratory</i>	Species or species habitat may occur within area.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Rare	Unlikely	Rare
Dugong <i>Dugong dugon</i>	<i>Migratory</i>	Species or species habitat known to occur within area.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Rare	Unlikely	Rare	Rare	Rare	Rare
Irrawaddy Dolphin <i>Orcaella brevirostris</i>	<i>Migratory</i>	Species or species habitat may occur within area.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Rare	Unlikely	Rare

Species name	EPBC Status/Listing	Presence in Search Area	Potential Impact Source											
			Collision and Grounding	Oil Spills from bauxite shipping	Oil spills from barge	Bauxite Spills	Oily Mixture Discharge	Sewage Discharge	Garbage Discharge	Vessel Strike	Introduced Species	Air Emissions	Vessel Noise	Ship Lighting
			Likelihood of Impact											
Killer Whale, Orca <i>Orcinus orca</i>	<i>Migratory</i>	Species or species habitat may occur within area.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Rare	Unlikely	Rare
Indo-Pacific Humpback Dolphin <i>Sousa chinensis</i>	<i>Migratory</i>	Species or species habitat may occur within area.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Rare	Unlikely	Rare
Australian Snubfin Dolphin <i>Orcaella heinsohni</i>	<i>Migratory</i>	Species or species habitat may occur within area.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Rare	Unlikely	Rare
Salt-water Crocodile, Estuarine Crocodile <i>Crocodylus porosus</i>	<i>Migratory Marine</i>	Species or species habitat likely to occur within area.	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely	Unlikely	Rare	Rare	Rare	Unlikely

