Myrmecodia beccarii Impact Management Plan

Lot 485 Ground Preparation Works

Customer	DEPW
Project	003257
Deliverable	001
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Project Manager	Jeremy Visser

Amendment Record

The Amendment Record below records the history and issue status of this document.

Version	Version Date	Distribution	Record
01	17 December 2024	DEPW Ports North	Final Report

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1 Introduction

1.1 Project Summary and Report Purpose

Far North Queensland Ports Corporation ('Ports North') is intending to undertake basin expansion works at the Commercial Fishing Base 2 (CFB2) basin, including landside excavation and installation of a new jetty.

The works phase of CFB2 involves landside works particularly the installation of pile walls. Native vegetation clearing will include host trees of the protected epiphytic species *Myrmecodia beccarii* (ant plants). To minimise the impact to ant plants, Ports North is proposing the translocation of these species, which would occur as part of clearing works.

This document has been prepared for use by a translocation contractor to achieve the following:

- To ensure compliance with regulatory requirements
- To ensure all contractors and subcontractors are aware of their roles and responsibilities in relation to this plan
- Maintain the abundance and distribution of the ant plant population within the region
- Implement appropriate avoidance, management and mitigation measures.

A separate Relocation Plan has been prepared by BMT (M.003257.009.00) which should be read in conjunction with this document and details the methodology for ant plant salvage and relocation to new host trees.

1.2 Approvals Context

The ant plant listed as Vulnerable under the Queensland *Nature Conservation Act 1992* (NC Act), as such a Protected Plant Clearing Permit issued by the Department of Environment, Science, Tourism and Innovation (DETSI) under the provisions of the NC Act. Although the Project is located outside a 'high risk area' on the Protected Plants Flora Trigger Map (see Annex A), Protected Plants (i.e. listed Critically Endangered, Endangered, Vulnerable or Near Threatened (EVNT) species under the NC Act) have been recorded within the Project footprint. As such, this Impact Management Plan (IMP) has been developed to meet the requirements of Section 86 of the *Nature Conservation (Plants) Regulation 2020.*

1.3 Survey Methodology

Vegetation clearing is required to support future development as part of CFB2 proposed development. Therefore, a targeted ecological survey was undertaken on the project by Aurecon (2024), flora significant species and fauna habitat values. The survey identified approximately 131 of ant plants within the CFB2 footprint which occurred on established host trees related to *Melaleuca* and *Casuarina* species.

1.4 Site Description

CFB2 proposed development is located in a modified environment in the Port of Cairns and is adjacent to Tingira St. The proposed development is associated with the construction of a jetty and landside works installation of pile walls will impact on marine plants.

An ecological survey undertaken by Aurecon (2024) identified. vegetation cover of approximately 1,600m^2 and acts as a host plant for 131 individuals of ant plants that were identified within the area, as shown in Figure 1.1. Very sparse pond apple, a weed of national significance located in a very sparce area across CFB2 proposed works. A biosecurity management plan will need to be developed to propose mitigation strategies to address this invasive species.

Part of the site will be cleared of vegetation and filled in preparation for future development to support the CFB2 works. This will include the upgrade and relocation of the existing commercial fishing base facilities. Therefore, translocation of ant plants will be required to ensure the future survival of these species.

2 Translocation Approach

Translocation of ant plants is the approach that will be adopted for vegetation clearing efforts. This approach is to maximise survival of the threatened plant species that will be affected by the Project and maintain current population levels. The sites being considered for relocation are [redacted]

Translocation will be undertaken by qualified and experienced ecologist or rehabilitation specialist within an Elevated Work Platform (EWP) bucket or by tree climbers using ropes in accordance with the methodology outlined in the Ant Plant Relocation Plan (BMT, 2024). A summary of the relocation approach is provided below.

All 131 ant plant individuals will be relocated to one of the new receival sites, ideally to a *Melaleuca and Casuarina* sp. host plant to maximise the relocation success. Once new recipient host plants have been nominated, removal of the ant plants can commence. Sections of the host tree supporting the ant plants should be cut above or below any plant roots and the ant plant placed on the ground temporarily. Any clusters of ant plants identified for relocation should not be separated and host branches cut so that the entire cluster is removed in one action.

Ant plants are to be stored in specialised containers with adequate soil and transported to the nominated receival site via trucks. It is important to note delays in the relocation process (up to 20 minutes) may result in abandonment[1]. Ant plants are to be removed from storage containers and taken to nominated recipient host plant. Qualified personnel will establish position in the new nominated host tree utilising the EWP or ropes and the ant plant will be placed into the upper canopy at the same angle of the previous host branch. Ant plants will be raised and tied into place using pre-cut natural fibres (e.g. sisal). In instances where smaller ant plants with less extensive root systems have physically detached from their hosts, they will be reattached using grafting tape by wrapping around the tuber, avoiding leaves and preferable within a fork to allow for more secure re-attachment.

[1] As the receival site is within 550m of CFB2 works, delivery in <20 minutes is feasible.

3 Environmental Impacts and Management Framework

3.1 Planning Requirements

Prior to the commencement of any vegetation clearing or relocation works, the appropriate permits should be sought by the CUF Project Manager to ensure regulatory and legislative compliance. A summary of approvals required for this work is provided in Table 3.1.

Table 3.1 Summary of Approvals

Approval Type	Statutory Provisions	Description
Marine Plant Permit	*Fisheries Act 1994*	Approval required for the removal/ disturbance of marine plants
Protected Plant Clearing Permit	*Nature Conservation Act 1992* Section 86 - *Nature Conservation (Plants) Regulation 2020*	Permit required if proposed activity involves legitimate taking or destruction of protected plants (under the NC Act) in the wild.

3.2 Roles and Responsibilities

All relevant staff and contractors are responsible for ensuring compliance with this IMP and associated legislative requirements. Specific roles and responsibilities under this IMP are set out in Table 3.2.

Table 3.2 Roles and Responsibilities under IMP

Role	Responsibility	Reports to
CUF Project Manager	• Overall responsibility for environmental management and compliance; • Obtaining and/or amending all environmental approvals; • Notifying relevant government agencies of commencement and completion of works; and • Reporting of environmental incidents to relevant government agencies.	-
Site Manager	• Liaison with contract staff regarding resourcing and schedule • Review and updates to IMP • Management of contractor staff, including contractor activities against IMP and contract specifications	CUF Project Manager
Contractor Staff	• Responsibility for day-to-day implementation of this IMP as directed by the Site Manager • Implementation of actions in IMP • Notifying the Site Manager of commencement, progress and completion of • Monitoring of impact of activities • Implement corrective actions as required • Reporting of any environmental incidents or deviations from the IMP to the Site Manager • Ensure appropriate records of activity are kept and maintained	Site Manager

3.3 Training

All staff, contractors and subcontractors involved in the Project and subsequent relocation works will undergo site induction training as per the overarching Construction Environmental Management Plan (CEMP) for CFB2 preparation works. All contractors will be appropriately qualified and hold relevant licenses to undertake this work and operate plant and machinery. Where relevant, the CUF Project Manager may implement specific set training requirements for the contractor and their staff.

3.4 Loss of Habitat Values

Vegetation is located mostly on the [redacted] will be cleared to support future development for the CFB2 proposed works. This includes *Melaleuca* sp. habitat which host ant plants. The main direct impact to ant plants is associated with habitat removal. however, translocation of ant plants is intended to minimise the impact to surviving ant plants as much as possible

Plant or equipment utilised during relocation works may pose the risk of chemical or fuel spills, which may cause impacts to vegetation and habitat values.

Specifically, the works has the potential to cause the following environmental impacts:

- Removal of ant plants and host trees
- Removal in the quality and extent of adjacent suitable habitats (i.e. mangroves in at receival site)
- Abandonment of ants from ant plant
- Indirect impacts to species other than ants that utilise ant plants (i.e. *Hypochrysops apollo apollo* (apollo jewel butterfly)).

The main direct impact to ant plants is associated with habitat removal. however, translocation of ant plants is intended to maximise the survival of this species and maintain current population status.

3.5 Monitoring, Reporting, Records and Review

3.5.1 Prior to Works

Prior to the clearing of vegetation on site, the Site Manager will provide the CUF Project Manager with document outlining the following:

- Total disturbance area (i.e. vegetation to be cleared) required for the for the Project
- The location and number of ant plants within the Project footprint identified by an ecologist to be relocated

3.5.2 During and Post-Clearing Works

During the relocation works, the contractor will keep records on site of the following for each ant plant:

- Number of individual ant plants placed on each new host tree
- Name of recipient species (new host plant)
- GPS coordinates of recipient plant

Any instance of non-compliance with this IMP should be reported to the Site Manager as soon as possible and appropriate corrective action taken. Where applicable, the IMP should be reviewed and updated to prevent future occurrence of non-conformances.

Post vegetation clearing, records detailing number of ant plants translocation and location of recipient species maintained during relocation works are to be provided to the CUF CFB2 Project Manager.

4 References

Australian National Herbarium, (2015). Myrmecodia beccarii. Accessed from Myrmecodia beccarii - Growing Native Plants (anbg.gov.au)

Department of Climate Change, Energy, the Environment and Water (DCCEEW), (2021). Ant Plant. Accessed from https://www.dcceew.gov.au/environment/biodiversity/threatened/species/30-plants-by-2020/ant-plant

Annex A Flora Survey Trigger Map

Protected Plants Flora Survey Trigger Map

High risk area
Other land parcel boundaries
Freeways / motorways / highways
Secondary roads / streets
Selected Lot and Plan

LOCALITY DIAGRAM

N

0 100 200 300 400 500 m

This product is displayed in:
GDA2020

This map shows areas where particular provisions of the Nature Conservation Act 1992 apply to the clearing of protected plants.

Land parcel boundaries are provided as locational aid only.

This map is produced at a scale relevant to the size of the area selected and should be printed as A4 size in portrait orientation.

For further information or assistance with interpretation of this product, please contact the Department of Environment, Science and Innovation at palm@des.qld.gov.au

Disclaimer: While every care is taken to ensure the accuracy of the data used to generate this product, the Queensland Government makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaim all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damages) and costs which might be incurred as a consequence of reliance on the data, or as a result of the data being inaccurate or incomplete in any way and for any reason.

Protected plants flora survey trigger map

The protected plants flora survey trigger map identifies 'high risk areas' where endangered, vulnerable or near threatened plants are known to exist or are likely to exist. Under the *Nature Conservation Act 1992* (the Act) it is an offence to clear protected plants that are 'in the wild' unless you are authorised or the clearing is exempt, for more information see section 89 of the Act.

Please see the Department of Environment and Science webpage on the clearing of protected plants for information on what exemptions may apply in your circumstances, whether you may need to undertake a flora survey, and whether you may need a protected plants clearing permit.

Updates to the data informing the flora survey trigger map
The flora survey trigger map will be reviewed, and updated if necessary, at least every 12 months to ensure the map reflects the most up-to-date and accurate data available.

Species information
Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the Queensland Spatial Catalogue, the Department of Environment and Science does not provide species information on request. Regardless of whether species information is available for a particular high risk area, clearing plants in a high risk area may require a flora survey and/or clearing permit. Please see the Department of Environment and Science webpage on the clearing of protected plants for more information.

Annex B CFB2 Ecology Technical Memo

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ABN: 54 010 830 421

Technical note

Project	Cairns Marine Precinct (CMP) Common User Facility (CUF)		
From:	BMT		
Date:	6th November 2024	To:	Ports North
Doc Ref:	R.003425.Ecology_Interim_Memo		
Subject:	Technical Memo- Interim Results Baseline Coastal Ecology Survey (September 2024)		

1.1 Background

This Technical Memo provides a summary of interim results for the baseline coastal ecology survey undertaken in September 2024 for the Cairns Marine Precinct (CMP) Common User Facility (CUF) project. A detailed report on baseline survey results will be provided on completion of the second (wet season) coastal ecology survey which will be undertaken in December 2024 in collaboration with the marine ecology survey.

1.2 Method

A detailed 'dry season' baseline coastal ecology survey was completed on 17 and 18 September 2024. The extent of survey area is shown in Figure 1.1. The CUF (A and B), CFB2 and SBR were traversed on foot. A boat-based survey was also conducted within the marine waters of CFB2, within the main navigation channel of Smiths Creek (AI-B) and along the northern foreshore of Admiralty Island (AI-A), at low tide on 17 September.

The following tasks were completed during the two day/one night survey:

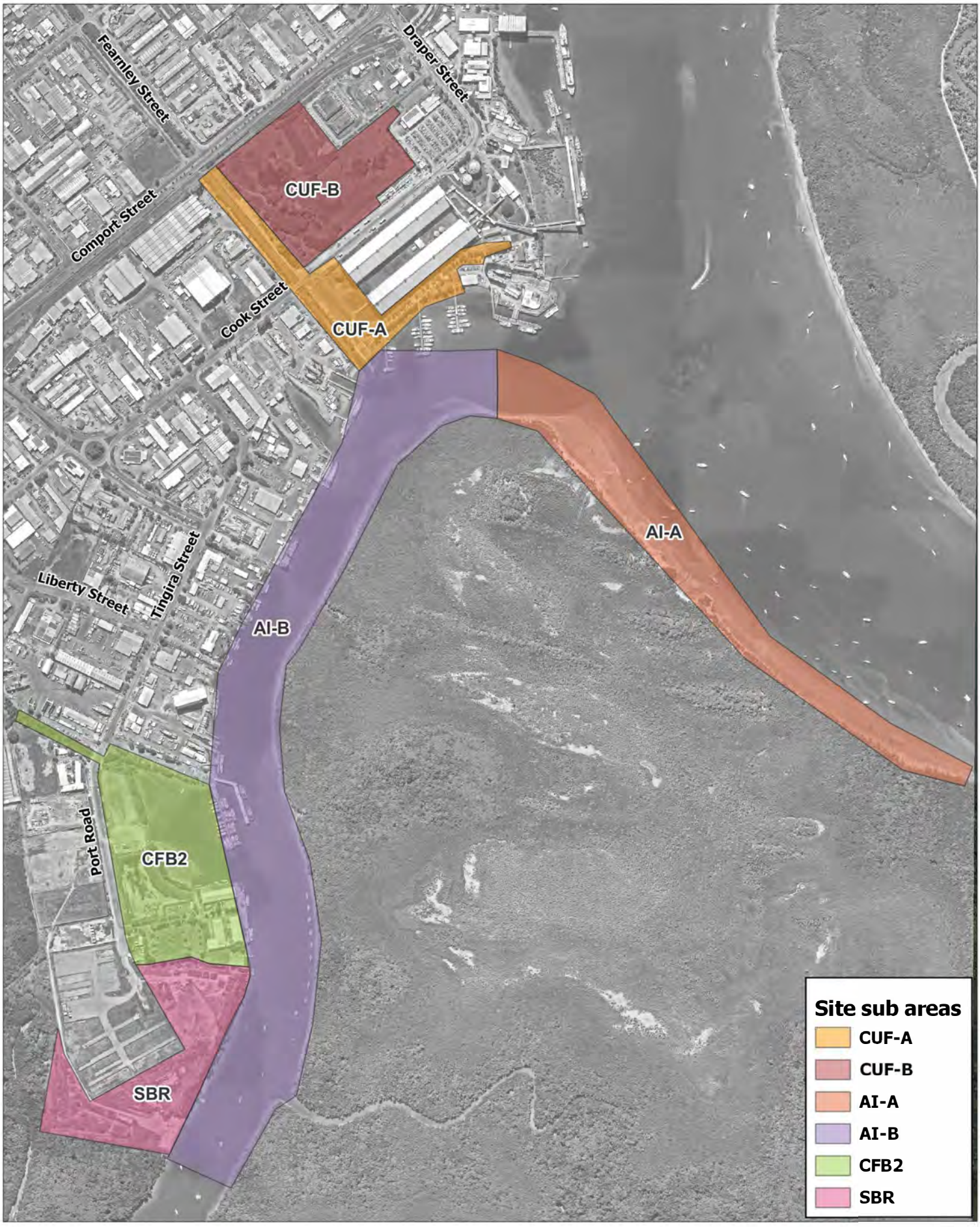
- Vegetation/Flora:
  - marine plant composition, condition and boundaries within the study areas were described and delineated for the purposes of the *Fisheries Act 1994.*
  - locations and abundance of the protected ant plant (*Myrmecodia beccarii*) within and directly adjacent to the study areas, were recorded for the purposes of the *Nature Conservation Act 1992* (NCA) and *Environment Protection and Biodiversity Conservation Act 1999* (EPBC).
  - locations of high priority invasive weeds within and directly adjacent to the study areas were recorded for the purposes of the *Biosecurity Act 2014*.
- Wildlife:

- habitat values for fauna species of conservation value within the study areas were assessed for the purposes of the NCA and EPBC, focusing on waders and shorebirds, the water mouse (*Xeromys myoides*) and breeding habitat for saltwater crocodiles (*Crocodylus porosus*).

- the shoreline of Admiralty Island and mainland Portsmith were observed through 10 x 42 binoculars and a 600 mm zoom lens. Birds were identified, counted and recorded.

- during the boat-based survey the water was also observed in search for any marine fauna.

- a wildlife spotlighting survey was also completed in CUF (A and B), CFB2 and SBR on the evening of the 17 September to detect nocturnal species.



Title:

Dry Season Baseline Coastal Ecology Survey Areas (September 2024)

Figure: 1.1

Rev: A

BMT endeavours to ensure that the information provided in this map is correct at the time of publication. BMT does not warrant, guarantee or make representations regarding the currency and accuracy of information contained in this map.

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BMT
www.bmt.org

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1.3 Interim Results

1.3.1 Vegetation/Flora:

Figure 1.2 provides photos of representative habitats taken during the dry season baseline survey.

The study areas are situated on the western bank of Smiths Creek, a tributary of the Trinity Inlet estuary. The foreshore of Smiths Creek and its tributaries are highly modified but support a narrow fringe (5 to 15m in width) of mangroves dominated by: *Rhizophora* spp., *Avicennia marina* subsp. e*ucalyptifolia, Bruguiera gymnorhiza, Bruguiera parviflora, Ceriops australis, Excoecaria agallocha, Lumnitzera* spp., *Xylocarpus* sp.*,* and *Sonneratia alba.* Isolated patches of saltmarsh also occur at the upper tidal range dominated by *Cynodon dactylon, Sporobolus virginicus* and *Sesuvium portulacastrum*. A discontinuous, narrow fringe of adjacent marine plants occurred landward of the mangroves and typically comprised *Hibiscus tiliaceus, Casuarina* spp.*, Melaleuca leucadendra* and *Melaleuca quinquenervia.* Other species that occurred in the narrow foreshore vegetation at, and directly adjacent to, highest astronomical tide included, *Calophyllum inophyllum, Cupaniopsis anacardioides, Ficus* spp.*, Jagera pseudorhus, Schefflera actinophylla,* Acacia *spp., Terminalia catappa, Scaevola taccada* and *Vitex trifolia.*

Apart from marine plants, no other vegetation communities of conservation significance were recorded in, or directly adjacent to, the study areas.

Lands directly adjacent to the fringing mangroves and upper foreshore are highly modified and include a mix of industrial and commercial uses, landscaping, and rank grasslands dominated by exotic species. Very sparse *Sesuvium portulacastrum*, listed as a marine pant, was recorded in rank grassland at CFB2 well removed from tidal influence and fisheries habitat.

The threatened ant plant (*Myrmecodia beccarii*) is widespread in the study areas and surrounds, typically occurring on *Melaleuca* host plants. The species is also widespread within the mangroves aligning Smiths Creek, which lies outside the study areas. [redacted] No other flora species of conservation significance were recorded in, or directly adjacent to, the study areas.

All weed species recorded during the survey are widespread in the Cairns region, such as, *Alternanthera brasiliana, Eleusine indica, Megathyrsus maximus, Richardia brasiliensis, Sphagneticola trilobata, Synedrella nodiflora, Urochloa mutica, Cocos nucifera, Leucaena leucocephala* and *Stachytarpheta cayennensis.*

Very sparse *Annona glabra* (pond apple) was recorded along CFB2 and upstream on a tributary of Smiths Creek outside the study area. This species is listed as a Restricted Matter under the Biosecurity Act 2014 and is a Weed of National Significance (WoNS). Management recommendations will be provided in the draft report to manage high risk biosecurity matters during construction and operation.

Complete flora species lists and detailed vegetation mapping delineating marine plants, threatened species and high-risk biosecurity matters will be provided in the draft report.

Table 1.1 [redacted]

Study Area	Waypoint	Host Tree	Number of Ant Plants
CUF-A	320	melaleuca	3
CUF-A	321	melaleuca	3
CUF-A	322	melaleuca	2
CUF-A	323	melaleuca	2
CUF-A	325	melaleuca	6
CUF-A	326	melaleuca	5
CUF-A	337	melaleuca	13
CUF-A	338	melaleuca	2
CUF-A	339	melaleuca	8
CUF-A	345	melaleuca	7
CUF-A	346	melaleuca	1
CUF-A	347	melaleuca	13
CUF-A	348	melaleuca	14
CUF-A	349	melaleuca	14
CUF-A	350	melaleuca	4
CUF-A	351	melaleuca	13
CUF-A	352	melaleuca	15
CUF-A	353	melaleuca	3
CUF-A	355	melaleuca	14
CUF-A	356	melaleuca	11
CUF-A	357	melaleuca	16

CUF-A- fringing mangroves along Fearnley Street Drain

CUF-A	358	melaleuca	8
CUF-A	360	melaleuca	3
CUF-A	361	melaleuca	9
Adjacent CUF-A	408	melaleuca	1
Adjacent CUF-A	409	melaleuca	1
Adjacent CUF-A	410	melaleuca	1
Adjacent CUF-A	411	melaleuca	2
Adjacent CUF-A	412	melaleuca	4
Adjacent CUF-A	413	melaleuca	2
Adjacent CUF-A	414	melaleuca	3
Adjacent CUF-A	415	melaleuca	3
Adjacent CUF-A	416	melaleuca	3
Adjacent CUF-A	417	melaleuca	3
Adjacent CUF-A	418	melaleuca	3
Adjacent CUF-A	419	melaleuca	3
Adjacent CUF-A	420	melaleuca	3
Adjacent CUF-A	421	melaleuca	3
Adjacent CUF-A	422	melaleuca	3
CFB2	366	melaleuca	12
CFB2	367	melaleuca	3
CFB2	368	melaleuca	5
CFB2	369	melaleuca	13
CFB2	371	melaleuca	6

CFB2	372	melaleuca	6
CFB2	373	melaleuca	3
CFB2	376	melaleuca	14
CFB2	378	melaleuca	13
CFB2	379	melaleuca	9
CFB2	380	melaleuca	8
CFB2	381	melaleuca	6
CFB2	382	casuarina	5
CFB2	383	casuarina	2
CFB2	384	casuarina	10
CFB2	400	melaleuca	5
CFB2	401	melaleuca	3
CFB2	402	melaleuca	6
CFB2	403	melaleuca	11
CFB2	404	melaleuca	15
CFB2	405	melaleuca	30
CFB2	423	melaleuca	2
CFB2	424	melaleuca	5
CFB2	425	melaleuca	3
CFB2	426	melaleuca	3
CFB2	427	melaleuca	5
CFB2	428	planted	5
CFB2	429	planted	3
CFB2	431	melaleuca	7
CFB2	434	melaleuca	1
CFB2	435	melaleuca	1
CFB2	436	melaleuca	9
CFB2	439	melaleuca	1
CFB2	448	melaleuca	3
SBR	451	mangroves	1
SBR	452	mangroves	3

CUF-A – fringing mangroves along Smiths Creek

CUF-A- fringing mangroves along Fearnley Street Drain

CFB2 – rank grasslands

CFB2 - rank grasslands adjacent mangrove fringe

CFB2 – Mangroves along Tingira Street Drain

CFB2 - Mangroves and saltmarsh along Tingira Street Drain

SBR – Rank grasslands adjacent to mangrove fringe aligning Smiths Creek

SBR- Mangrove fringe with Ant Plants adjacent to boat ramp, Smiths Creek

Figure 1.1 Representative Habitats - Dry Season Baseline Coastal Ecology Survey Areas (September 2024)

1.3.2 Wildlife Observations

A total of 120 waders and shorebirds were observed during the dry season survey, comprising 14 species. The greatest abundance of waders and shorebirds was recorded in SBR, with 79 individuals observed. Admiralty Island had an abundance of 24 and CUF an abundance of 17 individuals. The greatest species richness was observed on Admiralty Island, with nine species. A total of eight species were observed in SBR, with five species recorded in CUF.

Three conservation-significant species were observed during the survey, including:

- beach stone-curlew (*Esacus magnirostris*) – listed as vulnerable (V) under NCA

- eastern curlew (*Numenius madagascariensis*) – listed as critically endangered (CE) under EPBC and endangered (E) under NCA
- whimbrel (*Numenius phaeopus*) – listed as special least concern (SLC) under NCA.

The single beach stone-curlew was observed in CFB2 adjacent to the 'duck pond'. The eastern curlew, whimbrel and beach stone-curlew were all observed outside of the impact footprint on the northeast edge of Admiralty Island.

Most of the Study area does not constitute significant habitat for listed wader and shorebird species, though they may fly over the area and briefly land. There is a small area of sandflat exposed at low tide within CFB2 that may be suitable foraging habitat for waders and shorebirds. During the dry season survey a single great egret (*Ardea modesta*) was observed foraging in this area. It is believed that the disturbed nature of the site, caused by boat traffic, human presence and noise, deter waders and shorebirds from regularly utilising this area.

The study areas are not considered to support suitable breeding and nesting habitat for water mouse. Although mangroves in the study areas could potentially provide some suitable foraging habitat, these communities were narrow (approx. 14 to 25 m wide) in extent and provided limited habitat and cover. There was also a lack of habitat connectivity as adjacent land was typically cleared and degraded, primarily comprised of mowed lawn and/or invasive weeds, which provide very limited habitat values for the species.

No saltwater crocodiles were observed during the survey; however, they are known to occur in the region. The study areas are not likely to be utilised by saltwater crocodiles for nesting given the limited extent of mangrove communities and high levels of disturbance.

An additional 39 birds (ten species) and five mammals (approx. three species) were recorded, none of which were confirmed as conservation significant species.

A full list of dry/wet season wildlife observations with counts and locations will be provided in the draft report.

Table 1.2 Dry season wildlife observation – draft interim results (September 2024)

	Scientific name	Common name	Count	Date
Waders and shorebirds				
CUF-A	*Burhinus grallarius*	bush stone-curlew	3	17/09/2024
	Chroicocephalus novaehollandiae	sea gull	18	17/09/2024
	Gelochelidon nilotica	gull-billed tern	8	17/09/2024
CUF-B	*Ardea intermedia*	intermediate egret	2	17/09/2024
	Ardea intermedia	intermediate egret	2	18/09/2024
	Vanellus miles	masked lapwing	2	18/09/2024
CFB2	*Anseranas semipalmata*	magpie goose	25	18/09/2024
	Ardea modesta	great egret	1	17/09/2024
	Butorides striatus	straited heron	1	17/09/2024
	Burhinus grallarius	bush stone-curlew	15	17/09/2024
	Elseyornis melanops	black-fronted dotterel	2	17/09/2024

	Scientific name	Common name	Count	Date
	*Esacus magnirostris**	beach stone-curlew	1	17/09/2024
	Vanellus miles	masked lapwing	5	17/09/2024
SBR	*Anseranas semipalmata*	magpie goose	5	17/09/2024
	Ardea intermedia	intermediate egret	1	18/09/2024
	Vanellus miles	masked lapwing	3	17/09/2024
	Vanellus miles	masked lapwing	2	18/09/2024
AI-A	*Chroicocephalus novaehollandiae*	sea gull	12	17/09/2024
	*Esacus magnirostris**	beach stone-curlew	2	17/09/2024
	*Numenius madagascariensis***	eastern curlew	1	17/09/2024
	*Numenius phaeopus****	whimbrel	1	17/09/2024
	Pelecanus conspicillatus	Australian pelican	2	17/09/2024
AI-B	*Ardea modesta*	great egret	2	17/09/2024
	Ardea sumatrana	great billed heron	1	17/09/2024
	Butorides striatus	straited heron	2	17/09/2024
	Pelecanus conspicillatus	Australian pelican	1	17/09/2024
Other birds				
CUF-A	*Ducula bicolor*	pied imperial pigeon	6	17/09/2024
	Lichenostomus flavus	yellow honeyeater	8	17/09/2024
	Meliphaga lewinii	Lewin's honeyeater	2	17/09/2024
	Trichoglossus haematodus	rainbow lorikeet	7	17/09/2024
CFB2	*Ducula bicolor*	pied imperial pigeon	3	17/09/2024
	Geopelia striata	peaceful dove	2	17/09/2024
	Lonchura punctulata	nutmeg mannikin	3	18/09/2024
	Nectarinia jugularis	olive backed sunbird	1	18/09/2024
	Geopelia striata	peaceful dove	2	17/09/2024
SBR	*Dicrurus bracteatus*	spangled drongo	1	18/09/2024
	Ducula bicolor	pied imperial pigeon	2	18/09/2024
	Grallina cyanoleuca	magpie lark	2	18/09/2024
	Nectarinia jugularis	olive backed sunbird	1	18/09/2024
AI-B	*Todiramphus sanctus*	sacred kingfisher	1	17/09/2024
Mammals				
CUF-A	*Pteropus* sp.****	flying fox	1	17/09/2024
	Rattus sp.*****	rat	1	17/09/2024
CFB-2	*Notamacropus agilis*	agile wallaby	2	18/09/2024
	Pteropus sp.****	flying fox	1	17/09/2024
Fish				
CFB2	*Toxotes* cf *chatareus*	archer fish	8	17/09/2024
	Periophthalmodon cf *freycineti*	mudskipper	1	18/09/2024

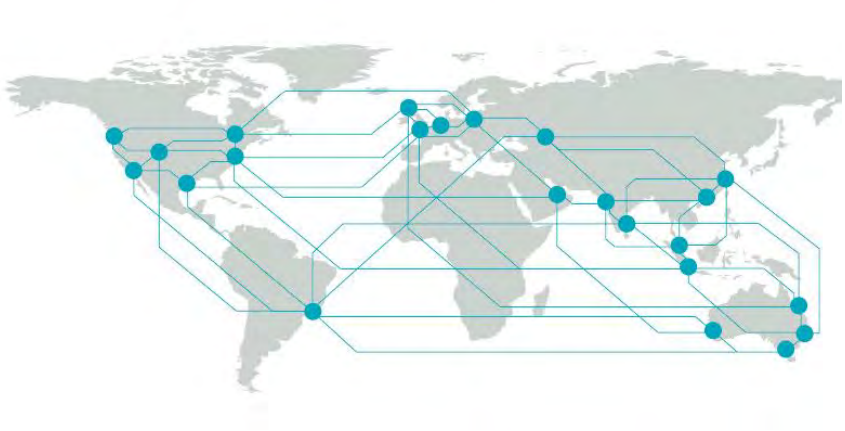
*V under NCA, **CE under EPBD and E under NCA, ***SPC under NCA, **** likely black flying fox (*Pteropus alecto*) or spectacled flying fox (*Pteropus conspicillatus*) listed as E under EPBC, ***** likely black rat (*Rattus rattus)* or brown rat (*Rattus norvegicus)* both of which are introduced species.

1.4 Summary

Interim results from the baseline coastal ecology dry season survey for the CMP CUF project indicate the following:

- the foreshore of Smiths Creek and its tributaries are highly modified but support a narrow fringe of marine plants for the purposes of the *Fisheries Act 1994* dominated by mangroves with isolated patches of saltmarsh and bounded by adjacent marine plants.
- Apart from marine plants, no other vegetation communities of conservation significance were recorded in, or directly adjacent to, the study areas.
- The threatened ant plant listed under the NCA and EPBC is widespread in the study areas and surrounds.
- No other flora species of conservation significance were recorded in, or directly adjacent to, the study areas.
- Very sparse pond apple (restricted matter/WoNS) was recorded along CFB2 and upstream on a tributary of Smiths Creek. Management recommendations will be provided in the draft report to manage this high-risk biosecurity matter during construction and operation.
- Three conservation-significant fauna species were observed during the survey, including: beach stone-curlew, eastern curlew. Though these taxa may use the study areas on occasion they do not constitute significant habitat for any listed wader/ shorebird species due to their degraded condition and high levels of human disturbance.
- Given the limited extent of mangrove communities, the study areas are not considered to support suitable breeding and nesting habitat for water mouse.
- The study areas are not likely to be utilised by saltwater crocodiles for nesting given the limited extent of mangrove communities and high levels of human disturbance.

A detailed report on baseline survey results will be provided on completion of the second (wet season) coastal ecology survey which will be undertaken in December 2024 in collaboration with the marine ecology survey.



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