

## Background and Application Summary

The role of the Queensland Department of Transport and Main Roads (DTMR) is to plan, manage and deliver Queensland's integrated transport environment to achieve sustainable transport solutions for road, rail, air and sea. They are responsible for the delivery of public transport and transport infrastructure to connect Queensland and to ensure the infrastructure built is efficient, reliable and safe.

Objectives include:

- Continuing to improve maritime safety and community satisfaction by managing the movement of commercial and recreational vessels in Queensland waters
- Contributing to the development and planning of Queensland waters through the implementation of the Reef 2050 Plan

DTMR are responsible for administering the following legislation:

- *Transport Infrastructure Act 1994*
- *Transport Operations (Marine Safety) Act 1994*
- *Transport Operations (Marine Pollution) Act 1995*
- *Transport Operations (Marine Safety—Domestic Commercial Vessel National Law Application) Act 2016*

Capital projects are funded through the Marine Infrastructure Fund.

The Clump Point boating facility upgrade project was developed by the Queensland Government as a response to community requests to enhance marine infrastructure, and improve boating safety and amenity in Boat Bay, Mission Beach and with the commitment of funding from both the Commonwealth and Queensland Governments in 2012. The (then) Department of State Development, Infrastructure and Planning (DSD) worked with a range of Mission Beach stakeholders between 2012 to 2015 and proposed, at the time, an overtopping breakwater in front of the existing Perry Harvey jetty plus enhanced boat ramp, road and parking facilities at Clump Point.

The proposed breakwater at Perry Harvey jetty was strongly opposed by both environmental and boating groups. The Great Barrier Reef Marine Park Authority (GBRMPA) application for the initial project was split into two distinct applications:

- (a) The overtopping breakwater in front of the existing Perry Harvey jetty: this application was never finalised and was not granted. It was eventually withdrawn.
- (b) Enhanced boat ramp, road and parking facilities at Clump Point: this permit (G16/38578.1) was granted to the State of Queensland acting through the Department of Transport and Main Roads on 17 May 2016.

Responding to the public concerns the Queensland Government determined that the proposed project would focus on the provision of safer boating infrastructure at Clump Point only, with the Perry Harvey jetty being left as is; a good-weather facility to support the Clump Point upgraded works.

The current application (the proposed project) is for new permissions for an upgrade to an existing boat ramp, the addition of a detached breakwater with associated jetty, pontoons and pen berths as well as the installation of up to six moorings (Figure 1). The proposed project also involves fuel transfer and reclamation of the State Marine Park.

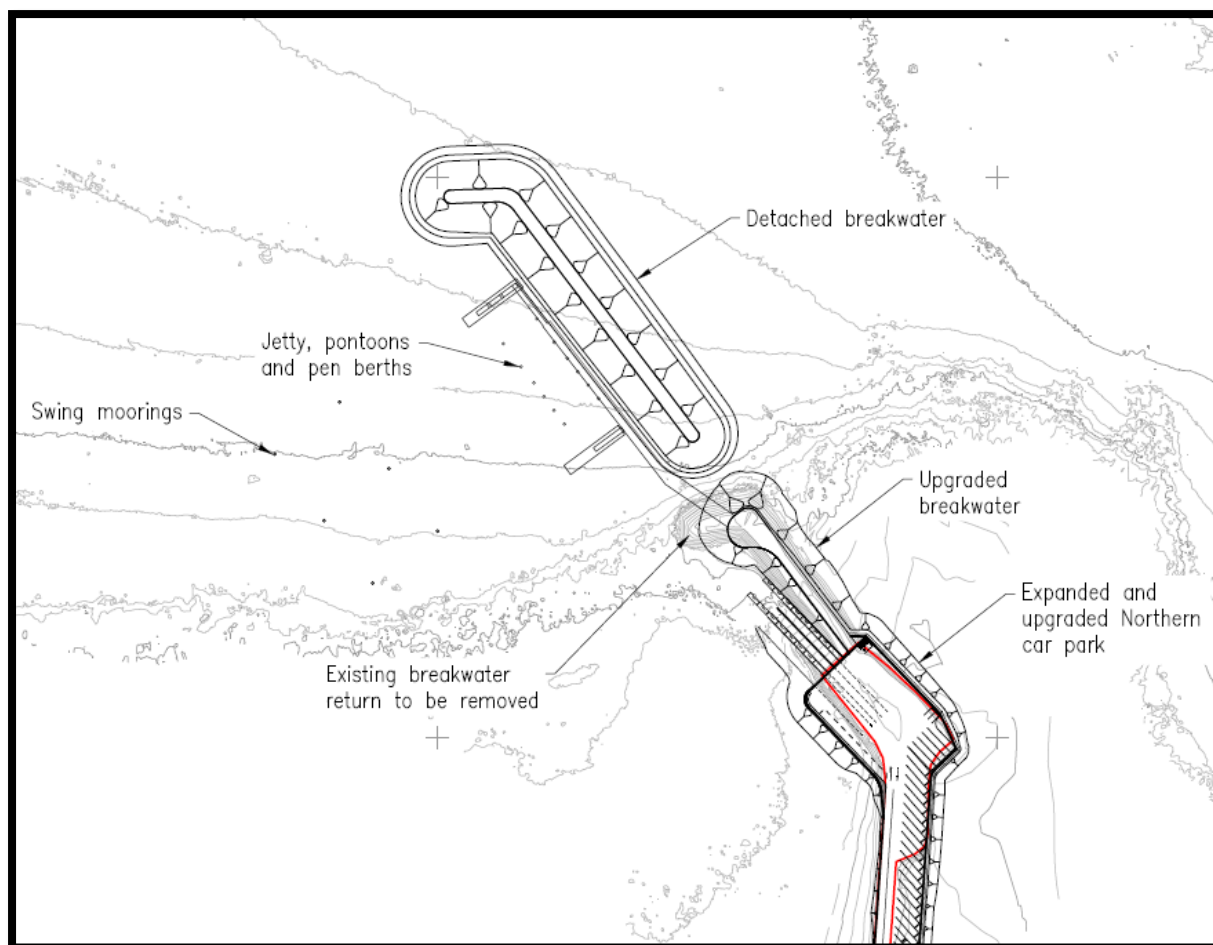


Figure 1: Schematic showing the proposed detached breakwater (25m gap to existing breakwater), the associated pontoon and pen berths and modifications to the existing wall.

## Glossary and definitions

the Applicant	Qld Department of Transport and Main Roads
ASS	Acid Sulphate Soils
ASSMP	Acid Sulphate Soils Management Plan
CCRC	Cassowary Coast Regional Council
CEMP	Construction Environmental Management Plan
CHMP	Cultural Heritage Management Plan
DAF	Qld Department of Agriculture and Fisheries
DES	Qld Department of Environment and Science
DSD	Qld Department of State Development, Infrastructure and Planning
DoEE	Commonwealth Department of the Environment and Energy
DTMR	Qld Department of Transport and Main Roads
EAM	Environmental Assessment and Management
EFMs	Environmentally Friendly Moorings
EMP	Environmental Management Plan
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>

EPP (Water)	Environmental Protection (Water) Policy 2009
ESS	Environmental Site Supervisor
EVs	Environmental Values
FINFO	Further Information Request
GBR	Great Barrier Reef
GBRMPA	Great Barrier Reef Marine Park Authority
GBRMPR	Great Barrier Reef Marine Park Regulations (1983)
GBRWHA	Great Barrier Reef World Heritage Area
ILUA	Indigenous Land Use Agreement
MLW	Mean low water
MSQ	Maritime Safety Queensland
NQLC	North Queensland Land Council
NTN	Native Title Notification
PASS	Potential Acid Sulphate Soils
PIP	Public Information Package
the Proposed Project	The Clump Point Boating Facility Upgrade Project
QCMP	Queensland Crocodile Management Plan
QPWS	Queensland Parks and Wildlife Service a division of DES
QMPR	Queensland Marine Parks Regulation (2017)
REEF2050LTSP	Reef 2050 Long Term Sustainability Plan
SI-PIP	Supplementary Information- Public Information Package
SMA	Site Management Arrangements
SOW	Schedule of Works
WQO's	Water Quality Objectives

**Application Received:** The Clump Point Boating Facility Upgrade Project application was received 23 June 2017. The moorings in Boat Bay application was received 27 July 2016 (G39075.1). These two applications were eventually merged on 19 February 2018.

**Applicant Name:** Queensland Department of Transport and Main Roads (DTMR)

**Veda Search:** Registered ABN: 39 407 690 291

**Assessment:** Joint (State/Commonwealth)

**Recommended Permit Term:** It is recommended that the permit is issued for twenty (20) years (see 88R (k) below for further explanation and justification).

**Permissions sought:**

Operating a facility (being the Clump Point Boating Facility Upgrade Project) including building, assembling, fixing in position, maintaining and demolishing the facility.

Operating a facility including constructing or operating mooring facilities for vessels.

Any other purpose- being fuel transfer.

Reclamation works – State Marine Park only.

**Primary Proposed Use:** The installation and operation of a detached breakwater structure (~42m wide and 145m long, elevation 4.5m), access jetty, pontoons (two at 30m x 5m), pen berths (maximum six), up to six swing moorings, floating walkway and an upgrade to the existing boat ramp and parking facilities.

**Zones and Locations:** Habitat Protection Zone (HP-17-5140) (Great Barrier Reef Marine Park). Cairns/Cooktown Management Area, Mulgrave Johnstone Segment (Great Barrier Reef Coast Marine Park).

**Facility Details:**

<b>Type:</b>	Breakwater, Boat-ramp, pontoons, jetty, vessel berths, floating walkway, moorings.
<b>Status:</b>	Not fully installed – project builds substantially upon the existing facility.
<b>Installed:</b>	Works not done (uninstalled).
<b>DGPS Coordinates Degrees Decimal Minutes</b>	The centre of the works (north end of current breakwater) is at: 17° 51.183'S 146° 6.975' E
<b>Drawings Supplied:</b>	Yes – Final mooring design to be provided before installation.

**Native Title Notification:** Pursuant to the requirements of the *Native Title Act 1993*, each application is referred to the relevant Native Title claimants and/or the representative body of the traditional owners, for a period of 31 days. Comments received are taken into consideration when assessing the application. The application was referred three times. Refer Table 1 for details of notifications.

## Timeline associated with permit application

*Table 1: Timeline associated with permit application G39785.1*

DATE	PROJECT (G39785.1) ASSESSMENT MILESTONE	NOTES
27/07/16	Application received for applied for ten moorings in Boat Bay, Mission Beach (G39075.1).	This application was eventually withdrawn after application G39785.1 had six moorings included it is scope.
09/08/16	Native Title Notification #1 (for application G39075.1 – moorings facility) North Queensland Land Council (NQLC) sent to Djiru people # 2 – comments required by	This was the original Native Title Notification undertaken for a mooring facility application (G39075.1) which has now been merged with the current



DATE	PROJECT (G39785.1) ASSESSMENT MILESTONE	NOTES
	09/09/16. <i>This application is now merged with G39785.1.</i>	application. No responses were received.
04/05/17	GBRMPA's interpretation considered and accepted that the proposed works are ' <i>de minimis</i> ' and will not substantially change the boundary of the Commonwealth Great Barrier Reef Marine Park (GBRMP).	
05/05/17	GBRMPA advised DTMR that the proposed design will not significantly alter the boundary of the GBRMP and no further actions are required (re. S.31 of the Act).	
19/05/17	Commonwealth Department of the Environment and Energy (DoEE) advise DTMR that the proposed project is not considered a Controlled Action under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth).	Refer to Attachment C for the statement of reasons.
08/06/17	QPWS advise DTMR that (reclamation) works can be considered under an application for permission.	Reclamation can be approved in a Habitat Protection Zone. Section 15 (4) of the <i>Marine Park Act 2004</i> (Qld). Small scale public works applies.
23/06/17	Application - Permit application plus supporting documents received from DTMR.	Supporting documents included Development Plan, Draft EMP's, marine/terrestrial ecological surveys and sediment/current modelling data.
27/06/17	GBRMPA sent an Acknowledgment (of application) letter to DTMR.	
13/09/17	DTMR advise they want to delay the commencement of the proposed public notification process.	DTMR had been verbally advised by GBRMPA that public notification would be required but as of 13/09/17 had not been formally advised of this. The delay (requested by DTMR) was to allow them time to get more modelling completed to support the application and the public notification documents.
19/09/17	GBRMPA sent the Public Notification Letter - Requirement for Public Notification to DTMR.	DTMR are advised that the proposed project proposal (application) is considered to have potential to impact on the public use of a part of the Marine Park and therefore public notification will be required. The letter was sent 19/09/17 to provide sufficient time to complete and advertise (by 31/01/18) taking into account the request for time to undertake further modelling.
30/10/17	DTMR advise a delay in ability to publically advertise.	Email from DTMR advising that 'due to the calling of the election on the weekend, we are required to delay the public comment period until a new State government is in place... likely some time in December.'

<b>DATE</b>	<b>PROJECT (G39785.1) ASSESSMENT MILESTONE</b>	<b>NOTES</b>
03/11/17	Design change – DTMR advised GBRMPA/QPWS of minor design change (angle and height of breakwater, minor change to areas of reclamation).	While DTMR were advised (19/09/18) of need to publicly advertise the proposed project it was agreed to wait until final design features were completed before putting this out for comment (this is the reason for the 6 week delay between request for public notification and further development of package of information to go out to the public).
17/12/17	Endorsement of public notification package.	QPWS/GBRMPA send letter to DTMR advising final version of public notification package has been reviewed and endorsed.
18/01/18	Commencement of public notification period.	The period of time in which the public were invited to make comment on the application commenced. This was advertised in the Cassowary Coast Independent on the following dates: 18 Jan, 25 Jan, 1 Feb, 8 Feb and 15 Feb. The GBRMPA and DTMR websites were updated and members of the Reference Group were advised. GBRMPA also notified its Tourism and Indigenous Reef Advisory Committees and all 12 of its Local Marine Advisory Committee as per standard practice for public comment opportunities.
12/02/18	Native Title Notification #2 – sent to North QLD Land Council and Djiru People #2 – comments required by 19/03/18.	This Native Title Notification was for the 'continuation of a facility' for ten years. It was later noted that this application was not for a continuation but was a new permit. As such a new Native Title Notification was sent on 2/03/18. No responses were received.
19/02/18	Closure of public notification period.	Over 350 submissions received.
19-27/02/18	Review of comments received through public notification process.	A full review of the public submissions was undertaken by GBRMPA.
19/02/18	DTMR request the withdrawal of application G37520.1 (Perry Harvey Jetty breakwater)	This was an application for a previous design option.
19/02/18	DTMR advised they would surrender permit G16/38578.1 (Operating a facility – the current Clump Point boating facility) if a new permit (application G39785.1) was granted.	This Marine Park permit covers the current operations and facility at Clump Point. It will be superseded if any new permission for the upgrade project is granted.
19/02/18	DTMR applied to merge G39075.1 (moorings facility application dated 27/07/16) – they also advised they were happy to withdraw that original application G39075.1 (moorings facility) once the application was merged with G39785.1.	
26/02/18	GBRMPA sent a further information request	This letter detailed in a 10 page table


DATE	PROJECT (G39785.1) ASSESSMENT MILESTONE	NOTES
	(FINFO) letter to DTMR.	all of the public submission comments, concerns and questions with regard to the information supplied in the Public Information Package. There were also a series of other questions from GBRMPA/QPWS in relation to information required to complete the assessment.
02/03/18	Native Title Notification #3 sent (to North Queensland Land Council (NQLC) and Djiru People #2 – response required by 03/04/18.  A response dated 20 March 2018 was received by GBRMPA on 1 May 2018.	This Native Title Notification was re-sent to ensure that it properly included the proposed conduct being one boat ramp (including the addition of an extra lane), two breakwaters (one being upgraded, one being built approximately 140m long), two pontoons and associated jetties and walkways, and six moorings at Clump Point. Also included was reclamation associated with the construction of the facilities that make up the Clump Point Boating Facility Upgrade Project. The permit term was for no longer than 20 years.
07/03/18	GBRMPA send a FINFO clarification letter to DTMR.	A letter was sent to DTMR acknowledging and correcting a minor error in the previous FINFO letter sent (26/02/18).
19/03/18	FINFO response. DTMR provided a response to the questions raised in the FINFO letter of 26/02/18.	
13/04/18	Joint QPWS/GBRMPA/DTMR site visit.	
14/04/18	DTMR meet with Djiru people.	
01/05/18	Response received from Djiru people to Native Title notification #3.	Covering letter dated 22 April 2018 attaches Native Title Notification response dated 20 March 2018 discussed further at GBRMPR [88Q (a)].  (Note: Original response dated 20 March 2018 was not received by GBRMPA until 1 May 2018).
18/06/18	Email to NQLC representing the Djiru people stating that the Managing Agencies intend to make a decision by end of June and to raise any outstanding issues or concerns.	
20/06/18	Response from Djiru people acknowledging the timelines.	
26/06/18	A further email to NQLC representing the Djiru people advising that if comments are not received by midday on 29 <sup>th</sup> June the Authority will assume that no comments wish to be made and proceed to make a	

DATE	PROJECT (G39785.1) ASSESSMENT MILESTONE	NOTES
	decision in the absence of those comments.	
28/06/18	Email from NQLC representing the Djiru people confirming no further comments in relation to this future act notice.	

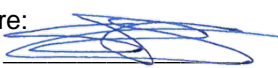
## Recommendation

Assessment Officer GBRMPA	Recommendation	Comments
<p>Signature: </p> <p>Name: Neil Mattocks/Rean Gilbert</p> <p>Date: 29/06/2018</p>	<p><input type="checkbox"/> Grant the permit</p> <p>x <input checked="" type="checkbox"/> Grant the permit with conditions</p> <p><input type="checkbox"/> Refuse the application</p>	<p>Expiry Date: 2038</p> <p>Period: 20 years</p>
Assessment Officer QPWS	Recommendation	Comments
<p>Signature: </p> <p>Name: Ian Grant</p> <p>Date: 29/ 5 / 2018</p>	<p><input type="checkbox"/> Grant the permit</p> <p>x <input checked="" type="checkbox"/> Grant the permit with conditions</p> <p><input type="checkbox"/> Refuse the application</p>	<p>Expiry Date: 2038</p> <p>Period: 20 years</p>

## Decisions

Delegate	Decision	Comments
<p>Signature: </p> <p>Name: Kirstin Dobbs</p> <p>Position: Acting General Manager- Reef Protection (PN393)</p> <p>Delegate of the Great Barrier Reef Marine Park Authority</p> <p>Date: 29/06/18</p>	<p><input type="checkbox"/> Grant the permit</p> <p>X <input checked="" type="checkbox"/> Grant the permit with conditions</p> <p><input type="checkbox"/> Refuse the application</p>	<p>The decision for the Great Barrier Reef Marine Park is made under the Instrument of Delegations signed by the Chairman (Russell Reichelt) on 28 June 2018.</p> <p>As Delegate, I confirm that I have read the assessment and agree that it complies with all relevant requirements under the <i>Great Barrier Reef Marine Park Act 1975</i> (Commonwealth) and the <i>Great Barrier Reef Marine Parks Regulations 1983</i> (Commonwealth).</p>



<p>Signature: </p> <p>Name: Saskia Salmeron-Rodriguez</p> <p>Delegate of the Chief Executive, Department of Environment and Science</p> <p>Date: <u>29</u> / <u>06</u> / <u>2018</u></p>	<p><input type="checkbox"/> Grant the permit</p> <p><input checked="" type="checkbox"/> Grant the permit with conditions</p> <p><input type="checkbox"/> Refuse the application</p>	<p>The decision for the Department of Environment and Science is made under the Marine Parks (Chief Executive) Delegation (No 1) 2017.</p> <p>As Delegate, I confirm that I have read the assessment and agree that it complies with all relevant requirements under the <i>Marine Parks Act 2004</i> (QLD) and the <i>Marine Parks Regulation 2017</i> (QLD).</p>
---	---	--

## Risk Assessment

A risk assessment was conducted consistent with the EAM Risk Management Framework (GBRMPA 2009). Activities to be permitted have been assessed in regards to potential impacts on the Marine Parks and its users. To reduce the initial risk, management actions have been implemented for each activity and consequently the risk for each is considered low to medium. The risk assessment can be found at Table 2.

**Project:** Queensland Department of Transport and Main Roads Clump Point Boating Facility Upgrade Project

**Zones & Locations:** Habitat Protection Zone (Clump Point - Mission Beach).

**Risk Assessment Methodology:** This risk assessment is based on standard procedures utilised by the GBRMPA (prior to 4 October 2017). New (Risk Assessment) Internal Procedure (Revision1 effective from 04 October 2017 have been considered where appropriate but as the application was submitted and accepted prior to this date (04 October 2017) the (previous) legislated assessment criteria (and associated procedures and guidelines) are used for this assessment.

Additional details on specific listed 'Activity/Hazards' and their mitigation shown in Table 2 can be found below in [GBRMPPR 88Q\(b\)/QMPR 10\(b\)](#).

This Risk Assessment (Table 2) is referenced throughout the assessment document.

Table 2: Risk assessment, Risk Assessment (discussed in [GBRMPR 88Q\(a\)](#) and [QMPR 10\(a\)](#)).

Activity or Element	Hazard	Factors	Possible impacted values	Initial Risk	Treatment and Management	Post Management (Residual) Risk
<b>Breakwater/Facility CONSTRUCTION</b>	<ul style="list-style-type: none"> <li>Physical damage to the benthic marine environment from the direct footprint</li> <li>Decrease in water quality</li> <li>Noise from pile driving</li> <li>Loss of intertidal mangrove habitat</li> <li>Rubbish/debris generation</li> </ul>	<ul style="list-style-type: none"> <li>Staff inadequately trained and not familiar with values of the area or permit requirements</li> <li>Disturbance to benthic environment during constructions leading to loss of value</li> <li>Barge based construction methods</li> <li>Reclamation of the Marine Parks (includes minor excavation, new rock and fill)</li> <li>Decrease in amenity or public appreciation of the area (through noise, visual and physical changes to the area)</li> <li>Loss of access during construction</li> </ul>	Corals, seagrasses, water quality, marine turtle, dolphin, dugong, aesthetics, social values (including access and aesthetics), Traditional Owner values	Almost Certain x Moderate = <b>HIGH</b>	<ul style="list-style-type: none"> <li>Construction will occur to an existing and operational boat ramp facility (thus not changing the existing use of the area).</li> <li>Design elements to ensure minimal impact on amenity of area.</li> <li>New breakwater not to be installed on seagrass or coral/live-rock.</li> <li>ESS for all works (nominated full-time (employed) environmental supervisor and strategic site visits and supervision by the Management Agencies).</li> <li>Construction EMP (CEMP) to include measures to manage potential impacts from the facility and any works including but not limited to: <ul style="list-style-type: none"> <li>Sampling and Analysis Plan for a pre-works monitoring program to establish a broad baseline at the construction site</li> <li>Turbidity monitoring program implemented throughout works with provisions for mitigation if required e.g. use of silt curtains.</li> <li>Soft start procedure implemented to reduce underwater noise for pile driving</li> <li>Washing of quarry rock to minimise dust and fine particles</li> <li>Measure to control any sediment discharge risks during construction, and during the sealing of the road and carparks (including erosion and sediment control measures)</li> <li>Details of monitoring plans of turbid plumes and marine turbidity in general</li> <li>Best practice measures to avoid impacts on Marine Megafauna during construction phase</li> </ul> </li> <li>Permittee to publish in a local newspaper the closure dates and alternative ramp access. This notification also needs to be available on-site for out of town tourists.</li> <li>CEMP to be approved by Managing Agencies prior to start of any works</li> <li>CEMP to be made publically available on DTMR website.</li> </ul>	Possible x Minor = <b>MEDIUM</b>
	<ul style="list-style-type: none"> <li>Physical damage to adjacent seagrass and coral communities</li> <li>Disturbance or interference with wildlife (cetaceans, dugongs, crocodiles or sea turtles)</li> <li>Fuel/oil spills (water quality impacts)</li> <li>Rubbish or solid waste released to environment – including choking and entanglement hazards to marine wildlife and amenity issues</li> <li>Impacts to social, cultural and heritage values</li> <li>Incidents during construction leading to damage to unfinished works</li> <li>Marine Park boundary issues</li> <li>Social impacts from unhappy stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Loss of equipment during construction</li> <li>Impacts to cultural heritage (fish traps nearby)</li> <li>Level of watch by vessel operator</li> <li>Oil and heavy fuel spills during an incident involving vessels and heavy equipment</li> <li>Extreme weather events during construction (prior to final/stable structures).</li> <li>The facility may cause changes to the Marine Park boundaries</li> <li>Poor site management (construction) can lead to release of waste or spills</li> <li>The proposed project has received over 350 public submissions (some have been opposed to the proposed project)</li> </ul>		Possible x Moderate = <b>HIGH</b>	<ul style="list-style-type: none"> <li>Environmental Harm conditions require notification within 24 hours of an incident</li> <li>Schedule of Works provided for any works</li> <li>Compliance certificate provided post works to the Managing Agency to ensure work is completed to standards</li> <li>Marine Mammal/Reptile Observers utilised during in-water works (this could be included in the CEMP)</li> <li>Works that present a significant risk to marine species will only be conducted during daylight hours</li> <li>The proposed design allows for minimal changes to the Marine Park boundary by including a gap of 25m under which the tidal flows (and thus the Marine Park boundary) continues.</li> <li>Reclamation works within the State Marine Park boundary are consistent with small scale public works.</li> <li>High level engineering standards (designed levels/extreme weather events) and shutdown procedures for extreme weather</li> <li>Deed of Agreement requiring indemnity and insurance</li> <li>Reclamation must avoid impact to the existing fish trap</li> <li>Native Title notification completed and consultation undertaken with the Djiru Traditional Owners.</li> <li>Application has been publically advertised and comments considered in the assessment</li> <li>All works conducted in accordance with the Aboriginal Cultural Heritage Duty of Care Guidelines and in recognition of the cultural heritage values of Clump Point and the Cultural Heritage Management Plan</li> <li>Consultation ongoing with Djiru Traditional Owners</li> </ul>	Unlikely x Minor = <b>LOW</b>
	<ul style="list-style-type: none"> <li>Acid Sulphate Soils</li> <li>Introduction of exotic species</li> </ul>	<ul style="list-style-type: none"> <li>Reclamation works can cause ASS</li> <li>Large number of barges can bring exotic marine pests</li> </ul>		Unlikely x Moderate = <b>MEDIUM</b>	<ul style="list-style-type: none"> <li>Construction contractor will establish an appropriate plan to deal with ASS</li> <li>Construction EMP can include methods to minimise the potential of marine pests.</li> </ul>	Rare x Minor = <b>LOW</b>

**PERMIT ASSESSMENT - G39785.1**  
**Great Barrier Reef Marine Park Authority and Queensland Parks and Wildlife Service**

Activity or Element	Hazard	Factors	Possible impacted values	Initial Risk	Treatment and Management	Post Management (Residual) Risk
<b>Breakwater/Facility MAINTENANCE</b>	<ul style="list-style-type: none"> <li>Maintenance works lead to reduction in water quality</li> <li>Maintenance work leads to increased pollution/rubbish</li> <li>Inadequately maintained facilities</li> <li>Rubbish or solid waste released to environment – including choking and entanglement hazards to marine wildlife and amenity issues</li> </ul>	<ul style="list-style-type: none"> <li>Staff inadequately trained and not familiar with values of the area or permit requirements</li> <li>Disturbance to benthic environment during maintenance leading to loss of value</li> <li>Lack of maintenance of facilities</li> <li>CCRC lacks funding for maintenance</li> </ul>	Corals, seagrasses, water quality, marine turtle, dolphin, dugong, aesthetics, social values, Traditional Owner values	Possible x Minor= <b>MEDIUM</b>	<ul style="list-style-type: none"> <li>Schedule of works condition for any maintenance works not covered by the EMP's.</li> <li>ESS required for any maintenance works</li> <li>Environmental Harm conditions require notification within 24 hours of an incident</li> <li>Permit will be issued to DTMR who will ultimately be responsible for the facilities (any internal business proposal between DTMR and CCRC is separate from the responsibilities of the permit holder)</li> <li>Publically available operational EMP</li> </ul>	Unlikely x Minor= <b>LOW</b>
<b>Breakwater/Facility OPERATION</b>	<ul style="list-style-type: none"> <li>Physical damage to the benthic marine environment and adjacent seagrass</li> <li>Changes to coastal processes, hydrodynamics or geomorphology</li> <li>Jetties/walkways and other structures result in shading</li> <li>Structural damage to the facilities</li> <li>Disturbance or interference with wildlife (cetaceans, dugongs, crocodiles or sea turtles)</li> <li>Concentrated vessels movements may lead to an increased risk of marine turtles and mammals being struck.</li> <li>General disturbance due to increase in vessel traffic</li> <li>Siltation of adjacent sensitive environments (coral, seagrass).</li> <li>Decrease in water quality</li> <li>General disturbance due to increase in vessel traffic</li> <li>Reputational risks</li> <li>Decrease in amenity/aesthetics of the area</li> </ul>	<ul style="list-style-type: none"> <li>Modelling conducted on the hydrodynamics may be inaccurate and changes occur to the coastal processes</li> <li>Extreme weather events</li> <li>Improper maintenance</li> <li>Shading of light may impact on sunlight dependant species if present.</li> <li>Installation of 140m breakwater can lead to changes in coastal processes and siltation rates</li> <li>Stormwater run-off from adjacent car-park and loading facilities</li> <li>Speed, draft and frequency of vessel movements.</li> <li>The operation of the facility may decrease the amenity/aesthetics of Boat Bay</li> </ul>	Corals, seagrasses, water quality, marine turtle, dolphin, dugong, aesthetics, social values, Traditional Owner values	Possible x Minor= <b>MEDIUM</b>	<ul style="list-style-type: none"> <li>Environmental Harm conditions require notification within 24 hours of an incident</li> <li>Compliance certificates to be provided to the Managing Agency</li> <li>Deed of Agreement requiring indemnity and insurance</li> <li>Operational EMP to include measures to manage potential impacts from the ongoing operation of the facility (including any impacts from increased vessel traffic)</li> <li>Operational EMP to be approved by the Managing Agencies</li> <li>Operational EMP to be publically available on DTMR website</li> <li>Detailed modelling undertaken suggesting (possible) minor siltation and concluding that the proposed design layout does not create any significant siltation impacts – ongoing monitoring program required</li> <li>New breakwater not to be installed on seagrass or coral/live-rock</li> <li>New floating structure can provide new habitat for certain fish species.</li> <li>The breakwater may provide suitable habitat for new species to settle, grow and reproduce potentially providing an increase in the general biodiversity of the area</li> <li>Permit condition requiring highly visible signs advising of risks to fauna from vessel operation as well as the significance of the area to the Djiru Traditional Owners, if Djiru want such recognition</li> <li>TMR to ensure CCRC manage facility to ensure waste (e.g. recreational rubbish) is properly managed via an operational EMP.</li> <li>The Permittee must ensure that no waste or garbage is discharged into the Marine Parks during the course of the fuel transfer operations. The Permittee must ensure that no detergents or dispersants are used or discharged in the Marine Park (including flushing or cleaning of the vessel decks using any detergents/dispersants)</li> <li>Gross pollutant trap proposed to reduce pollutants from the car park</li> <li>The Permittee must remove the abandoned floating walkways modules from nearby mangroves</li> <li>The Permittee to clean-up rubbish from under the existing Perry Harvey jetty</li> </ul>	Rare x Minor= <b>LOW</b>
		<ul style="list-style-type: none"> <li>Gap between new breakwater and mainland fills in causing changes in the mean low water mark (i.e. changes to Marine Park boundary).</li> <li>Significant public concern about apparent 'loophole' in GBRMPA legislation to allow gap in order to maintain Marine Park boundaries.</li> </ul>		Rare x Moderate= <b>MEDIUM</b>	<ul style="list-style-type: none"> <li>A detailed analysis of the required gap width to main tidal flows, avoid significant geomorphological changes and provide the required level of calm water conditions was undertaken.</li> <li>More information needs to be publically available about the Marine Park boundary issues. (GBRMPA action)</li> </ul>	Rare x Moderate= <b>MEDIUM</b>
<b>Breakwater/Facility REMOVAL</b>	<ul style="list-style-type: none"> <li>Reduction in values due to incomplete or inappropriate removal processes</li> </ul>	<ul style="list-style-type: none"> <li>Disturbance to benthic environment during removal</li> <li>Vessel incidents during removal operations</li> </ul>	Corals, seagrasses, water quality, marine turtle, dolphin, dugong, aesthetics, social values, Traditional Owner values	Possible x Minor = <b>MEDIUM</b>	<ul style="list-style-type: none"> <li>Environmental Harm conditions require notification within 24 hours of an incident</li> <li>Removal plan for any decommissioning/removal</li> <li>ESS for removal</li> <li>Deed of Agreement requiring indemnity and insurance</li> <li>Marine Mammal and Protected Reptile Observers utilised during in-water works including removal</li> <li>DTMR is the permit holder and responsible for the facilities until such a time that they are removed from the Marine Park</li> </ul>	Unlikely x Minor = <b>LOW</b>
<b>RECLAMATION WORKS</b>	<ul style="list-style-type: none"> <li>Loss of mangrove (inter-tidal)</li> </ul>	<ul style="list-style-type: none"> <li>Extension of car-park and turning</li> </ul>	Intertidal	Almost Certain x	<ul style="list-style-type: none"> <li>Reclamation of (mangrove) habitat has been kept to the minimum necessary to</li> </ul>	Almost certain x

**PERMIT ASSESSMENT - G39785.1**  
**Great Barrier Reef Marine Park Authority and Queensland Parks and Wildlife Service**

Activity or Element	Hazard	Factors	Possible impacted values	Initial Risk	Treatment and Management	Post Management (Residual) Risk
<b>(extension of car-park)</b>	<ul style="list-style-type: none"> <li>habitat</li> <li>Siltation associated with works</li> <li>Covering of basalt rocks</li> </ul>	<ul style="list-style-type: none"> <li>areas requires small scale reclamation of inter-tidal habitat.</li> <li>Removal of mangroves</li> <li>Loss of being able to see basalt rock feature along coastline</li> </ul>	<ul style="list-style-type: none"> <li>mangrove habitat, water quality</li> <li>Basalt rocks</li> </ul>	Moderate = <b>HIGH</b>	<ul style="list-style-type: none"> <li>allow for some increase in parking and vehicle movement.</li> <li>Mangroves will regrow adjacent to and amongst new rock revetments</li> <li>The total loss of mangrove habitat will be 1,014 m2. The State approvals require an offset for the loss of marine plants.</li> <li>Movement where operationally feasible of basalt rocks to outside of the new footprint</li> </ul>	Minor= <b>MEDIUM</b>
<b><u>Moorings INSTALLATION &amp; REMOVAL</u></b>	<ul style="list-style-type: none"> <li>Change in noise</li> <li>Direct damage, removal or destruction of non-living things</li> <li>Direct death or removal of living things</li> <li>Direct injury or disturbance of living things</li> <li>Exotic species or diseases</li> <li>Contamination of water or sediment</li> <li>Marine debris</li> </ul>	<ul style="list-style-type: none"> <li>Disturbance to benthic marine environment during installation and removal of mooring tackle and blocks</li> <li>Vessel collisions during installation and removal operations</li> <li>Disturbance or interference with wildlife (whales, sea turtles, dolphins, birds) during construction works</li> <li>Loss of equipment during installation and removal</li> <li>Decreased in water quality due to increased vessel or aircraft use resulting in chemical, oil or fuel spills and rubbish pollution</li> <li>Rubbish causing a choking or entanglement hazard to marine species</li> </ul>	<ul style="list-style-type: none"> <li>Seagrass and seagrass meadows</li> <li>Coral and coral reefs</li> <li>Whales</li> <li>Dolphins</li> <li>Dugongs</li> <li>Marine Turtles</li> <li>Traditional Owner heritage values</li> <li>Social values</li> <li>Economic values</li> </ul>	Possible x Moderate= <b>MEDIUM</b>	<ul style="list-style-type: none"> <li>Environmental Harm conditions require notification within 24 hours of the occurrence of an incident</li> <li>Schedule of Works provided for installation, removal or decommission</li> <li>ESS for installation, removal or decommission</li> </ul>	Unlikely x Minor= <b>LOW</b>
<b><u>Moorings OPERATION &amp; MAINTENANCE</u></b>	<ul style="list-style-type: none"> <li>Change in current or future human use pattern</li> <li>Change in noise</li> <li>Direct damage, removal or destruction of non-living things</li> <li>Direct death or removal of living things</li> <li>Direct injury or disturbance of living things</li> <li>Marine debris</li> <li>Contamination of water or sediment</li> </ul>	<ul style="list-style-type: none"> <li>Vessels not secured appropriately or adrift due to unmaintained mooring(s) leading to physical damage to the benthic environment and adjacent coral communities</li> <li>Structural damage to the mooring facilities as a result of extreme weather events such as cyclones</li> <li>Displacement of other Marine Parks users by increasing tourist access to the area</li> <li>Improper installation or maintenance</li> <li>Fuels, chemicals or paints stored and handled inappropriately</li> <li>Staff inadequately trained and not familiar with values of the area or permit requirements</li> <li>Mooring draft</li> <li>Decreases in water quality due to increased vessel or aircraft use</li> <li>Public safety</li> </ul>	<ul style="list-style-type: none"> <li>Seagrass and seagrass meadows</li> <li>Coral and coral reefs</li> <li>Traditional Owner heritage values</li> <li>Social values</li> <li>Economic values</li> </ul>	Possible x Moderate= <b>MEDIUM</b>	<ul style="list-style-type: none"> <li>Permittee proposed to install Environmentally Friendly Moorings thereby reducing impact to seabed</li> <li>Permittee must inform all staff of relevant restrictions or permit requirements</li> <li>Environmental Harm conditions require notification within 24 hours of an incident</li> <li>Schedule of Works provided for all works</li> <li>ESS for works</li> <li>Regular compliance checks and site visits</li> <li>Inspected regularly for damage and adequately maintained</li> <li>Annual compliance certificates can be requested and provided to the Managing Agency</li> <li>Native Title notification completed. One response received.</li> </ul>	Unlikely x Minor= <b>LOW</b>
<b>FUEL TRANSFER</b>	<ul style="list-style-type: none"> <li>Fuel/oil spill</li> </ul>	<ul style="list-style-type: none"> <li>Staff inadequately trained and not familiar with values of the area or permit requirements</li> <li>Inadequate supplies of fuel absorbent pads to deal with spill</li> </ul>	<ul style="list-style-type: none"> <li>Water quality</li> <li>Seagrass and seagrass meadows</li> <li>Coral and coral reefs</li> <li>Traditional Owner heritage values</li> <li>Social values</li> <li>Economic values</li> </ul>	Possible x Minor= <b>MEDIUM</b>	<ul style="list-style-type: none"> <li>Permittee must submit refuelling operations manual, which must include (but is not limited to) <ul style="list-style-type: none"> <li>Details of the refuelling operations</li> <li>Identification and assessment of all potential hazards and risk to the environment</li> <li>Training procedures for persons conducting activities refuelling under this permit</li> <li>An oil spill emergency response procedure including details of incident response equipment, including oil absorbent pads and floating oil booms, to be held at the facility and <ul style="list-style-type: none"> <li>notification and reporting procedures including agency contact information</li> </ul> </li> </ul> </li> <li>Refuelling manual must be approved by the Managing Agencies</li> <li>Refuelling manual must be publically available on DTMR website</li> <li>Refuelling manual must be kept at the site</li> </ul>	Unlikely x Minor= <b>LOW</b>

**PERMIT ASSESSMENT - G39785.1**  
**Great Barrier Reef Marine Park Authority and Queensland Parks and Wildlife Service**

Activity or Element	Hazard	Factors	Possible impacted values	Initial Risk	Treatment and Management	Post Management (Residual) Risk
					<ul style="list-style-type: none"> <li>The permittee and people operating under the permit must comply with the approved refuelling operations manual at all time</li> <li>Periodic audits to ensure compliance of third parties to the refuelling manual</li> <li>The refuelling operations manual must be updated at the request of the Managing Agencies</li> <li>The Permittee must ensure that no waste or garbage is discharged into the Marine Parks during the course of the fuel transfer operations. The Permittee must ensure that no detergents or dispersants are used or discharged in the Marine Park (including flushing or cleaning of the vessel decks using any detergents/dispersants)</li> <li>The Permittee must ensure that all equipment involved in the fuel transfer operation is inspected annually and properly maintained and that records of inspections and maintenance are provided within 21 days of the Managing Agency requesting them.</li> <li>No fuel to be stored on-site-OEMP.</li> </ul>	

## Assessment Criteria

The *Great Barrier Reef Marine Park Regulations 1983* and the *Queensland Marine Parks Regulation 2017* outline the matters the GBRMPA and QPWS, as the responsible agencies, must have regard to in considering applications for permissions.

- Under the *Great Barrier Reef Marine Park Regulations 1983* (the old Regulations) these matters are specified in Regulation 88Q (Mandatory considerations). If relevant, the GBRMPA delegate may also consider other matters specified under Regulation 88R (Discretionary considerations).
- Under the *Queensland Marine Park Regulations 2017* these matters are specified under Section 10. If relevant, the Chief Executive may also consider additional matters specified under Section 11(1).

## Mandatory Considerations

GBRMPR [88Q(a)]	the potential impacts of the conduct proposed to be permitted by the permission (the proposed conduct) on the environment and on the social, cultural and heritage values of the Marine Park or a part of the Marine Park;
QMPR [10(a)]	the potential impact of the conduct proposed to be permitted under the permission (the proposed conduct) on the environment and on the cultural resources of the marine park or the part;

### General description - Clump Point/Boat Bay

Clump Point is a northerly facing headland two kilometres north of the township of Mission Beach. The headland provides access to the existing Clump Point boat ramp facility and shelters Boat Bay and a second smaller bay which becomes exposed at low spring tides (Roder *et al.* 1998). The waters of Boat Bay are within the Great Barrier Reef World Heritage Area, adjacent to the Wet Tropics World Heritage Area and the terrestrial aspect of Clump Point is recognised in the Cassowary Coast Regional Council Planning Scheme (2015) and is zoned for 'Environmental Management and Conservation' (significant environmental values). The intertidal and benthic communities contain sub tidal seagrass beds, mangrove forests, coral, algae and invertebrate infauna (Roder *et al.* 1998). The area is considered to be a cultural landscape by the local Djiru Traditional Owners and contains several important cultural sites (GBRMPA 2005). Clump Point and the adjoining submarine reefs are formed from Cainozoic basalts. The occurrence of basalt substrate is of conservation significance as this type of substrate does not occur anywhere else along the coast in the region (Chenoweth EPLA 2007).

### Environment

Boat Bay and adjacent marine areas support a number of natural values. Direct and potential impacts on the environment from the proposed project will cause the direct and permanent loss of the following habitat values:

- 9533m<sup>2</sup> of soft sediments and rubble - due to new detached breakwater and upgraded breakwater footprint;
- 1013.5m<sup>2</sup> of inter-tidal mangrove habitat- due to increased boat ramp turning area and breakwater access footprint;
- 771.6m<sup>2</sup> of reef and rocky shoreline – due to upgrade of the existing breakwater.



*The total footprint of the proposed project (see*



Design Areas

Location	Area (m <sup>2</sup> )
Area A	8517
Area B	1298
Area C	2230
Area D	2100

*Figure 2 and*

Figure 3) includes a vehicle manoeuvring area and additional boat ramp (Area B), an upgrade of the existing breakwater (Area C), extension of car parking area (Area D) and a detached breakwater (Area A). Areas of State Marine Park reclamation are provided in Figure 11.





### Design Areas

Location	Area (m <sup>2</sup> )
Area A	8517
Area B	1298
Area C	2230
Area D	2100

Figure 2: Total footprint of project (for design areas see Figure 3)

### Design Areas

Location	Area (m <sup>2</sup> )
Area A	8517
Area B	1298
Area C	2230
Area D	2100



Figure 3: Design areas of total footprint of project (see



Figure 2)

The works will result in a total of ~2421m<sup>2</sup> of State Marine Park intertidal areas being reclaimed (reclamation works between existing Highest Astronomical Tide (HAT) line and new HAT line) (see Figure 11).

Key potential impacts (construction and operation) on the environment (apart from the direct impacts listed above) may include the following (as highlighted in Table 2 risk assessment):

- Decreased water quality (turbidity, sedimentation, waste disposal, fuel spills)
- Seagrass or coral damage during construction and operationally from vessel movements and accidents/incidents.

- Impacts to adjacent areas of intertidal and marine habitat from reclamation activities (mangroves, algae).
- Potential damage to the benthic environment from the facility becoming damaged (and unsecured) during cyclonic weather events.
- Coastal geo-morphology – e.g. increased sedimentation caused by the new breakwater and upgraded facilities.
- Disturbance to or interference with wildlife (whales, dolphins, dugongs, sea turtles); during construction and as a result of increased vessel movements when fully operational.

#### *Impacts to Benthic Environments*

Benthic primary producers, including seagrass, mangroves, algae and corals are particularly susceptible to changes in water quality, in particular light limitations and changes in hydrodynamics. Seagrasses in particular are also considered to have high ecological value as a food source for threatened species such as dugong and green turtles.

In November 2013 and February 2014, the Applicant's consultant, Aurecon, undertook marine ecology assessments which identified the reef area adjacent to the Clump Point boat ramp facilities in Boat Bay as '...diverse but in relatively poor condition predominately comprised of bare sand and silt with very sparse, patchy seagrass and coral'. The surveys, undertaken adjacent to the existing Clump Point boat ramp, breakwater and pontoon walkway facilities, primarily found rubble reef, consisting of rocks and boulders which provided habitat for brown algae, macro-invertebrates and corals characteristic of a relatively nutrient rich, turbid environment. Very sparse and patchy seagrass areas were also observed within the mid-littoral zone in patches up to 2 square metres.

Further benthic surveys were undertaken in July 2016 (BMT WBM 2016) that appear to align with the findings of the Aurecon surveys of 2013/2014 (Figure 4). Benthic habitats located immediately north of the existing breakwater (within the proposed project footprint) consist of isolated, patchy low profile boulders and rubble on soft (sandy) sediment. The boulders contain mixed assemblages of hard and soft corals as well as encrusting reef fauna. While the boulders contained a diverse range of biota, they did not contain large, complex hard and soft coral assemblages as can be seen to the east on the Clump Point fringing reef (BMT WBM 2016) (Figure 4). The reef to the east of the boat ramp is comprised of approximately 1.8 ha hard coral (*Acropora*, *Porites*, *Goniopora*). The hard coral recorded in the study area was found to be similar to other nearshore coastal reef systems in the region (Thompson *et al.* 2013). The corals and macro algae in these nearshore coastal environments can withstand periodic high turbidity conditions but are sensitive to longer term increases in turbidity (DSD 2017).

Potential impacts have been identified in the risk assessment (Table 2) along with treatment/management measures required to minimise those impacts

Refer to criterion [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) for proposed avoidance, mitigation and monitoring strategies.



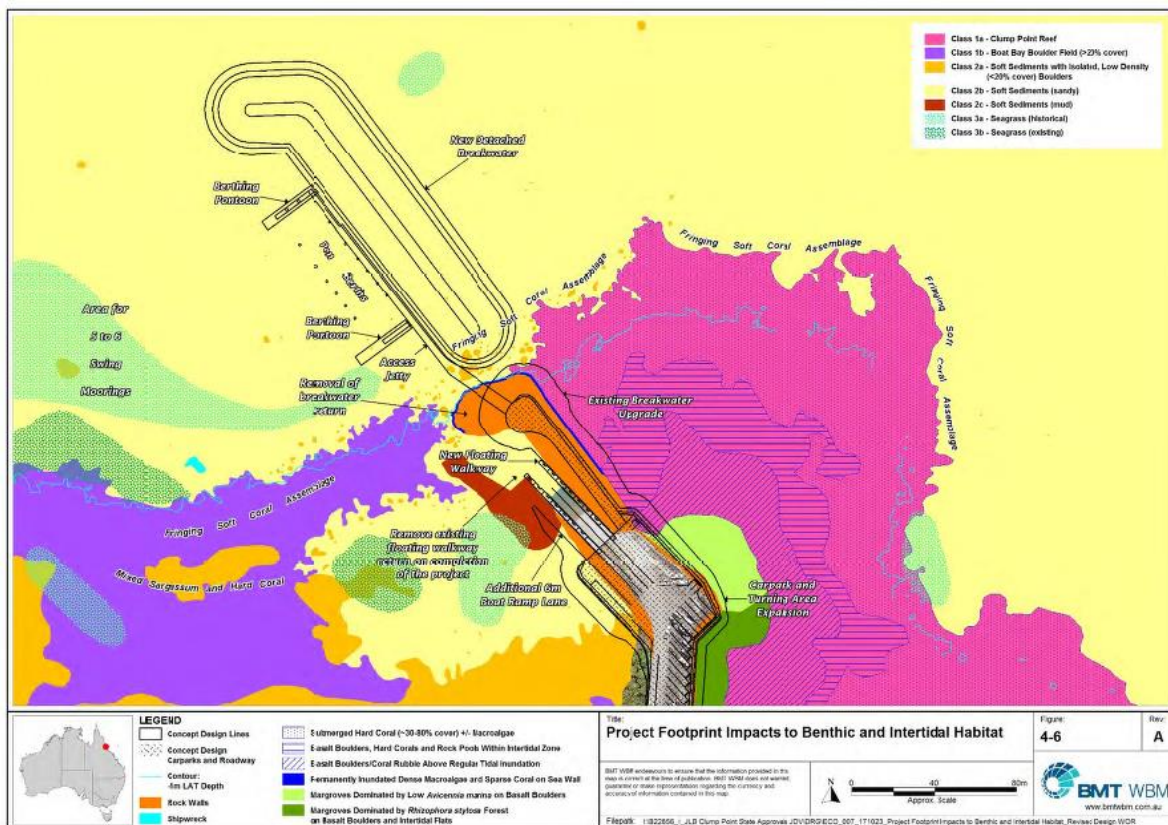


Figure 4: Clump Point benthic habitat with proposed new breakwater

#### Seagrass

Figure 5 shows the existing and historical (from Roder et al 1998) extent of seagrass beds. Five species of seagrasses have been found adjacent to Clump Point with approximately 2.8 hectares of seagrass in eight meadows mapped in December 1998. The Applicant conducted further surveys in 2016 which identified one seagrass species: *Halodule uninervis*. Specifically two seagrass meadows were identified; one with a total area of 0.34 ha (<1% cover) and the other with a total area of 0.12 ha (< 1% cover). Other studies conducted in 2013 indicated some sparse seagrass cover in other locations indicating the ephemeral nature of the seagrass meadows.

Major declines in seagrass meadow distribution and extent occurred in the Wet Tropics as a result of disturbance by tropical cyclones Larry (2006) and Yasi (2011) (Rasheed et al. 2014). In time, it is expected that seagrass will continue to recover, potentially occupying similar areas as observed by Roder et al. (1998).

The Statement of the Outstanding Universal Value of the Great Barrier Reef World Heritage Area is the official statement adopted by the World Heritage Committee and lists seagrasses as a natural heritage attribute. Seagrass and seagrass meadows support a number of listed migratory and threatened species such as marine turtle species (particularly green turtles), dugongs, dolphins, and sharks and rays.

Seagrass meadows are an important part of the Great Barrier Reef ecosystem. They are also critical contributors to human wellbeing and the economy, particularly in coastal communities and provide important ecosystem services. Important ecological, cultural and economic roles of seagrasses include:

- providing nursery grounds and habitat for many marine organisms and are foraging grounds for larger predators
- supporting commercially important species for fishing (such as fish, crabs, prawns and molluscs) and tourism (particularly charismatic species)
- supporting Traditional Owners cultural practices, lore and spiritual connections,
- contributing high rate of primary production, nutrient cycling, water filtration, and significant amounts of carbon sequestration



The proposed new breakwater and jetty does not overlap with any existing or historically recorded seagrass meadows. The seagrass species currently present nearby (*Halodule uninervis*) is known as an ephemeral species with rapid turnover and reproductive rates which enable them to rapidly recover following disturbance (Carruthers *et al.* 2002).

The existing seagrass meadows could potentially become impacted by turbidity associated with the construction phase of the proposed project. Activities that could increase turbidity include piling for jetty infrastructure, placement of new rock material, and removal of existing rock material and installation of moorings. Indirectly, sediments can also be disturbed by increases in vessel movements in the area both during construction and operation of the facilities. Vessels attempting to operate in water too shallow for their design can also impact on seagrass beds through propeller scouring.

Due to the limited amount of seagrass present at the site, the fact that all direct impacts to seagrass have been avoided and the management measures recommended by the Applicant the residual risk to seagrass habitat and seagrasses is considered to be low.

Refer to criterion [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) for proposed avoidance, mitigation and monitoring strategies.

#### Reef and Rocky Shores

There are some significant coral bommies and some isolated corals close to/adjacent to the Project Area. The Project Area lies predominantly over soft sandy sediments generally free from coral communities (refer to Figures 4 and 6). Shading by the pontoon walkway / jetty “will lead to some indirect effects to the marine environment.” DTMR, pg11 (SI-PIP) One of the primary design objectives of the current proposal was to avoid impacting coral bommies.

*“The loss of reefs and rocky shores habitat will occur across an area of 772m<sup>2</sup> within the GBR Marine Park. This includes a small area of reef assemblages under the footprint of the new breakwater, and within the Clump Point reef and intertidal zone under the expanded footprint of the existing breakwater. Actions have been taken to limit the extent of reefs and rocky shores habitat loss in the Project design.”* DTMR, pg11 (SI-PIP)

Approximately 1.8 hectares of established and juvenile hard corals were located along the fringing reef and isolated bommies north to north-east of the existing breakwater during the same 1998 surveys (Roder *et al* 1998).



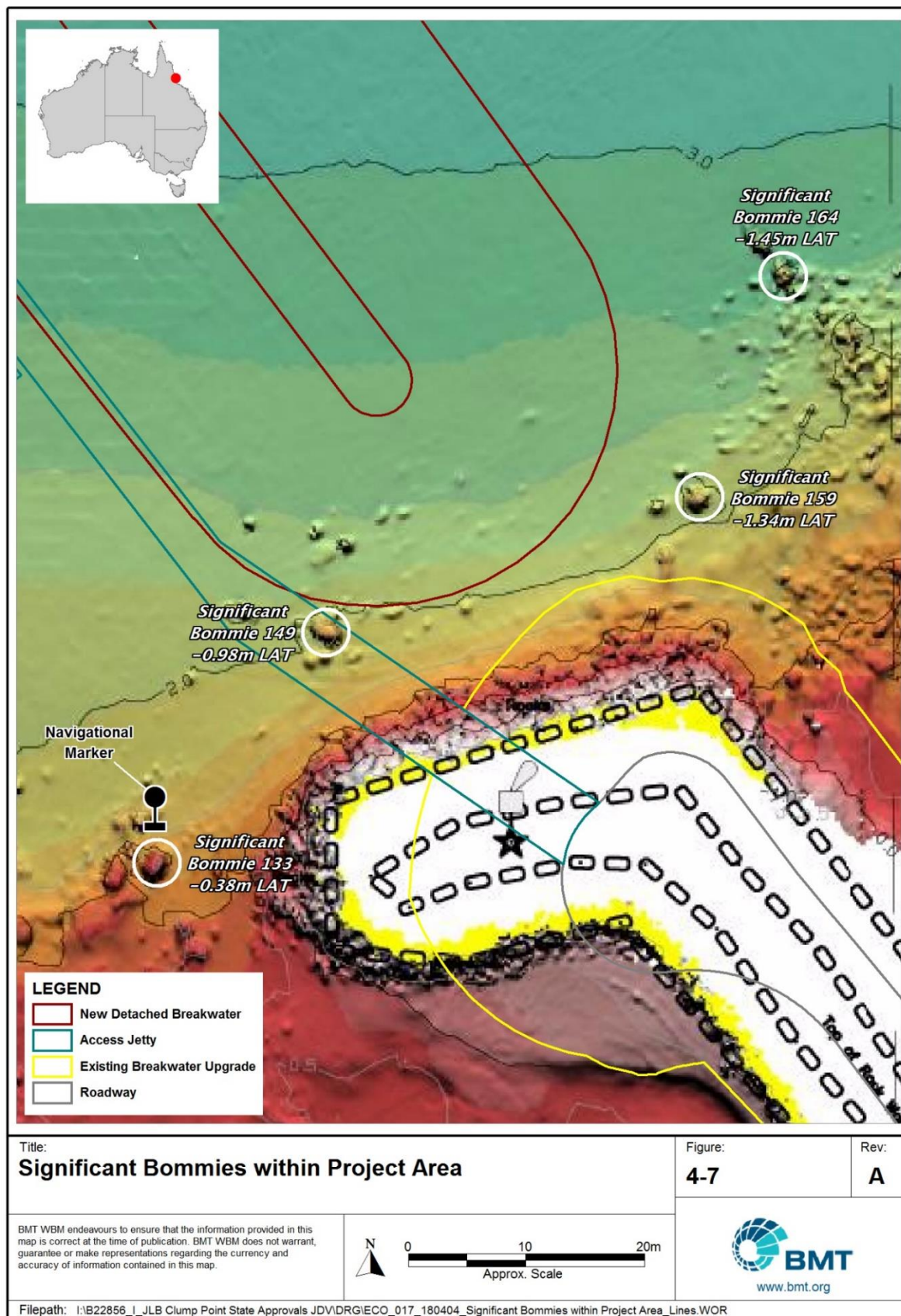


Figure 6: Significant bommies at Clump Point Boat Ramp



The fringing reef to the east of the Clump Point boat ramp, and the large coral bommies near the shipwreck at the entrance to Boat Bay, have high coral cover and are considered to have high local-scale biodiversity values. The rubble and boulder habitat immediately offshore of the northern margin of the rock wall had high cover of reef benthos, including some small hard and soft coral colonies, but were not as structurally complex as those occurring on Clump Point reef to the east.

Overall, considering the current general health, diversity and proximity of coral habitat, the potential impacts and management options proposed for these in the CEMP, it is considered that the residual risk to coral is low.

Clump Point and the adjoining submarine reefs are formed from Cainozoic basalts. The occurrence of basalt substrate is of conservation significance as this type of substrate does not occur anywhere else along the coast in the region (Chenoweth EPLA 2007).

Refer to criterion [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) for proposed avoidance, mitigation and monitoring strategies.

#### Mangroves

Mangroves in the proposed project area were surveyed and found to be comprised of 7.2 ha of *Rhizophora* dominated and 0.15 ha of *Avicennia marina* dominated habitat. This mangrove habitat is listed as of 'least concern' under Queensland's Regional Ecosystem framework with a total estimated extent of 45000 hectares which is approximately 2000 hectares less than its estimated 'pre-clearing' extent of 47000 hectares.

This habitat type is generally considered an important fish nursery habitat (depending on extent of tidal inundation) as well as habitat for a range of invertebrate and vertebrate species adapted to the specific levels of tidal flooding, salinity, wave and current action. A range of bird species could also be expected to feed and roost within this habitat ranging from waders such as herons and egrets through to mangrove adapted passerines such as the mangrove gerygone.

Mangrove vegetation will be impacted primarily along the eastern side of the current car-park (see Figure 7). This mixed mangrove habitat is dominated in some parts by *Rhizophora spp* and in others by *Avicennia marina*.

The proposed project footprint (in particular the increased boat ramp turning area and the increase in the existing breakwater access footprint) will require the clearing of mangrove vegetation on the eastern side of the northern carpark. It is estimated that approximately 1,013.5 m<sup>2</sup> of mangroves will need to be cleared.

All mangroves are protected as marine plants under the *Fisheries Act 1994* (Qld) and a permission to remove this vegetation has been granted by the Queensland Department of Agriculture and Fisheries (see Planning Act approval dated 5 March 2018). This permission allows for the '*..permanent removal of 1013.5m<sup>2</sup> of mangroves*' and requires that the Proponent enters into an agreed delivery arrangement to 'deliver an environmental offset in accordance with the *Environmental Offsets Act 2014* to counterbalance the significant residual impacts of the matter/s of state environmental significance being 1013.5m<sup>2</sup> of marine plants.'

Refer to criterion [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) for proposed avoidance, mitigation and monitoring strategies.

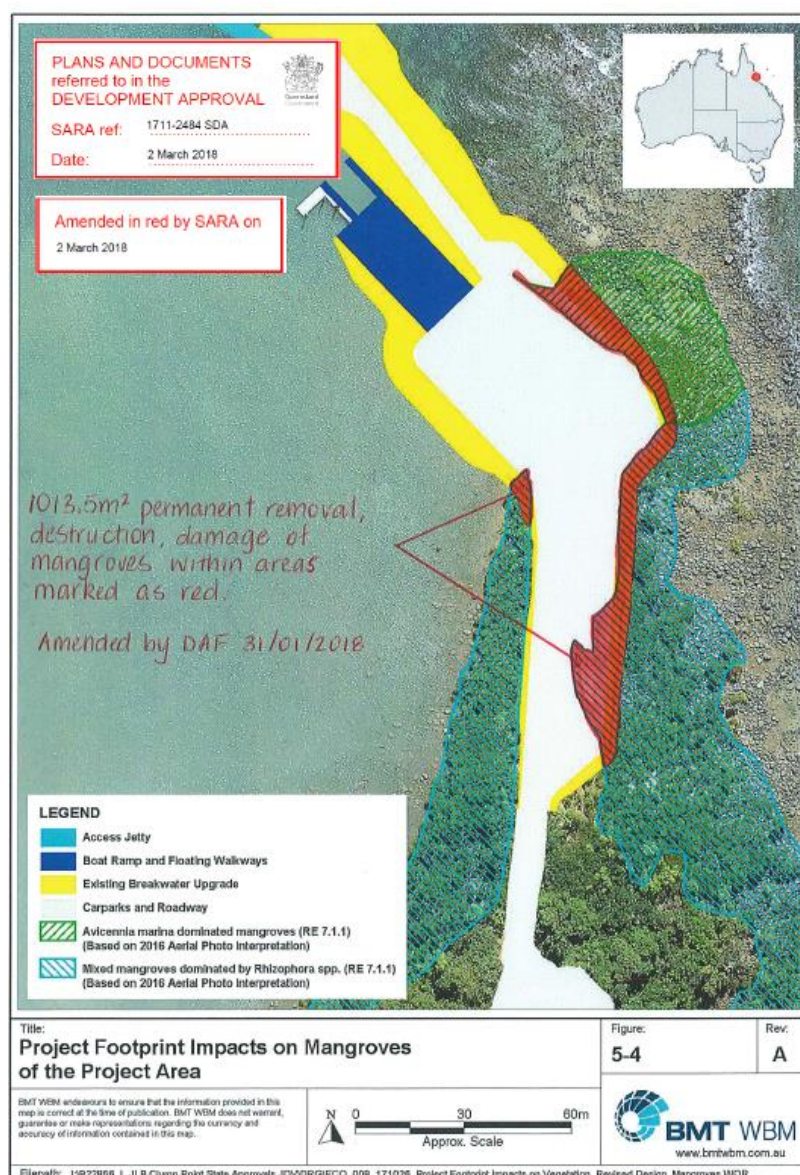


Figure 7: Project footprint (Impacts) on Mangrove habitat (version endorsed by the Department of Agriculture and Fisheries)

#### Impacts to Coastal Geomorphology

Works at Clump Point are proposed within the area of an existing and operational public boat ramp, located on the lee side of an existing breakwater which shelters the boat ramp from significant wind and waves. A potential risk from the construction of the new breakwater is the potential for siltation in the lee of the structure. If significant siltation were to occur then maintenance dredging would be required, this in itself would add an extra potential for environmental impacts.

The Applicant submitted two modelling reports in 2017 (BMT 2017a, BMT 2017b) which used high spatial resolution, phase-resolved wave modelling to investigate the wave structure interactions and the degree of sheltering offered by the structure. The siltation impact predictions were undertaken using a coupled hydrodynamic, wave and sediment transport modelling approach.

The Applicant modelled the difference between the effect of different gap widths (20m, 30m and 45m) between the proposed breakwater and the existing breakwater at the ramp. The outcome of the gap modelling showed that the 20m and 30m gap options provided virtually the same wave protection and siltation trends. Both of these options had a very small siltation rates of maximum 1-2 mm/year) suggesting that both these options would unlikely require dredging over the design life. By contrast, the 45m gap allowed more wave energy through, creating sub-optimal wave protection, significant morphological changes and increased siltation rates. Based on this a design gap of 25 metres was found to be suitable for meeting the mainland

separation objective and minimal siltation rate. The report (BMT WBM November 2017) concluded that there may be a need for some maintenance works following a severe tropical cyclone event.

The SI-PIP states that no initial or regular maintenance dredging is planned over the design life of the new facility, as a result of construction of the proposed project, the exception being as a result of severe weather events.

DTMR have an existing ERA to remove marine muds from the tow of the boat ramp. Historically, since 1999 approximately 80-90 cubic metres of sedimentation has occurred at this location (very low). These works were conducted with the basin fully contained by a silt curtain and with a detailed CEMP in place to avoid water quality impacts. Any future removal of sediment will be conducted in similar way. DTMR has concluded that the upgrade project (that is the subject of this assessment) may actually reduce the need for maintenance sediment removal due to the sealing of the road surface.

The Applicant has an existing application (G38869.1) (dated 28 April 2016) in with the Managing Agencies to remove 1500 cubic metres of material from the swing basin adjacent to the toe of the existing boat ramp. The dredging is a one off activity, with all material being disposed of on land. This application is currently under assessment.

DTMR have not ruled out the requirement for dredging after a marine contingency event such as a cyclone. Any such dredging is likely to be undertaken by a backhoe / grab dredger and relative small volumes of material based on historical evidence. Since the initial upgrade of the breakwater approved in 1999 there has only been one maintenance dredging campaign that occurred with the removal of a very small amount of material at the toe of the boat ramp (80-90m<sup>3</sup>). This is after the area experiencing two category 5 cyclones – Larry 2006 and Yasi 2011. The modelling also demonstrated that silt-sized material was unlikely to fill the gap, as the wave and current conditions within the zone was predicted to be too energetic to allow fine material to fall out of suspension there, thus keeping the separation objective and the connectivity of the water flow.

As such, the proposed works are not anticipated to interrupt sediment transport patterns or have any notable effect on the coastal processes, hydrodynamics or geomorphology of Boat Bay. Minor impacts may occur from sediment disturbance associated with the daily operation of the boat ramp such as boat propeller induced turbulence and noise. There is a possibility that this may reduce the benthic habitat value at the boat ramp but these are likely to be consistent with that which currently occurs at the existing facility.

Refer to criterion [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) for proposed avoidance, mitigation and monitoring strategies.

#### *Impacts to Water Quality*

Construction works have the potential to impact water quality through sediment disturbance (turbidity), exposure of Potential Acid Sulphate Soils (PASS) or contaminated sediments (from historical use) and accidents using machinery and equipment (oil/fuel spills, hazardous waste).

The proposed removal of sediments within the western reclamation area is no longer required (p.47 SI-PIP) which significantly reduces the risk of exposure of PASS. However the Applicant states that the successful contractor will be required develop an Acid Sulphate Soils Management Plan (ASSMP) which requires measures to ensure any exposed PASS is appropriately managed. The risk of the works generating Acid Sulphate Soils and impacting on local water quality and ecology is considered low.

The placement of rock, movement of rock currently at the site and the works in general have the potential to disturb sediments and even add new fine sediments (dirty rock) to the water column. The applicant has committed to the use of silt curtains during construction if turbidity monitoring indicates it is necessary and all rock brought into the marine environment must be clean. This must all be detailed in any Construction EMP.

The waters of the proposed project area are within the Tully River basin. The Environmental values (EVs) and water quality objectives (WQOs) have been scheduled for this area under the Queensland Government Environmental Protection (Water) Policy 2009 (EPP (Water)) water quality guidelines. Specifically, the waters of the area are mapped as:

- Boat Bay – enclosed coastal waters/lower estuary
- Waters east of Clump Point and north of Boat Bay – open coastal waters.

The EVs for these waters include aquatic ecosystems, human consumption, primary, secondary and visual recreation, and cultural and spiritual values. WQOs for aquatic ecosystem EVs include the parameters listed in Table 3.

*Table 3: Queensland Government Environmental Protection (Water) Policy 2009 (EPP (Water))*

Parameter	Boat Bay WQOs <sup>a</sup>	Open coastal waters WQOs <sup>a</sup>
Dissolved oxygen (% saturation)	85-105	95 / 100 / 105
pH	6.5 / 7.3 / 8.4	8.1 / 8.3 / 8.4
Ammonia nitrogen (µg/L)	<15	1 / 3 / 7
Oxidised nitrogen (µg/L)	nd	0 / 0 / 1
Particulate nitrogen (µg/L)	nd	≤20
Organic nitrogen (µg/L)	135	nd
Total nitrogen (µg/L)	180	76 / 105 / 140
Filterable reactive phosphorus (µg/L)	5	0 / 2 / 3
Particulate phosphorus (µg/L)	nd	≤2.8
Total phosphorus (µg/L)	20	8 / 14 / 22
Chlorophyll-a (µg/L)	2.0	<0.45
Turbidity (NTU)	10	0.6 / 0.9 / 1.8
Secchi depth (m)	1.0	≥10
Total suspended sediment (TSS) (mg/L)	nd	≤2

<sup>a</sup>Where three WQOs are provided, this represents the 20<sup>th</sup>, 50<sup>th</sup> and 80<sup>th</sup> percentiles

It is recommended that the key WQO's be used to guide the assessment of DTMR's proposed Water Quality Monitoring Program for the construction activities and ongoing operation of the facility

The Applicant has advised (SI-PIP) that they do not require the removal of approximately 2000 cubic metres of soft sediments (marine muds) from the western side of the reclamation works (to expand the car-park and turning areas). This material is considered to be pose high risk as PASS. The material will now be encapsulated within reclamation Area C (Figure 8 & Figure 11). DTMR are required to have an ASS Management Plan as part of their (Qld) Development Approval associated with the Tidal Works. This plan will ensure that there is a low risk of PASS oxidation occurring.

Any sediment removal at the toe of the boat ramp would require removed materials to be disposed of on land and impacts to water quality minimised through the use of a sediment curtain. Potential risks of this activity would be managed through an EMP and/or Schedule of Works.

It is possible that current and ongoing use of the area for boating facilities has had some localised and minor impacts on water quality (e.g. minor oil contamination from car-park run-off, minor fuel spills) as indicated by previous benthic sampling. While there is no evidence that operation of the current facility has had a significant impact on the marine environments of the area it is important that the risk to water quality (from oil/fuel contamination) is minimised.

Refer to criterion [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) for proposed avoidance, mitigation and monitoring strategies.



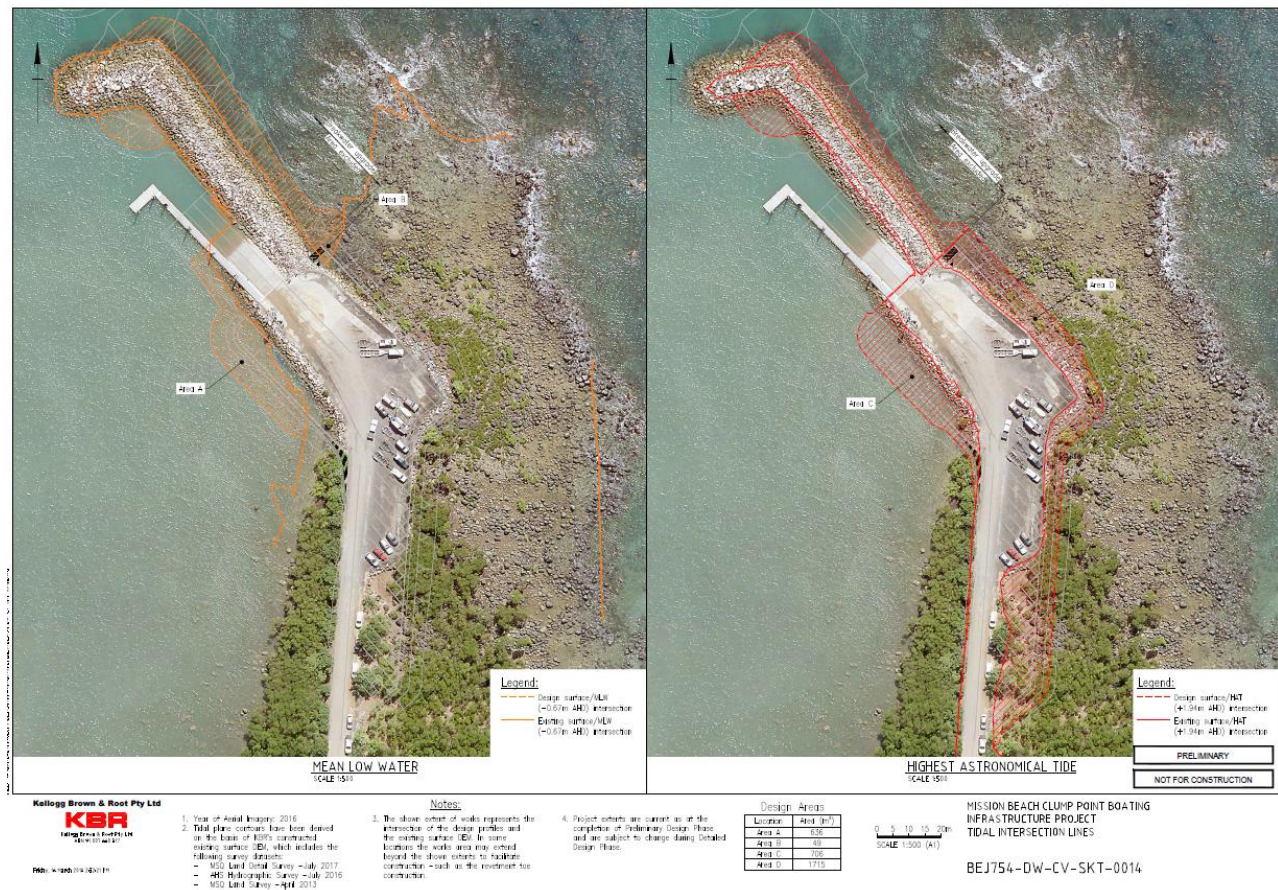


Figure 8: Map showing proposed works with Mean Low Water (on left) and Highest Astronomical Tide (on right). Design areas are shown as Figure 9. Close up of MLW in Figure 10. Close up of HAT in Figure 11.

Design Areas	
Location	Area (m <sup>2</sup> )
Area A	636
Area B	49
Area C	706
Area D	1715

Figure 9: Design Areas from Figure 8





Figure 10: Proposed development and Mean Low Water (Commonwealth Marine Park Boundary).





Figure 11: Proposed development and Highest Astronomical Tide. State Marine Park reclamation area (change in HAT) is predicated to be 2421m<sup>2</sup> (Area C + Area D)



#### *Impacts to Marine Wildlife*

The proposed project area may be accessed by sea turtles, primarily green turtles but flatback and loggerhead sea turtle species may also be encountered. Sea turtles are listed as threatened and migratory species under the *Environment Protection and Biodiversity Conservation Act 1999*. The specific project area is not recognised as high value foraging habitat for green turtles (paucity of seagrass beds) but given the general mobility and feeding habits of this species it is expected that individuals will be encountered. Flatback and loggerhead turtles are primarily carnivorous species that feed on benthic (and free swimming) invertebrates (e.g. crabs, molluscs, sea cucumbers, soft corals and jellyfish) which can be expected to be found within the area. The new breakwater would potentially provide new foraging habitat (following the settlement of benthic species onto the rocks).

The highly mobile nature of sea turtles means there is very low-risk of physical impact to individual turtles from the works (marine observers will be required). Overall risk to foraging habitat from the works is also considered to be low. The risk of boat-strike (during operation) is discussed below.

The location of the proposed project is a rocky headland with surrounding mangroves and not deemed suitable habitat for turtle nesting. The hydrodynamic modelling report shows no impacts to coastal processes and beaches in the vicinity. As such there are no significant nesting turtle sites that will be directly impacted by the proposed project.

Dugong feed primarily on seagrass species with a high protein and low fibre content and generally uproot whole plants, producing distinctive feeding trails. They prefer delicate, pioneer species that are high in nitrogen like *Halophila* and *Halodule*. Lush seagrass meadows are not favoured for foraging, and the total area of seagrass may not be a good indication of its value to dugongs. Dugongs are listed migratory species under the *Environment Protection and Biodiversity Conservation Act 1999*.

The seagrass species identified within the surveys described above include some favoured by dugong. While much of Boat Bay is quite shallow (and therefore has limited access with the tides) the specific footprint of the works is unlikely to impact on dugong habitat and the outer edge of the bay may present suitable feeding habitat.

Nearshore dolphins (Australian humpback dolphin and Australian snubfin dolphin) could occur within the area and are listed as migratory species under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth). Both species have a relatively broad diet and feed opportunistically and will travel into shallow water. Snubfin dolphins prefer water as shallow as 1-2m while humpback dolphin appear to prefer 2-5m water depth. A vulnerability assessment (GBRMPA 2012) states that habitat degradation, impacts to water quality and increased noise pollution are some of the human-related threats they face.

Estuarine crocodiles may also access the proposed project area particularly during the warmer months when they are more mobile and seeking out new habitat and breeding partners. Estuarine crocodiles are listed migratory species under the *Environment Protection and Biodiversity Conservation Act 1999*. However there are no significant river or creek systems close to the proposed project site that would suggest the site presents suitable habitat for permanent residence. It is unlikely that regional crocodile populations would be impacted in any significant way by the proposed project.

Marine megafauna is more likely to be impacted during normal day to day operation of the boating facilities (associated with the potential for increased vessel traffic causing disturbance and/or strike).

Refer to criterion [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) for proposed avoidance, mitigation and monitoring strategies.

#### *Impacts from Decommissioning Facility*

Potential impacts from decommissioning the facilities may occur from the following:

- damage to the benthic and intertidal environment from removing structures;
- partial structures being left on-site where tidal and wave action may cause movement or result in damage to the benthic environment including adjacent seagrass and coral communities;
- pollution and debris left in the Marine Parks during removal of the facilities; and
- removal of the facilities under inclement weather conditions resulting in damage to adjacent sensitive environments and wildlife.

#### *Impacts from Reclamation (under the Queensland Marine Parks Act 2004)*

The area of proposed 'reclamation' lies predominately above Mean Low Water Mark and therefore considered outside the Commonwealth Great Barrier Reef Marine Park. The GBRMPA has reviewed the proposed changes (fill/rock-wall to extend car-parking and manoeuvring areas) that occur below the Mean Low Water



(approximately 685m<sup>2</sup> in total) and decided they are minor and do not trigger section 31 of the *Great Barrier Reef Marine Park Act 1975*.

DTMR's response to additional information (SI-PIP Attachment B) shows the proposed project plan footprint against various reduced levels (RL), including Mean Low Water Springs (MLWS), Mean Low Water Mark (MLWM), Mean High Water Springs (MHWS) and Highest Astronomical Tide (HAT).

The proposed reclamation at Clump Point is required for the construction of the additional boat ramp, extra parking, rigging lane and vehicle manoeuvring. The area of State Marine Park to be reclaimed has been determined by DTMR as 2421m<sup>2</sup> (0.2421 hectares), which is calculated as the total area of land to be reclaimed between existing HAT line and new HAT line and is shown in Figure 11.

There are two distinct habitat areas of State Marine Park reclamation involving 706m<sup>2</sup> on the western side of the existing facility (Area C) which is predominantly marine muds and 1715m<sup>2</sup> of rocky foreshore on the eastern side (Area D) (Figure 11).

The reclamation on the eastern side is the area where the majority of the mangroves are required to be removed which has been discussed in detail above in this criteria. The rocky foreshore area is dispersed with large basaltic boulders which DTMR will be required to retain as far as practicable and relocate immediately adjacent to the eastern side of the area being reclaimed. DTMR also advised that this matter was also raised by the Djiru People. It is recommended that this matter be addressed in the EMP rather than a specific permit condition.

The perimeter of the reclamation area will be protected from erosion by a rock armour seawall. Any additional fill material required for the reclamation works will be obtained from a licensed quarry and fit for purpose (clean).

In regards to the reclamation proposed within the Great Barrier Reef Coast Marine Park, the *Marine Parks (Great Barrier Reef Coast) Zoning Plan 2004* allows for a permit to be issued within a Habitat Protection Zone. Section 15(4)(d) of the *Marine Parks Act 2004* also allows/supports small-scale works by or for a public authority, for a public purpose and where the works involve minimal disturbance to the park's natural resources, or minor alienation of parts of the park from enjoyment by the public. The area of reclamation is limited to ~2421m<sup>2</sup> and is consistent with other examples of small scale public works with the State Marine Parks. As such the proposed reclamation is considered consistent with the provisions of the *Marine Parks Act 2004* and revocation is not required.

The area of reclamation has been specifically designed to avoid impacts to Aboriginal cultural heritage which has been discussed in further detail below in this criteria. There is a Cultural Heritage Management Plan in place between the Djiru Warrangburra Aboriginal Corporation Registered Native Title Bodies Corporate (ROTEC) and the State of Queensland as represented by the Department of State Development and the works will be managed through a Construction EMP.

#### *Impacts from Mooring facilities*

Key potential impacts on the environment from the installation, operation and removal of mooring operations may include the following:

- potential damage to the environmental values of the Great Barrier Reef as a result of increasing tourist access; or
- potential damage to the benthic environment should the mooring facilities become unsecured or detached through improper design, inadequate maintenance or inclement weather conditions.

Possible impacts to the environment from the mooring facilities may occur throughout the life of the structure including installation, operation, decommissioning and removal. If they are appropriately designed and managed, moorings are likely to have minimal adverse impacts on the reef and offer many benefits for reef-based recreation and tourism activities especially in high demand and high intensity use locations. Moorings in tropical marine environments are often subject to severe conditions such as tropical cyclones, biofouling from marine organisms, abrasion and corrosion. Maintenance programs are therefore essential to monitor performance and inspect the facility for potential repairs, replacements or damage.

It is highly unlikely that the anticipated level of impact will have an effect on the overall Great Barrier Reef ecosystem however, some localised impacts could have a detrimental effect. Potential impacts have been identified in the risk assessment (Table 2) along with the treatment/management measures required to minimise those impacts.

The proposed six (6) swing moorings will be Environmentally Friendly Moorings (EFMs) which minimises the impact footprint of the moorings. These EFMs are designed to securely hold the vessels in place without ripping out and destroying seagrass beds around it by eliminating the destructive action of chains over the seabed.

According to the *Moorings in the Great Barrier Reef* policy, moorings promote environmental protection by reducing or eliminating the need to anchor in and adjacent to sensitive habitats. Furthermore, they provide safety and convenience for vessels in the Great Barrier Reef and enable the presentation of the Great Barrier Reef World Heritage Area to visitors. On the other hand, moorings will have a local environmental impact at the installation site and may impact on amenity and limit access by others to that site.

Refer to criterion [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) for proposed avoidance, mitigation and monitoring strategies.

#### *Impacts from Pollution (including impacts from refuelling operation)*

Potential impacts to the marine environment are likely through inadequate disposal of waste or dispersion of debris during installation, or maintenance works, and by jetty users and vessels using the facility. Waste management procedures, including storage, transport and disposal of waste will be addressed in the construction and operational EMPs.

The Applicant decided that a permanent refuelling facility was not justified due to scale of the marine infrastructure provided. Instead, the proposed design includes a single-lane access road to the start of the jetty. The jetty will be capable of supporting a 12.5m rigid fuel tanker and will also consist of a bunded area to contain any spills. The proposed refuelling point will be adjacent to a berth protected from prevailing sea conditions by the detached breakwater with fuel delivered by flexible hose operated from the fuel tanker. There are no proposed fixed fuel lines or fuel storage proposed on/near the new proposed facility.

The Reference Group was strongly of the view that refuelling was preferred at the new proposed Clump Point facilities instead of Perry Harvey jetty due to the more exposed wave conditions at Perry Harvey jetty. This was confirmed in the SI-PIP and also the fact that Perry Harvey Jetty has shallow-draught depths and the new location would provide a calm water berth in most conditions.

The main potential impacts from a refuelling operation is the potential for incidents that involve the loss of fuel from the refuelling truck. Fuel spill incidents are a hazard to the marine environment. A fuel spill response plan will be required including the use of fuel spill response kits, absorbent pads and booms should be located in the vicinity of the refuelling activities. All personnel must be trained in using the equipment to manage a potential hydrocarbon spill.

Marine pollution from the refuelling operation is considered in the Risk Assessment (Table 1) and further conditions are recommended in criteria GBRMPR 88Q(b)/QMPR 10(b).

#### **Social, Cultural and Heritage Values of the Marine Parks**

##### *Traditional Owner Heritage (Cultural) Values*

Traditional Owner heritage is a unique, dynamic and diverse living heritage. Traditional Owners express their cultural heritage through their relationships with country, people, beliefs, knowledge, language, symbols, ways of living, sea, land and objects. Indigenous values are described in four categories:

1. sacred sites, sites of particular significance and places important for cultural tradition;
2. Indigenous structures, technology, tools and archaeology;
3. stories, songlines, totems and languages; and
4. cultural practices, observances, customs and lore.

Indigenous values are interconnected and interrelated with other values. Many traditional cultural practices include plants, animals and the environment, making nature inseparable from cultural identity. Furthermore, ecosystem health is essential for maintaining Traditional Owner wellbeing. Traditional Owners make significant contributions to the ongoing management of the Reef and they maintain a unique and continuing connection to the Reef and its adjacent coastal areas.

Tourism and other recreational use of the Marine Parks has the potential to affect or displace Traditional Owners, particularly in high use areas. Further, tourism activities and increased visitation in areas where there are known or possible sites or areas of significance to Indigenous people are likely to have impacts on their values. Indigenous heritage is irreplaceable and once lost or damaged is lost forever. Tourist programs may also provide opportunity to educate visitors and raise awareness about the importance of Traditional Owner

heritage values and Traditional Owner activities in the Marine Parks, increasing opportunities for enjoyment, appreciation and understanding.

Furthermore, tourism can provide an avenue for economic benefit through employment and income by creating opportunities for enhancing Traditional Owner involvement through direct and indirect employment arising from a tourism program. Economic benefit and Traditional Owner use and dependency is also influenced by access and contributes to their empowerment.

Recreation is one of the major uses of the Marine Park. Recreation is woven into the social fabric of adjacent coastal communities and plays an important role in the health and wellbeing of regional communities. There are over 14 million recreational visits to the Marine Park by residents each year and overall visitors to the Great Barrier Reef were happy with their visit and would recommend the experience (GBRMPA 2012). The proposed project is aimed at increasing the safety of the users of the boating facilities, many of which are recreational users. The proposed project may increase the recreational use of the Marine Park by recreational users. The impacts of recreational users include fishing, anchor damage, littering, boat strike and fin damage. GBRMPA's Recreation Management Strategy states that:

*"With increasing use of the Marine Park comes an increasing demand for coastal infrastructure to access the area (for example, marinas and boat ramps). Construction and operation of these facilities can threaten the Great Barrier Reef ecosystem through damage to coastal habitats, dredging, dumping of spoil and effects on water quality. Improved access to the Marine Park through new roads (for example, on Cape York), marinas and boat ramps can also place greater pressure on areas with little previous use. High demand and long wait times at popular access points can result in use being spread to adjacent, less popular areas as people choose to spend more time travelling and less time queuing. Unregulated beach access is also a threat to coastal habitats that support the Great Barrier Reef."*

#### *Djiru People*

Clump Point is a significant cultural heritage location for the Djiru people represented by the Djiru Warrangburra Aboriginal Corporation and is the location of a number of recognised cultural heritage features. The Djiru have a long history of association in the area, recognised by the Federal Court's consent determination (non-exclusive) over the claim area (QCD2011/005 lodged in 2003) which includes 8900 hectares of land and waters.

*"The non-exclusive rights recognised, include the right to access and be present on the area, to hunt, fish and gather on the land and waters of the area for personal, domestic, and non-commercial communal purposes, and to maintain places of importance and areas of significance to the native title holders under their traditional laws and customs."* From: <http://www.nntt.gov.au/News-and-Publications/latest-news/Pages/NativeTitlerecognitionfortheDjiruPeople.aspx>

In 2010 the Cassowary Coast Regional Council and the Djiru People entered into an Indigenous Land Use Agreement Native Title number QI2009/063 including over Lot 550 on Plan NR7351.

DSD consulted with the Djiru people (the Djiru Warrangburra Aboriginal Corporation) throughout the preparation of the Development Plan, and received valuable advice and feedback on emerging information from ongoing studies and design options. The Djiru people were invited to join the Reference Group but preferred to be consulted separately to provide their advice.

DTMR provided further information in the SI-PIP which stated that four meetings took place with the Djiru board. Overall they noted areas of cultural heritage importance, the need to respect both the marine and terrestrial environments at Clump Point, and the need for more employment opportunities for all in the Mission Beach community, including the Djiru people.

The cultural heritage values of the area include a stone alignment, a fish trap, and numerous middens. The area is also important spiritually to the Djiru people for ceremonial purposes, story place and marine totems (DTMR EPBC Referral Summary of proposed action).

*"In a study undertaken by the Girrigun Aboriginal Corporation in 2007 (GAC, 2007), the following cultural heritage values were noted for the study area: The Djiru people's sense of identity as 'rainforest people' is very strong and is demonstrated by their relations with their rainforest neighbours and their affinity with the rainforest environment. Clump Point is universally seen by the Djiru people, both young and old, as a core place in their homeland, a hub of traditional life in pre-European times and a place today that they enjoy for its beauty, for its natural benefits and for the sense of connection to tradition and country that it brings to them."*

*The cultural components within Clump Point area are seen as tangible expressions of connection. The fish traps on either side of Clump Point and the ceremony ground are seen to be very significant as they invoke potent images of traditional life. Shell and artefact scatters recorded in the area are seen as lesser though still significant evidence of connection. These oral history and material items have significant value to researchers.*

The Clump Point coastal basalt formations and their ecosystems are unique to the Wet Tropics Bioregion of North Queensland and are of extreme significance to the Djiru people as land managers and to researchers" (BMT WBM, pg56 2018).

DSD and DTMR have stated that they have consulted with the Djiru people to ensure that all significant sites and measures will be undertaken to protect cultural heritage values of the area during construction and the ongoing maintenance and operation of the facility. The footprint of the proposed project area does not lie over any known cultural artefacts.

#### Aboriginal Cultural Heritage Act 2003 (Qld)

Under the *Aboriginal Cultural Heritage Act 2003 (Qld)* Duty of Care guidelines a person must exercise due diligence and reasonable precaution before undertaking an activity which may harm Aboriginal cultural heritage.

Part 7 of the *Aboriginal Cultural Heritage Act 2003 (Qld)* details when a Cultural Heritage Management Plan (CHMP) is required. The State of Queensland currently has a CHMP in place with the Djiru people for the project area for development works at Clump Point dated 2 March 2016. While the new proposal has been planned to avoid high value cultural features previously identified by the Djiru people (specifically the fish trap and high value terrestrial areas) the existing CHMP does not reflect the current scope of the project. Should a permit be granted it is recommended that the State of Queensland provide evidence of a revised CHMP with the Djiru Warrangburra Aboriginal Corporation for the current scope of the project.

Discussions on how the proposed project may potentially benefit the Djiru people are ongoing with the Queensland Government.

#### Native Title Act 1993 (Cth)

Pursuant to the requirements of the *Native Title Act 1993 (Cth)*, each application for permission is referred to the relevant Native Title claimants and/or representative body of the Traditional Owners, for a period of 31 days.

The purpose of Native Title notification (NTN) is to ensure that the possible impact of the grant of the permission on Native Title rights is not overlooked by the decision maker. Any comments received within that consultation period are taken into consideration when assessing the application. Traditional Owner heritage values are considered in all Marine Parks planning/ zoning, site management and policy.

Initially 3 NTN's were issued with the most recent issued on 2 March 2018 to the North Queensland Land Council and the Djiru people #2 with comments due by 3 April 2018. The notification referred to a new permit for the construction, upgrade and operation of a facility- being one boat ramp (including the addition of an extra lane), two breakwaters (one being upgraded, one being built approximately 140m long), two pontoons and associated jetties and walkways, and six moorings at Clump Point. Also included was reclamation associated with the construction of the Clump Point Mission Beach boating infrastructure project. The permit term was for no longer than 20 years.

In response to the NTN, there are no records of any comments received within the notification period. However, on 27 April 2018, DTMR forwarded a letter from Djiru people to GBRMPA dated 22 April 2018 seeking further consultation and information to address their concerns before the grant of a permit for the proposed project and outlining outcomes of a meeting held with DTMR on 14 April 2018.

Reference was made to a letter from Djiru to GBRMPA dated 20 March 2018. A copy of that letter was subsequently provided on 1 May 2018. The letter was a response to the NTN of 2 March 2018 and outlined the Djiru people's objection to the proposed project based on the following grounds:

- lack of detailed information;
- environmental concerns;
- impact on native title rights;
- impact on Aboriginal Heritage; and
- lack of consultation.



Additional information addressing the above matters was provided to Djiru people by DTMR and the Managing Agencies. On 28 June 2018 the North Queensland Land Council, on behalf of the Djiru people confirmed that they had no further comments in relation to this future act notice and that they would continue to liaise with the DTMR in relation to the project and any further concerns that may arise.

It is not intended that any permission resulting from this application would extinguish native title rights. The GBRMP Zoning Plan at s 1.7 (3) contains a statement to this effect.

#### *Cultural Heritage Values*

GBRMPA by the *Great Barrier Reef Marine Park Act 1975* and the Queensland Department of Environment and Science (DES) (through the Queensland Parks and Wildlife Service (QPWS) under the *Queensland Marine Parks Act 2004* have been charged with the responsibility of undertaking assessments in respect of all applications for permissions. The GBRMPA is required to have regard to the assessment criteria set out in the *Great Barrier Reef Marine Park Regulations 1983*. Similarly, QPWS is required to have regard to the assessment criteria set out in the *Queensland Marine Parks Regulation 2017*. In doing so, an assessment is made of the need to protect the cultural and heritage values of traditional people and the potential impact that such activities are likely to have on those values including options for monitoring, managing and mitigating those impacts.

GBRMPA is of the view that the notification to the Djiru people complies with the requirements of the *Great Barrier Reef Marine Park Act 1975* and *Marine Parks Act 2004* and the provisions of the determination insofar as it provides a description of the general area of the act proposed. Therefore there is no requirement for further additional information to be provided. However it is understood that the applicant has been in ongoing discussions with the Djiru people and this has been encouraged by the Managing Agencies.

#### *Historic heritage*

Historic heritage relates to the occupation and use of the Marine Park since the arrival of European and other migrants, and illustrates the way in which the many cultures of Australian people have modified, shaped and created the cultural environment. Historical places of social significance may include those with only intangible attributes, such as stories about an incident, event, a person or clan. The intangible attributes of historic heritage can be determined through the assessment of social values, such as personal connection, appreciation, understanding, aesthetics, and equity. Historic heritage also relates to World War II features and sites as well as voyages and shipwrecks.

Heritage is important to people of present and future generations, thus the significance of a site or location is determined through its social values, in particular aesthetics, personal connection, equity, enjoyment, appreciation and understanding.

Historic heritage is also addressed throughout this assessment in particular under '[social values](#)'.

Indigenous heritage is addressed above in [Traditional Owner Heritage](#). No further historic heritage sites (including artefacts or features, or archaeological artefacts) have been identified at the site of the proposed project.

#### *World Heritage and National Heritage Values*

The Great Barrier Reef is listed on both the World Heritage List and the National Heritage List and therefore contains both world heritage values and national heritage values. The two categories of heritage values are combined in this assessment as the area's national heritage listing is based on its recognition as a world heritage property — meaning that its national heritage values correspond to its world heritage values.

The Great Barrier Reef World Heritage Area covers 348,000 square kilometres and includes both marine areas and all the Great Barrier Reef islands contained inside its boundary. The property has the same boundary as the Great Barrier Reef Region, except that it also includes the internal waters and islands of Queensland.

The Great Barrier Reef was inscribed on the World Heritage List in 1981 and on the National Heritage List in 2007. It was the first coral reef ecosystem in the world to be listed as world heritage and today is one of only 46 marine world heritage areas. Its world heritage listing recognised the area was of outstanding universal value.

'Outstanding universal value is defined as cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity.'

Recognition of the Great Barrier Reef's outstanding universal value was based on all the four natural world heritage criteria in place at the time of listing — acknowledging the Reef's natural values, together with the strong ongoing links between Aboriginal and Torres Strait Islanders and their sea country.

Only those attributes of the Region that are consistent with the four criteria for which the Great Barrier Reef was inscribed are its world heritage values. A *Statement of the outstanding universal value of the Great Barrier Reef World Heritage Area* is the official statement adopted by the World Heritage Committee outlining how the property met the criteria for outstanding universal value, integrity and protection and management at the time of listing.

Given the broad scope of the criteria under which it was listed, almost all attributes of the Reef's environment are relevant to the criteria and contribute to its outstanding universal value. This includes its biodiversity, geomorphology, Traditional Owner connections to the area, ecological processes, aesthetic values and natural phenomena.

The Great Barrier Reef's outstanding universal value (OUV) occurs at the scale of the entire World Heritage Area.

Table 4 considers the proposed construction works and ongoing operation in terms of potential impacts to World Heritage Values.

*Table 4 – Potential impacts to World Heritage Values from the proposed works*

<b>World Heritage Criterion</b>	<b>Guidelines for impacts to attributes (taken from EPBC Act guidelines)</b>	<b>Consideration</b>
Criterion vii - contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;	Will the proposed action of itself, or in combination with other relevant impacts, result in loss or degradation of areas that are essential for maintaining the beauty of the property?	<ul style="list-style-type: none"> <li>Public comments included concern that the proposed project would impact aesthetics of the area (see further consideration below). The area is acknowledge locally as an attractive part of the region (however this includes the current existing facility (breakwater, boat ramp).</li> <li>'Concerns around 'death by a thousand cuts' raised in public submissions– i.e.it will contribute to a general degradation of 'natural beauty'. UNESCO report 2012 referenced.</li> <li>UNESCO 2012 also states '...the increased provision of visitor facilities to support sustainable tourism and enhance the appreciation of the property in itself is also an important contributor to the realisation of aesthetic values'</li> <li>The scale of the proposed project (including operation) is small in comparison to many other human activities/developments within the GBRWHA.</li> </ul>
Criterion viii – be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or	Will the proposed action of itself, or in combination with other relevant impacts, impact on the key interrelated and interdependent elements in their natural relationships?	<ul style="list-style-type: none"> <li>The proposed project will add further built infrastructure onto a relatively rare example of coastal basalt substrate (this type of substrate does not occur anywhere else along the coast in the region).</li> <li>The current facility and proposed project does not significantly impact on the physical nature of the basalt substrate (i.e. it is still there and the impacts may be more aesthetic); however rocks to be moved where operationally feasible.</li> <li>The proposed project will have some minor (local</li> </ul>

<b>World Heritage Criterion</b>	<b>Guidelines for impacts to attributes (taken from EPBC Act guidelines)</b>	<b>Consideration</b>
significant geomorphic or physiographic features		scale) impacts to hydro-dynamic processes and therefore at a very minor level on geomorphological processes. At the scale of the GBRWHA and at geological timescales this may be considered minor.
Criterion ix - be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;	Will the proposed action of itself, or in combination with other relevant impacts, result in the loss of necessary elements that are essential for the long-term conservation of the area's ecosystems and biodiversity?	<ul style="list-style-type: none"> <li>• UNESCO 2012 Report stated '....coastal and port development has impacts on the values associated with this criteria, notably through the cumulative additional pressures on nearshore species such as marine turtle, dugong, and seagrass habitats. The mission was not able to quantify the degree of impact that may have occurred since 1981, but considers this of high concern, in particular taking into account the rapid pace of development and the many development proposals currently awaiting determination'.</li> <li>• Matters relevant to this criterion are detailed above under potential environmental impacts. It was concluded that there are no major environmental impacts expected.</li> <li>• Other ecological and biological processes including water quality (including nutrient load, temperature) should not be significantly impacted by this project.</li> </ul>
Criterion x contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of Outstanding Universal Value from the point of view of science or conservation.	Will the proposed action of itself, or in combination with other relevant impacts, result in the loss or degradation of habitats required for maintaining the diverse fauna and flora of the region?	<ul style="list-style-type: none"> <li>• Matters relevant to this criterion are detailed above under potential environmental impacts. It was concluded that there are no major environmental impacts expected.</li> <li>• UNESCO 2012 Report stated in relation to this criterion '...there are significant concerns regarding the long term prospects for a number of key habitats and species, notably in the nearshore zone, such as to dugong, seagrass, fringing and nearshore coral reefs, and locally specific threatened populations such as the Australian snubfin dolphin...' These matters are relevant and have been considered in this assessment. It is concluded that this project in itself does not present a specific and clear threat to these elements of the OUV.</li> <li>• Concerns about 'cumulative impacts' are discussed at 11(1)(j)</li> </ul>

It should be noted that the Commonwealth Department of Environment and Energy's statement of reasons (Attachment C) for not declaring the proposed activity a controlled action was the following in relation to the proposed project and its potential impacts on the World Heritage Property when it was referred in 2017:

*'the Department considered it was unlikely there was a real chance or possibility that there would be a significant impact on the World Heritage values of the Great Barrier Reef World Heritage property as a result of the proposed action'* (from Commonwealth Department of Environment and Energy Statement of Reasons dated 14 July 2017). .

### *Commonwealth Heritage Values*

The Great Barrier Reef Marine Park has a rich and diverse historic heritage including a strong and significant maritime cultural heritage. Unlike the natural values of the Marine Parks, the historic values will not regenerate over time if damaged. The Commonwealth Heritage List is a list of natural, Indigenous and historic heritage places owned or controlled by the Australian Government. It includes places connected to defence, communications, customs and other government activities that reflect Australia's development as a nation. There are five (5) places in the Great Barrier Reef Marine Park which are on the Commonwealth Heritage List and therefore have Commonwealth heritage values (GBRMPA 2014). None of these sites will be impacted by this project.

### *Natural Heritage Values*

The natural heritage values of the Marine Parks are based on its biodiversity and ecosystem processes. The 2014 Outlook Report recognises that these values are generally in good condition, though some are in decline particularly in the southern two-thirds of the Marine Parks. The natural heritage values overlap with, and are assessed in the same way as, the biodiversity values. The potential impacts are likely to be same and to avoid repetition, the same considerations apply. Permit conditions such as appropriate signage and operational EMP's will be included in the permit to further educate and protect natural heritage values.

### *Social values*

The GBRMPA Social Value Assessment Guidelines describe social values of the Marine Park to include:

- Access
- Aesthetics
- Appreciation, understanding and enjoyment
- Human health
- Personal Connection
- Equity- intra and inter-generational
- Empowerment
- Employment and income

One of the most challenging aspects of evaluating impacts to social values is that a positive impact for one section of the community often creates a negative impact for another section. For example, an activity may generate employment and income for the tourism industry (and flow-on benefits to the broader regional economy) but may result in a reduction in aesthetics, amenity or personal connection for people who value the existing site in its more natural state. Such 'trade-offs' can be difficult to evaluate objectively in an assessment but the goal is to reduce risks and enhance benefits for all sections of the community to the greatest extent possible.

Some impacts described here (e.g. aesthetics) are difficult to quantify in terms of levels of impacts (negative or positive). It therefore follows that consideration of potential ways to mitigate identified (potential) impacts (see [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#)) below is equally challenging.

Aesthetics refers to people's perceptions of beauty of a site or object. Aesthetics is strongly influenced by visual appearance. The applicant has provided before and after (computer generated) photographic composites of what the Clump Point site would look like with and without the proposed development (Figure 12 & Figure 13).

Construction is anticipated to take approximately nine months. During this time, use of the boat ramp by recreational users will not be possible and commercial operators may also need to make other arrangements to access the Marine Parks.





*Figure 12: (above) current view of the Clump Point boat ramp and (below) computer generated representation of the changed visual amenity as seen from the Perry Harvey jetty (approximately 900-1000m away) at low tide*

The current Clump Point facility was upgraded in 1999 (breakwater added) and 2009 (floating pontoon next to boat-ramp). While it appears to have important value as a location for people to travel to (walking, cycling etc. as well as driving) and enjoy its natural appeal (views, rainforest canopy, snorkelling) its main direct use is as a marine access point. It is also a location from which people will fish from the shore-line and the current infrastructure. It is already one of the main points of access for small/medium sized vessels to/from the Marine Parks in the region (from Cardwell (50km south) to Mourilyan Harbour (30km north)). The proposed project is likely to increase this focus of use but has been designed to ensure minimal impact on amenity/aesthetics.

Any potential impacts to aesthetics are likely to persist in the longer term, and therefore there may also be possible equity considerations where the impacts may be evident for one or many generations. There are also possible empowerment considerations where changes to aesthetics may alter people's aspirations to participate in stewardship actions. The changes can be positive or negative.

A broad summary of the current and future (if the proposed project is approved) cultural and social use (and impacts) of the proposed project site and any flow-on effects within the Marine Parks is as follows:

- Marine access node for recreational and some commercial vessels (project is expected to improve this). Future access for commercial use pen berths and swing moorings) will be allocated through a formal process run by CCRC (as facility manager) with assistance from DTMR (see SI-PIP). Recreational users will have two floating walkways at the boat ramp which no longer have to be shared with commercial operators. The proposed inner pontoon berth will include a public berthing side dedicated to public use. If

not constructed (due to budgetary constraints) the outer pontoon berth will include a dedicated side for recreational use.

- Increased vessel movements to/from the site following expansion. The proposed project is expected to improve safety for these movements.
- The proposed project is intended to improve public and commercial access to the Marine Parks and is therefore expected to see an increase in use in some areas. Some Marine Park (and island National Park) sites may experience increased use with more vessels travelling from this facility.
- Conflict between users of the facility (recreational, commercial) - while the design makes efforts to separate uses (commercial and recreational) it may be possible that overlapping use will cause conflict. E.g. a group of tourists being held up by a commercial fishing vessel unloading or a high volume of recreational vessels entering/exiting the Marine Parks. This will need to be managed through an Operational EMP and any other appropriate management mechanisms put in place by the Cassowary Coast Regional Council.

#### **Evidence from public submissions**

A large number of public submissions were received in relation to the potential impacts of the proposed project on the environment and social, cultural and heritage values of the Marine Park. Those submission that were against the proposal raised the following concerns:

- Hydrodynamic effects of sediment & water flow under the bridge causing increased turbidity and a reduction in water clarity
- Loss of benthic habitat from rockwall
- Impacts to mangrove habitat
- Impacts to turtles, dugongs, dolphins, humpback whales, manta rays, prawns, fish nursery habitat, fragile coral reefs, seagrass, mangroves
- Decrease in fish stocks from increase in fishing pressure
- Increasing large vessel use
- Increase pollution along the foreshore
- Increase large scale development
- Large out of town operators taking away business from locals
- Ugly development – loss of amenity values
- Destruction from cyclones not being cleaned up
- Will result in increased user conflict (commercial vs recreational users)
- Refuelling activities causing spills and pollution
- Refuelling available at Perry Harvey jetty
- Barging means bringing ugly island rubbish in uncovered skip bins to the boat ramp
- Beach launching is already ok – no need for further facilities
- Will change the character of the town and 'what sets this region apart and attracts visitors'
- Proposal represents 'death by a thousand cuts' in relation to coastal development along the Marine Park coast
- That the proposal was the first step towards the development of a marina and a port.
- That the Djiru Traditional Owners did not want the facilities (one submitter who identified as a Djiru Traditional Owner claimed the Djiru were opposed to the proposed project in its current form).
- Construction timeframe
- Loss of access, especially for recreational users, during construction
- Increase of boat collisions due to design
- Anti-fouling paint pollution from moored boats
- Need for the proposed project in the first place.

Those submissions that were generally for the proposal raised the following potential benefits:

- Improve boater safety
- Improved tourism opportunities
- Good economic outcomes for local business, from refueling and the reduced time with not having to travel for refueling and from opportunities for other sorts of jobs

- Increased opportunities for enjoyment of the Marine Park
- Increased opportunities to educate visitors about the Great Barrier Reef and have them take those messages home with them
- Ease congestion associated with existing facilities
- Complements the lifestyle of the Mission Beach area
- Allows greater opportunities for commercial fishing
- Allows greater opportunities for recreational fishing
- People's well being will be supported by being able to access and appreciate the Marine Park
- There will be better access for visitors to offshore islands and reefs
- Generally improved Marine Park access
- A reduction in environmental risks from boats not coming into contact with e.g. Perry Harvey Jetty or accessing the Marine Park in weather events (noting that
- No need for beach launching, resulting in protecting beach habitat

#### **Potential conditions**

Refer to criterion [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) for proposed avoidance, mitigation and monitoring strategies.

#### **Conclusions- Environment, Social, Cultural and Heritage Values**

The proposed project and its construction and operation present a number of risks (and changes) to the environment of the Marine Parks (Table 2). These include some permanent (direct) changes to the habitat (e.g. rock breakwater and reclamation extending above normal tidal influence instead of soft sediments, mangroves and boulder fields) and a number of indirect changes and ongoing operational risks to the environment (e.g. shading, fuel spills, changes to sediment movements and vessel strikes on marine fauna).

It is not possible to conclude that the proposed project will result in no measurable changes to the Marine Parks. However a key question is how much of the change will there be to the values. For example it is likely that the new breakwater will provide roosting habitat and shelter for seabird species and a new complex sub-tidal structure for a variety of marine organisms to settle on or feed amongst. It is also possible that the proposed project if appropriately developed and managed will result in overall better boating environmental practices by commercial and recreational users and reduced risk of marine incidents.

Some negative environmental outcomes are also likely. For example the permanent loss of some mangrove and soft sediment habitats (this is covered under an agreed offset between the Department of Agriculture and Fisheries and the applicant). However it also needs to be noted that some potential negative outcomes e.g. waste generation, minor spills, and disturbance to wildlife would otherwise be likely to continue occurring at other marine access nodes if this facility was not constructed. (i.e. the proposed facility may not necessarily result in substantial increases in some marine risks but rather shift them from another location (and potentially allow for better management of them)). In conclusion it is considered that the identified environmental effects of the proposed project fall within the limits of acceptable and manageable.

The proposed project has generated significant public feedback on matters related to social, cultural and heritage values. Aesthetic values are discussed further at 88(R)(b) below. There was limited information provided (from public submissions) on how the proposal might impact negatively on a person's social values of the specific site (i.e. use of Clump Point by the individual), in particular how the loss of access to using the existing boat ramp for up to nine months during construction. A number of submissions suggested positive social outcomes through improved marine facilities and therefore improved Marine Park access and use.

The impacts of increased recreational use associated with the proposed project are appropriately managed through the range of existing management tools. Any long-term concerns about crowding and congestion in the Marine Parks can be managed by changes to the site specific management going forward. Appropriate signage will assist in education and community awareness.

The Djiru People have demonstrated a long history of association with Clump Point in exercising their traditional laws and customs passed on from generation to generation. The area remains significant to the Djiru People in maintaining and exercising their native title rights and interests.

An approved Cultural Heritage Management Plan under the (Qld) *Aboriginal Cultural Heritage Act 2003* between the Queensland Government and the Djiru People will ensure that the proposed project does not impinge on any known sites of cultural heritage significance. Any intensification of infrastructure and use in the area is likely to diminish the cultural heritage values of the site to the Djiru People.

All of these impacts (real and potential) have been considered in Table 2. Potential conditions and actions to mitigate these are listed above and [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) below goes into further detail on this.

Taking this into account; the varied responses through the public submission process; and the advantages associated with having access to a newly developed and safer marine access point (for a coastal community with significant reliance on marine access); it is concluded that the assessed values are at low risk from impacts associated with the proposed activities.



GBRMPR [88Q(b)]	options for monitoring, managing and mitigating the potential impacts of the proposed conduct;
QMPR [10(b)]	options for monitoring, managing and mitigating the potential impact of the proposed conduct on the environment and on the cultural resources of the marine park or the part;

### Overview

The 'potential impacts of the proposed conduct' are detailed in [GBRMPR 88Q\(a\)/QMPR 10\(a\)](#) above and Table 2 (Risk Assessment). The risk assessment (Table 2) outlines potential treatment/management and monitoring actions for the activities proposed. A range of conditions have been recommended to mitigate potential impacts and to manage the activities, most of these fall into the standard suite of conditions for facilities. They include:

- A requirement to take all reasonable steps to ensure operations and works do not cause harm to the environment and Aboriginal cultural heritage and notification to the Managing Agency should an incident occur that causes harm to the environment is recommended to avoid and minimise any potential impacts to the environment and Aboriginal cultural heritage from the facility operations/mooring and/or fuel transfer operations.
- In order to reduce the risk of impacts from poorly maintained facilities, conditions are recommended to provide for the Managing Agency to witness, inspect or audit the operation, if required. Facility compliance certificates should be sought every three (3) years to ensure the facility is installed and maintained in accordance with the As Constructed Drawings.
- For moorings, annual compliance certificates should be provided if asked for to ensure the moorings have been maintained appropriately and are fit for purpose.
- It is proposed to require a monitoring plan to identify any siltation issues within the gap.
- The permittee must adhere to all Commonwealth and State laws.
- To ensure the facility was upgraded in accordance with Design Drawings, a condition should be included which requires the submittal of a compliance certificate following works, signed by a RPEQ.
- It is recommended that the Applicant be required to enter into a Deed of Agreement to ensure financial insurance in the event that the facilities result in environmental harm or require removal. In order to provide assurance that a damage assessment is completed should an incident occur, a clause should be included within the deed which requires that should the Managing Agency suspect harm to the environment as a result of an incident, the costs of a damage assessment will be recovered from the Applicant. The deed serves three main purposes:
  - to commit the permission holder to repairing, rehabilitating, inspecting, or removing a facility; and/or taking other preventive or corrective actions to protect the Marine Park
  - to indemnify GBRMPA from any adverse impacts resulting from the proposed project, including any costs incurred by GBRMPA to remedy those adverse impacts
  - to require the permission holder to take out and maintain appropriate level of insurance, including for public liability, removal and clean up
- A Schedule of Works should be required and approved by the Managing Agency prior to any works (i.e. upgrades, repairs, clean-up, removal or decommission) being completed. It is recommended that conditions require an ESS to supervise the works if advised by the Managing Agency.
- An EMP should be required for both construction and operation and approved by the Managing Agency prior to any works (i.e. upgrades, repairs, clean-up, removal or decommission) being completed. The EMP should include but not be limited to the proposed soft start procedures, Marine Mammal and Protected Reptile Observers, sediment curtains, source of reclamation area fill material, construction methodologies, turbidity monitoring requirements and control measures to prevent harm from PSS and ASS. These EMPs will be required to be publically available on the TMR website.

### Impacts of Facility Construction

The construction phase of the proposed project presents the highest risk, given the need to place approximately seventy tonnes of core/filter, secondary and primary armour rock within the marine environment. These materials may need to come from multiple quarries at different travelling distances from

Clump Point which will impact significantly on the final cost. An independent estimate comparing barge and truck-based breakwater construction methods and costs indicates that barge-based construction will be about 163% of equivalent truck-based construction costs. On this basis, it is likely barge-based breakwater construction will not be achievable within the proposed project budget.

For this reason, the proposed project has been progressed on the assumption that temporary land access will be required for the breakwater construction works. Despite this advice, DTMR has no reason to exclude barge-based construction during the tender process and will consider any proposal on its merits. The PIP stated '*...the method of delivery of rock for the new breakwater will be determined as part of the construction tender process. Tenderers will be invited to submit offers that fall within the project budget and will not be constrained to a particular rock delivery method. While community feedback is that barge delivery is preferred, initial cost analysis indicates that delivery of breakwater rock by barge may cost considerably more than delivery by truck, and may not be achievable within the Project budget. The environmental risks of truck-based supply of rock are considered to be manageable, subject to strict traffic management controls.*'

Temporary access during construction will maintain the GBR Marine Park boundary and allow tidal flows through the gap between the breakwater and the mainland. This will be achieved using one or more temporary concrete culverts or a temporary bridge, based on the experience and equipment available to the successful contractor.

Construction activities may temporarily increase suspended sediment concentrations in and around the proposed project site. Key sediment sources could include resuspension of sediments during rock placement, soil or rock fill and general earthworks at the site. Construction can also affect water quality through accidents/incidents and the exposure of acid sulphate soils (in particular from reclamation works).

The proposed removal of sediments within the western reclamation area is no longer required (p.47 SI-PIP) which significantly reduces the risk of exposure of PASS. However the Applicant states that the successful contractor will be required develop an Acid Sulfate Sulphate Soils Management Plan (ASSMP) which requires measures to ensure any exposed PASS is appropriately managed, prevents the release of contaminants into the marine environment and retains the PH of local waters. The risk of the works generating Acid Sulphate Soils and impacting on local water quality and ecology is considered low.

The placement of rock, movement of rock currently at the site and the works in general have the potential to disturb sediments and even add new fine sediments (dirty rock) to the water column. The applicant has committed to the use of silt curtains during construction if turbidity monitoring indicates it is necessary and all rock brought into the marine environment must be clean. This must all be detailed in any Construction EMP.

If the permissions were to be granted, consideration should be given to the inclusion of conditions to develop and implement a Construction Environmental Management Plan to manage construction related risks.

Preliminary design drawings provided by the applicant depicts a rock revetment wall around the perimeter of the area of reclamation (car park). It is anticipated that the car park will be created using a long arm excavator and tip trucks working outwards from the existing roadway. Geo-fabric linings are normally used to support and retain the fill material and sediment curtains will be required to minimise the effects of sediment run off or turbidity. All works would be subject to an EMP approved by the Managing Agency prior to the commencement of any works. Given the small scale of the works proposed, significant impacts to the State Marine Park are not likely from the proposed reclamation (see section on mangroves above), therefore the reclamation proposed is considered to be consistent with the intent of section 15(4)(d) of the *Marine Parks Act 2004* and as such a permit can be issued within a Habitat Protection Zone.

If the permissions were to be granted, it is recommended that a Construction EMP be required which includes the following information:

- source of reclamation area fill material;
- source of rockwall material
- sediment curtains; and
- construction methodologies.

### *Mangroves*

The draft CEMP contains a number of management measures including the development of a Clearing Plan and a Rehabilitation Plan that includes long-term rehabilitation objectives.

If the permissions were to be granted, consideration should be given to the inclusion of a condition that the applicant prepare a CEMP which includes details on a clearing plan that clearly identifies the areas of vegetation that will be permanently lost, areas that will be impacted and rehabilitated and areas that will be retained.

If the permissions were to be granted, consideration should be given to the inclusion of a condition that the applicant prepare a CEMP that includes a rehabilitation plan to minimise impact on mangroves.

### **Impacts from Facility Operation**

Possible impacts to the environment from the boat ramp, breakwater, pontoon walkways, moorings and parking facilities may occur throughout the life of the structures including installation, operation, maintenance, decommissioning and removal. If they are appropriately designed and managed, these structures are likely to have minimal adverse impacts on the reef and offer increased public access to the Marine Parks (for more information on public access refer to impacts to social values).

A facility in the tropical marine environment is often subjected to severe conditions such as tropical cyclones, biofouling from marine organisms, abrasion and corrosion. Maintenance programs are therefore essential to monitor performance and inspect the facility for potential repairs, replacements or damage. Neglecting these programs may result in deterioration or failure of the facility to perform its desired purpose (Kapitzke *et al.* 2002).

In particular, risks associated with the operation of the facilities include:

- Refuelling activities at the facility;
- Management of the facility during extreme weather events (this includes vessels seeking shelter);
- Spills, discharge and accidents.

If the permissions were to be granted, there should be a requirement to notify the Managing Agency within 24 hours in order to reduce any potential risks to the environment. Furthermore, a deed would provide assurance that should an incident occur or the structures become damaged or abandoned, the costs associated with the clean-up or removal would be covered through insurance. In order to provide assurance that a damage assessment is completed should an incident occur, a clause should be included within the deed which requires that should the Managing Agency suspect harm to the environment as a result of an incident, the costs of a damage assessment will be recovered from the Permittee.

If the permissions were to be granted, consideration should be given to the inclusion of conditions to reduce the threat of impacts from poorly maintained facilities including requirements for compliance certificates every three years to ensure the facilities have been maintained in a good state of repair and in accordance with as constructed drawings. It is also recommended that following a significant event (i.e. cyclone) or works, maintenance certificates are provided to ensure the facility has not been damaged and/or the works have not compromised the structural stability of the facility.

If the permissions were to be granted, consideration should be given to the inclusion of conditions to reduce the risk of refuelling accidents by including a refuelling manual and incident response procedures. This could be included in an Operational Environmental Management Plan.

If the applicant's permission was to be granted, consideration should be given to ensuring a required Operational EMP has detailed processes in place for safe re-fuelling operations (including identifying who is responsible for these). Gross pollutant traps, grassy verges, storm water management, sediment erosion controls and other design features (to minimise oily waste escape)

for the terrestrial car-park and roads conditions should be included.

#### **Impacts to Marine Wildlife (during construction and operation of the facility)**

In order to minimise any impacts from marine based works, the Applicant proposes to undertake a soft start (ramp up) procedure whereby machinery is started at low power and gradually increased to full power over a period of 30 minutes. Marine Mammal and Marine Reptile Observers will also be utilised during works which will only occur during daylight hours where visibility above water of up to one (1) kilometre can be achieved. If marine mammals are observed within a 500 metre radius of the work area, all machinery will be shut down until the animal leaves the area. If the animal is not seen to leave the area, it is recommended that the recommencement of works does not occur until the animal is not sighted for at least 30 minutes.

If the permissions were to be granted, consideration should be given to the inclusion of conditions to reduce the threat of impacts from proposed upgrade works. This could be achieved through the following:

- requirement of a Schedule of Works which must be approved by the Managing Agency;
- requirement of an Construction EMP which must be approved by the Managing Agency and include but not be limited to the proposed soft start procedures, Marine Mammal and Marine Reptile Observers, sediment curtains, construction methodologies and turbidity monitoring requirements;
- ESS requirements; and
- a compliance certificate following completion of the works to ensure the upgrades were constructed in accordance with the approved Design Drawings.

The draft CEMP recommends a number of management measures to avoid impacts to marine megafauna which include exclusion zones, observers, soft starts, shielded artificial lights sources and all construction to be conducted during daylight hours with surface visibility of up to 1 km (360 degrees).

The operational EMP should contain details of go-slow zones and signage that will be installed to manage the potential impacts on marine megafauna and raise awareness of users of the facilities of the marine megafauna that are found in the area.

If the permissions were to be granted, consideration should be given to the inclusion of conditions to reduce the threat of impacts from the day to day use of the facilities. This could be achieved through the development of an Operational Environmental Management Plan with details of go-slow zones and appropriate signage about marine mega-fauna and how to minimise the risk of impacting on them. Furthermore the applicant will need to notify of any incidents within 24 hours in order to reduce any potential risks to the environment.

#### **Impacts to Water Quality**

The applicant has developed a (draft) Construction Environmental Management Plan which deals with how to reduce and mitigate any impacts associated with the construction phase of the proposed project. The management measures for water quality (turbidity and ASS) investigates a number of management options that could reduce turbidity and thus any impact on existing seagrasses; they include:

- Use of only clean rock material that will not cause a turbid plume can be used for construction of the breakwater;
- Establish pre-construction water quality baseline and establish a water quality monitoring program for the construction phase
- Silt curtains may also be required if monitoring establishes that turbidity is having a significant impact on adjacent seagrass (and coral) habitats.

To mitigate the potential impacts associated with an incident during refuelling, if the permissions were to be granted, consideration should be given to the inclusion of conditions requiring the applicant to submit a refuelling operations manual (or including this in the Operational EMP) for



approval by the Managing Agency.

If the Perry Harvey jetty is considered 'un-safe' for refuelling then consideration should be given to removing permission for refuelling from the Perry Harvey jetty permit (G12/35298.1).

#### *Marine debris*

It was noted that some anchor chain was located around coral in the Boat Bay boulder. It is recommended that the applicant can work to remove this anchor chain while doing works in the area in order to increase the resilience of the existing coral and to reduce marine debris/pollution.

If the permissions were to be granted, consideration could be given to the inclusion of a condition to clean up the stray floating walkway modules, remove any anchor chain in the existing coral reef and conduct a general clean-up around Boat Bay in order to increase resilience of the existing coral and increase amenity value.

#### **Impacts from Decommissioning Facilities**

The proposed facilities are intended to be permanent, however, in the unlikely event that decommissioning of the facilities is required it is prudent to assess potential impacts in this assessment. Potential salvage operations should ensure that the sensitive environments adjacent to the structures are protected from physical disturbance and pollution. It is anticipated that permit conditions would effectively minimise any potential impacts from decommissioning or removing a structure by requiring a schedule of works, EMP and ESS.

If the permissions were to be granted, consideration should be given to the inclusion of conditions to reduce the threat of impacts from proposed works including removal or decommissioning activities. This could be achieved through the requirement of a Schedule of Works which must be approved by the Managing Agency and ESS requirements.

If the permissions were to be granted, a condition requiring that all reasonable steps are taken to ensure operations and works do not cause harm to the environment should be considered. In order to reduce the potential risk of impacts resulting from an incident, it is recommended that a condition be included which requires notification to the Managing Agency within 24 hours should an incident which causes harm to the environment occur.

#### **Impacts from Mooring facilities**

No formal environmental monitoring of individual moorings is considered necessary although compliance with permit conditions will be routinely monitored through field audits or desktop compliance audits.

Managing and mitigating potential impacts are largely dealt with through appropriate mooring design, operation within those design parameters, site selection and site supervision during installation. Relevant permit conditions are recommended to this effect.

If the permissions were to be granted, consideration should be given to the inclusion of

- conditions which requires approved compliance certificates are provided annually on the anniversary of the date of installation of each mooring that verifies each mooring is installed and maintained in accordance with an approved design drawing and provide those certificates within 21 days of being called upon to do so
- condition requiring schedule of works prior to the commencement of any works including installation and/or maintenance of moorings
- condition allowing for environmental site supervision to supervise installation and also advise on suitability of proposed site
- conditions ensuring appropriate mooring design (fit for purpose, use of riser buoys) and site supervision during installation and maintenance.

## Impacts to Social, Cultural and Heritage values

### Cultural resources (Traditional Owners)

DSD and DTMR have stated that they have consulted with the Djiru People to ensure that all significant sites and measures will be undertaken to protect cultural heritage values of the area during construction and the ongoing maintenance and operation of the facility. The footprint of the works area does not lie over any known cultural artefacts and that there is a Cultural Heritage Management Plan with the Djiru People for the proposed project area.

DTMR stated at the time of their EPBC referral that *“the State held 3 formal meetings with the Djiru people about the proposed scope (because they did not wish to be part of the formal reference group process), The Djiru have provided verbal support for the direction of the project to date. The State currently has a Cultural Heritage Agreement in place with the Djiru People **for development works** at Clump Point and the new proposal has been planned to avoid high value cultural features previously identified by the Djiru People (specifically the fish trap and high value terrestrial areas.”* (Extract for DTMR EPBC Act referral).

### Aboriginal Cultural Heritage Act 2003

An approved Cultural Heritage Management Plan under the (Qld) *Aboriginal Cultural Heritage Act 2003* between the Queensland Government and the Djiru People will ensure that the proposed project does not impinge on any known sites of cultural heritage significance. Any intensification of infrastructure and use in the area is likely to diminish the cultural heritage values of the site to the Djiru People.

From the public submissions the following conditions (or elements of EMP's) are recommended further to those already considered as standards:

If the permissions were to be granted there is a need to ensure that the Operational EMP has suitable sections in relation to management of all activities at the facility (re-fuelling, loading and unloading, vessel movements, safety, lighting, waste-management etc.). Some of these may then be linked to further agreements between DTMR and the CCRC as the facility (operational) managers.

If the permissions were to be granted there is a need to ensure suitable conditions are in place to manage the requirements and concerns of the Djiru Traditional Owners, A Cultural Heritage Management Plan needs to be in place and approved by the Djiru Traditional Owners

If the permissions were to be granted a permit condition could be included that the Permittee needs to display appropriate signage about the cultural significance of the area to the Djiru Traditional Owners.

### Evidence from public submissions

Some concerns were raised about elements of the proposed project (if it proceeds) and how they might be managed. For example:

- Depending on the tide, the height, length, and position of the proposed extended breakwater possess a safety risk, because vessels would have poor visibility to starboard...which could cause collisions with inward bound vessels turning to port. The combination of commercial and recreational activity may prove fatal, with various environmental and legal consequences. DTMR (p.28 SI-PIP) states in response that a) vessel movements are the responsibility of the operators and governed by a number of pieces of legislation and b) details of navigation aids (shown in Appendix H) will be subject to final approval by the Regional Harbour Master.
- Concerns raised about large rocks/coral bommies near the boat-ramp. The suggestion was to ‘...put a guard-rail or walkway along the inside of the breakwater to keep boats off the rocks’ or put a navigation marker on them. DTMR response (p.33 SI-PIP) stated ‘...no relocation of the coral bommies is needed – the removal of the return from the existing breakwater will not only provide a more direct access path to the boat ramps but also allow the two bommies...to be retained. The bommies will be marked as navigation hazards.....yellow special marker buoys marking the location of the bommie on the edge of the channel (will be constructed)’.

However some further matters for consideration, and potential extra monitoring, managing and mitigating conditions are:

- *Climate change - have climate change (predictions) been properly addressed. In particular sea-level rise and increased cyclone intensity?* There were several submissions that raised concerns about the predicted impacts of climate change on the facility. This issue is discussed at [GBRMPR 88Q\(f\)/QMPR 10\(e\)](#) below.
- *Environmental damage after a cyclone and who is responsible for repair and clean-up?* A number of concerns were raised about how the facility may end up like the damaged and unusable facility at Port Hinchinbrook to the south and left in a poor state. Several submissions mentioned old floating pontoons torn from the facility during Cyclone Yasi still being abandoned amongst the mangroves. DTMR were asked to respond to these concerns (Further Information request sent 28/02./18). DTMR advised that repairs and associated clean-ups would be covered under DTMR's insurance (Queensland Government Insurance Fund). They also advised that they (along with CCRC) would investigate incorporating the removal of any old walkway modules in the nearby mangroves into the proposed project plan (if environmentally safe to do so).
- *Construction of a commercial barge ramp and the risk of environmental harm (spills etc.).* The construction of this is not considered to present any significant environmental risks of its own. Future barge operations should be managed through an Operational EMP and Marine Park permits jointly issued by the State/Commonwealth Governments (see potential further conditions below). The Marine Parks permit will include conditions that relate to environmental management however any allocation of access to the site is expected to be managed by the CCRC (site managers).
- *Ecological data gathered was done post cyclonic conditions* and is therefore not representative of the areas (ecological) potential. Lack of coral identification to species and fish species not listed in any way (at least three species of (variously) threatened grouper). DTMR responded (SI-PIP) with the following: Seagrass maps reflected three surveys (1997, 2013-2014 and 2016) and they showed 'the extent of seagrass occurrence and potential impacts explicitly considered distributions pre and post cyclone events. They also stated (regarding corals) '...it has been conservatively assumed that all reef habitat supports potential habitat for corals, irrespective of the condition of the corals....' With regard to the lack of identification to species (and fish surveys) DTMR stated '...marine ecological surveys focused on the identification and mapping of marine habitats and benthic communities in the area. This information informed the design of the proposed project as part of an environmental constraints assessment, as well as the impact assessment. This approach is consistent with both federal and state policy as it focuses on the habitat values that underpin assemblages of marine fauna.
- *Who will be responsible when the facility turns the beach into a mud flat?* There were several concerns raised about the potential impacts of the new breakwater on coastal hydrodynamics and subsequent changes to sediment deposition in nearby areas. Modelling provided at BMT WBM November 2017) clearly shows that it is very unlikely that the wall will impact sandy beach areas. DTMR were asked to respond to this concern and stated (with reference to final modelling reports November 2017) '...negligible longshore transport occurs around Clump Point and so the proposed development will not interrupt sand supply to the adjacent beaches...'
- *Impacts to (from).....COTS.....and further bleaching* .Several submissions raised concerns about the construction and operation of the facility increasing the risk of Crown of Thorns Starfish outbreaks and severity of bleaching events. This was presumably from potential increases in nutrient loads and stress levels to corals nearby. This assessment finds no evidence to suggest that this would occur. The works should not introduce any new supply of nutrients. In fact road works will potentially decrease sediment/erosion loss from adjacent land. Increased turbidity may occur during works but this should not result in any significant increase in nutrients. Proposed monitoring programs (see potential further conditions below) should help to alleviate some of these concerns.
- *Degraded site argument.* Concerns were raised that the proposed project was being pushed through using the argument that the site was now degraded (from Cyclone's Larry and Yasi) and therefore it didn't matter anymore. There does not appear to be any evidence to support this view. In fact efforts have been made to consider the proposed project in relation to previous states (in particular seagrass) and allow for future improvements in condition. Potential improvements to adjacent seagrass beds and boulder/fringing coral reef habitats can be assisted through best-practice management of the facility (Operational EMP) and the environmental education of user groups.
- *Scale bigger than what is needed.* Concerns were raised that proposed project was larger than that required for Mission Beach (and therefore environmental impacts greater). This is considered further under social impacts.

- *One lane of (new) ramp will not be functional because of rocks/bommies.* Need to install a guardrail to protect boats. DTMR have advised (19/03/18) that the new lane will be fully functional (no impedance from rock/bommie) and that an adjacent bommie that does not require removal will be marked with a 'isolated danger marker'.
- *Whale nursery.* One submission raise concerns that there was a nearby whale calving ground that would be impacted. No evidence could be found on specific whale calving grounds in the immediate vicinity. It is expected that whales will calve in the adjacent Great Barrier Reef waters but not in a location close enough to the facility to be impacted. Vessels that access the Marine Parks from the facility may potentially impact on whales and will be required to abide by standard exclusions, which are legislative requirements of all users in the Marine Parks.

#### **Potential further conditions**

From the public submissions the following conditions are recommended further to those already considered as standards:

**Monitoring** – will be required for the entire construction works program. DTMR already have a permit that allows for monitoring activities. This will include requirements for water quality and turbidity monitoring, cultural heritage (Traditional Owner) site monitoring, marine fauna monitoring and gap monitoring. Many of these monitoring programs will require a research permission which the applicant already has. . As well as these programs ongoing work-site management will monitor all aspects of the physical works including workplace safety, spill management etc. There will also be requirements for Environmental Site Supervision by the Management Agencies and a nominated Environmental Officer always on site during works.

**Managing** – Comprehensive Construction and Operational Environmental Management Plans will be required (these will link to the monitoring programs mentioned above). These EMP's will cover all aspects of the works and ongoing operation and will be publically available. The permittee must implement the approved EMP's and update them when the Managing Agency requires it.

**Mitigating** – there will be requirements to re-plant mangroves (DAF requirement) and the implementation of EMP's will mitigate many of the identified risks. The installation of new information signage at the facility (in relation to Marine Park matters) will assist in the education and subsequent behaviours of Marine Park users. Such signage should include information about marine megafauna, the site's significance for Djiru Traditional Owners and that the area is where two World Heritage Areas meet as well as having Marine Parks arrangements in place.

#### **Conclusion**

In summary, it is considered that a properly managed construction project (and subsequent operations) with the proposed permit conditions recommended in this assessment and appropriate construction and operational environmental management plans can ensure that the residual risk to the Marine Parks is kept Low for all permissions being considered.



GBRMPP [88Q(c)]	if the proposed conduct will take place in an area to which a zoning plan applies — the objectives of the zone as set out in the zoning plan;
QMPR [10(c)]	if the proposed conduct will take place in an area to which a zoning plan applies — the objectives of the area as set out in the zoning plan;

### Overview

The Commonwealth Great Barrier Reef Marine Park Zoning Plan 2003 and the Queensland Marine Parks (Great Barrier Reef Coast) Zoning Plan 2004 both apply. Under the *Great Barrier Reef Marine Park Zoning Plan 2003* the operation of a facility will occur in the Habitat Protection Zone (HP-17-5140) within the Cairns/Cooktown Management Areas. The *Marine Parks (Great Barrier Reef Coast) Zoning Plan 2004* provides complementary management by adopting similar zone objectives, and entry and use provisions.

The Clump Point boat ramp, breakwater, pontoon walkway facilities, proposed reclamation and the proposed refuelling and moorings are located within the Mission Beach coastal area Habitat Protection Zone (HP-17-5140) which is positioned in the central portion of the Great Barrier Reef Marine Park and Great Barrier Reef Coast Marine Park (Qld) (the Marine Parks) in the Cairns/Cooktown Management Areas.

The proposal to operate 6 mooring facilities is also considered to be consistent with the objectives of the zone provided permit conditions and other statutory requirements or management arrangements are complied with.

The objectives for this zone:

- to provide for the conservation of areas of the Marine Park through the protection and management of sensitive habitats, generally free from potentially damaging activities; and
- subject to the objective mentioned above, to provide opportunities for reasonable use.

At Part 2.3.4 of the GBRMP Zoning Plan (Use or entry with permission) states that the written permission of the Authority is required to use or enter the Habitat Protection Zone for any of the following purposes:

- building, assembling, fixing in position, maintaining or demolishing the facility; or
- operating a facility (detached breakwater, upgrade existing breakwater, boat-ramp, pontoons, floating walkway)
- constructing or operating mooring facilities for vessels
- Any other purpose that is consistent with the objective of the zone.
- carrying out works including reclamation.

In regards to the reclamation proposed within the Great Barrier Reef Coast Marine Park, the *Marine Parks (Great Barrier Reef Coast) Zoning Plan 2004* allows for a permit to be issued within a Habitat Protection Zone. Section 15(4)(d) of the *Marine Parks Act 2004* also allows/supports small-scale works by or for a public authority, for a public purpose and where the works involve minimal disturbance to the park's natural resources, or minor alienation of parts of the park from enjoyment by the public. There have been other areas where reclamation has occurred within State Marine Parks for similar purposes by a public authority (DTMR). As such the proposed reclamation is considered consistent with the provisions of the *Marine Parks Act 2004*.

### Evidence from public submissions

Some submissions argued that the proposed facility did not constitute 'reasonable use' (as described in the Zoning Plan) for a Habitat Protection Zone. While a detailed rebuttal of that argument will not be undertaken it is sufficient to say that the position put in the submission would mean that no facility development of any nature would be possible in a Habitat Protection Zone. This is not considered the Managing Agencies' interpretation of 'reasonable use'.

The 2017 Assessment and Decision guidelines (GBRMPA 2017) define 'providing opportunities for reasonable use' as meaning allowing ecologically sustainable human activities. Ecologically sustainable use should consider both long-term and short-term environmental, economic, social and equitable considerations (these are considered under criteria 88Qa).

### Potential conditions

There are no permit conditions needed to be imposed that relate specifically to meeting the objective of the zone.

### Conclusion

An interpretation of the Zoning Plan and their objectives make clear the following:

- The objectives of the zone provide for 'opportunities for reasonable use' that continue to 'provide for the conservation of.....the Marine Park through the protection and management of sensitive habitats, generally free from potentially damaging activities'.
- The Marine Parks (State/Commonwealth) in their entirety are managed as 'Multiple Use' Marine Parks and there are many examples (including permit decisions, policy, guidelines etc.) that make clear that facilities of this nature are acceptable for Habitat Protection Zones. I.e. 'reasonable use' in this instance could include the proposal being assessed here.
- [GBRMPR 88Q\(a\)/QMPR 10\(a\)](#) and [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#) of this assessment document assert that this project can be developed in a way that '....provides for the conservation of.....the Marine Park through the protection and management of sensitive habitats, generally free from potentially damaging activities'.

The Habitat Protection Zone provides for the operation of facilities and limited reclamation within the State Marine Park. The proposed upgrades to the Clump Point boat ramp facilities will provide the public with improved opportunities to access and enjoy the Marine Parks. Therefore the proposal is considered consistent with the objectives of this zone.

GBRMPPR [88Q(d)]	if the proposed conduct also requires an approval or permit under the Environment Protection and Biodiversity Conservation Act 1999: (i) whether the approval or permission has been, or is likely to be, granted and, if granted, the terms and conditions of it being granted; and (ii) any relevant assessment documentation (within the meaning given by subsection 133(8) of that Act) in relation to the approval or permit;
------------------	--

### Overview

In 2017, the Department of Transport and Main Roads made a referral to the Commonwealth Department of the Environment and Energy (EPBC Act Referral 2017/7924).

On 19 May 2017, the referral decision was that the action was not a controlled action. When making this decision the delegate for the Minister for the Environment and Energy considered GBRMPA advice and concluded *“it was unlikely there would be a real chance or possibility of a significant impact on corals”* and that *“The Department considered that the above listed potential impacts will be mitigated through the CEMP and the GBRMPA permitting process.”* (Attachment C).

Further comment was sought from the applicant (as part of a further information request sent on 26 February 2018) on the status of consultations with the Commonwealth Department of Environment and Energy. The SI-PIP clarified that TMR provided the Department of Environment and Energy with an update on the final scope of works to ensure “TMR’s obligations under the EPBC Act (1999) continue to be met”.

### Evidence from public submissions

A number of submissions raised concerns about the process of submission and decision making under the *Environment Protection and Biodiversity Conservation Act 1999*. It was questioned that the proposed project was different to what was reviewed by the Commonwealth Department of Environment and Energy. DTMR responded that they had provided an update on the final scope of works to ensure DTMR’s obligations under the *EPBC Act (1999)* continue to be met.

### Potential conditions

Not relevant

### Conclusion

No approval or permit was required for the proposed conduct under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* as it was considered not a controlled action.

GBRMPR [88Q(e)]	any written comments received about the application in response to the public advertisement published in accordance with regulation 88D;
QMPR [10(d)]	any written submissions received about the application in response to the public notice of the application given under section 15;

### Overview

The decision was made by the Management Agencies to require public notification of the proposed project (by the applicant) on 19 September 2017. This was based on a consideration that *‘.....the granting of a permission to undertake works to upgrade the Clump Point boating facilities may restrict the reasonable use by the public of a part of the Marine Park.’*

A Public Information Package (PIP) was developed by the applicant and approved by the Management Agencies on 17 December 2017 (Attachment A). This was then made publicly available from the period 18 January 2018 to 19 February 2018. The PIP was available at DTMR and GBRMPA web-sites and the fact that the proposed project was available for public comment was advertised in the Cassowary Coast Independent Newspaper on 18, 25, January and 1, 8, 15 February 2018.

The public comment process is established in the legislation. DTMR complied with the statutory requirements by providing a copy of the advertisement to GBRMPA, publishing information on their website, by having submissions come to GBRMPA at a nominated address, and they published an advertisement in a newspaper (advertised 5 times) circulating in that part of the State of Queensland adjacent to that part of the Marine Park in which the conduct, for which permission is sought, is to be engaged in. GBRMPA also published the advertisement on its website, and notified all Local Marine Advisory Committee Chairs and Secretaries, and members of both the Tourism and Indigenous Reef Advisory Committees.

More than 350 individual submissions were received by the GBRMPA.

These have been reviewed and collated and relevant issues sent on 26 February 2018 to DTMR to address. This was presented in the form of a ‘Further Information Request’ (FINFO) and included other questions that has arisen from the assessment process to date.

The primary issues raised in the public submissions relevant to this assessment have been considered under individual assessment criteria. However the following general comments about the public advertising process, the submissions made and how they have been considered should be noted:

- The requirement for seeking public comments was based on Regulation 88D (*Great Barrier Reef Marine Park Regulations 1983*) and Section 15 (*Queensland Marine Parks Regulation 2017*) with the intent being a focus on how the proposed project may restrict the reasonable use by the public of a part of the Marine Park.
- Public submissions have been considered and interpreted quite broadly i.e. all matters raised that related to the assessment criterion listed in this assessment document have been given consideration.
- Matters raised that were criticisms of the proposed project development and assessment processes (as opposed to being directly related to use and non-use values) have either been put back to the Applicant for further comments or noted by the relevant assessing bodies (in this case the Great Barrier Reef Marine Park Authority and the Queensland Parks and Wildlife Service).
- The submitted written comments, while generally divided into categories that could be considered to be ‘for’ and ‘against’ the proposed project (for ease of processing), were not considered this way or counted for a measure of ‘for and against’. Rather they were interrogated for content in relation to ways that the submitter considered the proposed project to impact on their ‘reasonable use’ and any other matters the submitter wished to raise ‘

The general topics that were most prominent in the public submissions were divided into broad categories consisting of:

- Consultation process: usually associated with not enough consultation or that stakeholders views were not included
- Administrative processes: how did the proposed project consider the REEF2050LTSP and the Cassowary Coast Regional Council (CCRC) Planning Scheme
- Justification for the proposed project/need for the proposed project: the proposed project is needed, the proposed project is not needed, cost of the proposed project, economic benefits



- The size and design proposed: some were of the view it was too big, some thought it was too small
- Environmental concerns: these are addressed in [GBRMPR 88Q\(a\)/QMPR 10\(a\)](#)
- Cultural/heritage/social concerns: these are addressed in [GBRMPR 88Q\(a\)/QMPR 10\(a\)](#)
- Construction issues: marine access, potential dredging.
- Future management of the site: refuelling issues, emergency services.

The DTMR responded to this FINFO on 19 March 2018 (refer Attachment B) by providing their Supplementary Information-Public Information Package.

#### **Evidence from public submissions**

This criterion exclusively deals with the public submissions. In general, submissions that were opposed to the proposed project focussed on (*comments in italics are where in the document these matters are addressed*):

- Pollution: fuel, oil, rubbish from barges, skips, vessels- *refer to [GBRMPR 88Q\(a\)/ QMPR 10\(a\)](#)*
- The area is a nursery for prawns and fish. *Refer to [GBRMPR 88Q\(a\)/QMPR 10\(a\)](#)*
- TO's not supportive- *refer to [GBRMPR 88Q\(a\)/ QMPR 10\(a\)](#)*
- Turtles laying eggs on nearby beach- *refer to [GBRMPR 88Q\(a\)/ QMPR 10\(a\)](#)*
- Traffic issues- *DTMR will deal with traffic through a traffic management plan, this is outside the jurisdiction of the Marine Parks*
- Vessels crashing into each other- *this is a matter for the asset owner (DTMR). Maritime Safety Queensland (MSQ) is the responsible agency for managing vessel safety. MSQ is a section within DTMR.*
- User conflict between recreational and commercial vessels- *Maritime Safety Queensland (MSQ) is the responsible agency for managing vessel safety. MSQ is a section within DTMR.*
- Barges carrying dangerous goods, rubbish and chemicals- *a permit condition to cover the barges (rubbish) has been proposed. Marine Transport Operations legislation adequately deal with these risks. The standard barge assessment and permit which all barge users will require adequately covers the associated risks.*
- Is this part of a bigger project, will it become a marina- *DTMR has specifically ruled this out. Refer to pg. 32 of the SI-PIP in which DTMR stated 'the Project does not represent the first stage of a future marina development and no expansion in the facilities is planned or supported other than what is set out in the Development Plan and this Public Information Package.'*
- Potential for the proposed project to be half-finished- *refer to [GBRMPR88R\(j\)/ QMPR 11\(1\)\(i\)](#)*
- Impacts to coral, seagrass, benthos, mangroves- *refer to [GBRMPR 88Q\(a\)/ QMPR 10\(a\)](#)*
- Issues with public consultation process recommending a letter box drop as some people don't use internet or buy newspaper- *GBRMPA can certainly consider this going forward*
- Some of the users who were opposed to the proposed project still thought the additional boat ramp and pontoon were a good idea.
- Concerns about CCRC to manage the facility- *refer to [GBRMPR88R\(j\)/ QMPR 11\(1\)\(i\)](#)*

In general, submissions that were in favour of the proposed project focused on (*comments in italics are where in the document these matters are addressed*):

- Almost every single submission mentioned the improvements to safety in terms of some of the following: congestion of the car park, congestion on the water, the tourists having to currently wade through crocodile waters to get to boats and safety during embarkation and disembarkation process.
- Of all the submissions in favour of the proposed project, approximately 70% were considered to be locals of the area (they mentioned Mission Beach, ratepayers, Bingal Bay, Wongaling Beach, residents, our community), 17% were unknown origin and approximately 11% were out of towners or visitors

- Improvements to allow more tourists and visitors access to enjoy the reef including better access for young children, disabled people and the elderly
- Current design was far superior to previous design which involved the Perry Harvey jetty
- Public consultation process was inclusive
- Mission Beach needed the proposed project for tourism, economy and safety.

### **Conclusion**

There was considerable public feedback on this proposed project. It has clearly generated substantial local and regional community interest.

The process of seeking public feedback has been an important part of the assessment process and concerns about adverse impacts have been considered within this assessment under relevant criteria.

Public submissions have been considered as part of this assessment process and some of the issues raised in the submissions have resulted in proposed permit conditions to mitigate risks associated with the proposed activities in addition to standard conditions which also address a number of issues raised.

GBRMPP [88(Q)(f)]	any other matters relevant to the orderly and proper management of the Marine Park;
QMPR [10(e)]	any other matter relevant to ensuring the orderly and proper management of the marine park

### Overview

The application relates to the upgrade of a boat ramp, breakwater (including installation of a new 140m breakwater), floating pontoons and walkways, installation of six moorings and fuel transfer in the vicinity of Clump Point.

**Precedent decisions/future expansion and management** - the (potential) granting of these permissions does not set a precedent in regards to use of this area or future developments. It is clear that this area Clump Point/Boat Bay (and the adjacent Perry Harvey Jetty) has been a focus of boating activities for several decades and the ongoing use of this area for these activities is recognised in relevant planning documents including the CCRC Planning Scheme 2015.

Permit G16/38578.1 was granted to DTMR on 17 May 2016 for the upgrade of the existing Clump Point facility including enhanced boat ramp, breakwater, 2 pontoon walkways, and parking facilities, however no works commenced under this permission. Following a change in scope to the proposed project by DTMR in response to feedback and further public consultation, the current application G39785.1 was submitted. Subsequently, DTMR advised on 19 February 2018 that they would surrender permit G16/38578.1 if a new permit was granted.

DTMR has confirmed that there is no intention that this facility be expanded in the future. Nor that any capital dredging is required to install this facility.

Allocation of moorings – moorings will be allocated via a formal process run by CCRC with assistance from DTMR. It is understood that one of the moorings shown in the mooring design plan is a current mooring covered under permit G17/39615.1, which is not owned by DTMR. This highlights the need for DTMR to reconsider their mooring layout as appropriate separation distances need to be kept between moorings. It is also intended that one or more swing moorings will be available for recreational use (overnight use by recreational deep-draught boats on a coastal passage). Final mooring installation positions will be subject to site specific assessment.

What are the ongoing management arrangements? CCRC will be responsible for regular maintenance of in-water infrastructure (as facility manager). Major repairs etc. (as a result of storm damage etc.) will be the responsibility of DTMR (as facility owner).

User access during construction. The PIP advised that ‘...during the construction phase, it will be necessary to close the Clump Point facility, including the boat ramp and parking areas completely from recreational use. Access to a single boat ramp lane will be provided whenever possible for essential commercial use but this is subject to the outcomes of the construction tender process, after which a detailed schedule of works and methodology for managing access will be provided. It is DTMR’s intent to minimise the impact on ramp access to recreational and commercial users as much as possible in planning the proposed project, but because of the spatial constraints of the site periods of closure are unavoidable. The duration of the works will be subject to the contractor’s methodology and the timing of approvals given seasonal constraints on working windows, but the works are expected to take in the order of 9 months to complete. Notification of closure periods and advice on alternative ramp access arrangements will be provided to the community as soon as the timing of works are known

Fuel transfer – this will only occur via flexible hose from a mobile tanker operated by an accredited supplier. All necessary safety protocols will be required under an Operational EMP.

Approval of the application would not significantly increase the demand for management resources above what is currently required.

A number of additional management controls (permit conditions) have been identified to ensure the orderly and proper management of the Marine Parks. Below are recommended permit conditions.

- Extend permissions to all staff, so all parties participating in the program must abide by the restrictions and conditions of the permit and must inform participants of the restrictions as well;
- Ensure the Permittee takes all reasonable steps to prevent harm to the environment and notify the Managing Agency within 24 hours if an incident occurs;
- Allow for the Managing Agency to supervise any works in order to ensure that environmental harm does not occur;

- Require compliance certificates every three (3) years to verify the facilities are in good working order and have been maintained in accordance with the as constructed drawings;
- A Schedule of Works is submitted prior to upgrades, repairs, clean-up or removal;
- An EMP is submitted for the operation of the facility and any works;
- Unused permits for moorings have the potential to “tie up” popular areas and prevent other operators from accessing the area. To prevent moorings permits being used as a passive investment, it is recommended that a permit condition requiring the mooring to be installed and operated to within two (2) years of date of issue of the permit be included.
- The permit requires that the mooring be installed/operated to in accordance with an attached Mooring Notification Approval. This approval contains relevant information, including type and location, regarding the particular mooring.
- Allow for the Managing Agency to witness, inspect or audit the operation to reduce the risk of impacts from poorly maintained mooring facilities;
- Require annual compliance certificates to ensure the moorings have been maintained in accordance with approved drawings;
- Require a Deed of Agreement including indemnity and insurance.

### Climate Change

Climate change modelling and predictions for future sea-level rise and cyclone intensity should be considered within the design life of this facility. For example (predicted) sea-level rise over the next 20 years could impact on the effectiveness of this facility, in particular the new detached breakwater. DTMR were asked to provide further details on the consideration of climate change predictions through the design process. Their response was as follows:

*As with many TMR boating infrastructure projects, the application of sea level rise needs to be applied carefully. Unlike other coastal developments, a boat ramp needs to be designed to function at the current tidal levels. For this reason designs are often undertaken on the basis of allowing for a future retrofit of the facility subject to sea level rise, rather than a blanket design application. TMR has adopted this philosophy with this Project.*

*As discussed at Reference Group meetings, the northern carpark has been raised by an approximate average of 0.5m to bring it half a metre above the level of Highest Astronomical Tide (HAT) and hence avoid spring tide and wind-driven ('meteorological effect') inundation. However, in the design of the reclamation area and changes to the existing breakwater, TMR has chosen not to include an additional vertical increase for sea level rise. This decision was made because the inclusion of an additional allowance for sea level rise would create a need to extend the boat ramp south (into 'cut'), eating into the turning area and resulting in a significant increase to the development footprint to maintain car-trailer parking capacity.*

*The detached breakwater and associated infrastructure has been designed with the application of 0.3m of sea level rise which exceeds that recommended in AS4997-2005. The design storm tide and wave conditions have been generated using the entire dataset from Clump Point and have hence captured TC Larry and TC Yasi. On this basis the design conditions fully reflect the increase in storm intensity seen in these two cyclones.*

### Objects of the Act

Subsection 7(3) of the *Great Barrier Reef Marine Park Act 1975* provides that the GBRMPA must, in managing the Marine Park and performing its other functions, have regard to, and seek to act in a way that is consistent with, the objects of the Act, the principles of ecologically sustainable use and the protection of the world heritage values of the Great Barrier Reef World Heritage Area. Following is an analysis of how this is achieved in relation to this application.

*Seek to act in a way that is consistent with, the objects of the Act*

Refer [GBRMPR 88R\(k\)/QMPR 11\(1\)\(k\)](#).

### *Principles of ecologically sustainable use*

For the purposes of the *Great Barrier Reef Marine Park Act 1975* ecologically sustainable use is defined as use that is consistent with protecting and conserving the environment, biodiversity and heritage values of the



Great Barrier Reef Region; and ecosystem-based management; and that is within the capacity of the Region and its natural resources to sustain natural processes while maintaining the life-support systems of nature and ensuring that the benefit of the use to the present generation does not diminish the potential to meet the needs and aspirations of future generations.

The following principles of ecologically sustainable use were considered:

- (a) decision-making processes should effectively integrate both long-term and short-term environmental, economic, social and equitable considerations;

The assessment has considered the potential impacts to the environment and the social, economic and equitable considerations. In the short-term the impacts were not considered to be significant and the proposed permit conditions will ensure that any potential adverse impacts are identified early. In the longer term, the potential for increased visitation and hence appreciation, understanding and enjoyment of the Marine Parks should empower people to be part of the solution to create a more resilient Great Barrier Reef.

- (b) the precautionary principle;

The precautionary principle means that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage.

Proposed permit conditions will ensure that any sustainability issues are identified early and appropriate action is taken and also achieved through continuous management of the facilities. Any uncertainty associated with the walkway between the rockwall and the reclamation area being kept flushed to maintain the Great Barrier Reef Marine Park boundary can be dealt with appropriately through a gap monitoring program as part of the permit conditions.

- (c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;

This assessment has recommended assurances in the form of a deed of agreement with the applicant. This deed will ensure that any structures associated with their permissions will be removed if directed so by the managing agencies. The proposed permit condition requiring proactive management of pontoons in the event of a cyclone or severe weather will assist with reducing the potential for impact of marine debris. Access to the Marine Parks will be maintained and enhanced through this activity becoming operational. The proposed activities contribute to maintaining environmental and social, cultural and heritage values and does not compromise their long-term resilience and health.

- (d) the conservation of biodiversity and ecological integrity should be a fundamental consideration in decision-making.
- (e) This assessment and the associated risk assessment have determined that the risk posed by the permissions being applied for pose a Medium-Low risk to the Marine Parks. Appropriate mitigation measures have been proposed. It is not anticipated that the permissions being applied for will unduly impact on the sustainability of species associated with the proposed conduct and any the approved research program ([G16/39320.1](#)).
- (f) Improved valuation, pricing and incentive mechanisms should be promoted.

This principle was not considered relevant to this assessment.

*Protection of the world heritage values of the Great Barrier Reef World Heritage Area*  
Refer to assessment [GBRMPPR 88Q\(a\)/QMPR 10\(a\)](#).

#### **Evidence from public submissions**

Many submissions highlighted issues associated with Regulation 88Q(E) in the current GBRMP regulations, being feasible and prudent alternatives. This application is being assessed under the previous regulations since the application was received prior to 4 October 2017. Nevertheless, DTMR were asked a number of questions (FINFO) in relation to how the final design option was achieved and what 'prudent and feasible alternatives' were considered during this process. These can largely be summarized into the alternatives of 'do nothing' or larger or smaller or modified versions of the current proposal. There was some support for the previous proposal of a breakwater adjacent to the Perry Harvey Jetty so as to separate commercial and recreational users. Public submissions and the response from DTMR can be summarised as follows:

**Do nothing.** There was significant support for the option of just maintaining the current situation with the possibility of upgrades to the road (sealed) and modifications to car-parking. Many of these submissions were focused on concerns around potential environmental impacts and changes to the current 'village feel' of Mission Beach. Some people felt that closure of other small ramps in the area should be reversed and that these could provide a suitable alternative marine access option. DTMR responded by saying that none of these ramps provided the required protection during the regular south-easterly winds i.e. failed to provide safe boating options.

It was apparent that there is support within some sections of the local community for improved boating facilities in this area for some time as evidenced through many of the other public comments received.

DTMR have previously provided significant detail on the process undertaken to achieve the current design (e.g. DSD Development Plan, Reference Group meetings/documentation, Public Information Package). The rejection of the option of doing nothing is probably best summarised by the following *'the project was developed by the Queensland Government as a response to community requests to enhance marine infrastructure in Boat Bay, Mission beach, to improve boating safety and amenity'* (p.1 FINFO response). It is accepted that doing nothing is not a prudent alternative given the level of evidence in support of providing improved facilities and the fact that there is currently no protected and modern boating facility in the area.

**Modified design (larger)** – some public feedback was in favour of a larger project with more vessel moorings and infrastructure. The process undertaken to settle on final design size is summarized by the following *'...the current (new) proposal was developed based on a Development Plan (DSD, 2017) prepared by DSD in consultation with a Project Reference Group, made up of Mission Beach community groups. The Development Plan presented a concept design that reflected a balance of community group interests and desires, and was informed by extensive survey, environmental investigations and numerical modelling studies (p.i) Public Information Package) undertaken in 2016-2017. Also there is no room on the land at Clump Point for further car parking and hence no ability to increase the size of the proposed breakwater facility in the future.*

**Modified design (smaller)** – some submissions felt the project was suitable but could be reduced in size. The reasoning against this option is as per the above 'larger' option i.e. it represents a balance of public views and requirements.

**Other proposed modifications** – there was also some support for other elements including sewerage toilets, mains power, water supply etc. There was concern about offering re-fuelling and a suggestion that this could be undertaken at the Perry Harvey Jetty instead. The proposed barge ramp also raised some concern with submissions worried it would lead to ongoing commercial use and associated impacts on recreational use.

DTMR responded to all of these concerns and proposed alternatives in the SI-PIP. Power was not considered essential (or possibly not within project budget) and that most vessels using pen berths would have onboard generators. Solar lighting will be used.

Sewerage toilets were considered outside project budget and would have required mains power for its operation. A composting toilet will be built in the southern carpark and was considered the best alternative.

A permanent re-fuelling facility was deemed not necessary and a risk in terms of severe weather. Re-fuelling will be offered via flexible hose from a mobile fuel tanker. The suggestion that Perry Harvey Jetty was an already existing and suitable re-fueling option was countered by advice from DTMR that the Reference Group felt re-fuelling at the new protected facility was strongly preferred and is safer both for users and the environment.

The heavy-duty (new) boat-ramp suitable for barges raised some concerns with some submissions concerned that it would be used on an ongoing basis by commercial barge operations. DTMR have advised that *'...the ramp and associated infrastructure is not being designed for regular barge access. Breasting piles normally seen at barge ramps have not been included in the design. The floating walkways are not being modified to allow for regular barge use. Depths in the approaches to the boat-ramp will be such that any infrequent barge use will be restricted to higher tides.....the ramp design is to barge loading rating to protect it from damage caused by once-off or occasional barge use'*. It is accepted that the proposed use is for occasional barge access including during emergency response periods when marine access may be an important part of operations.

There was a number of submissions that raised concerns about the public consultation process undertaken and that it resulted in a proposal that was skewed to 'big business' and pro-development lobbyists. DTMR was asked to provide comment on matters related to this. DTMR provided several pages of evidence to support the view that the process was not skewed (see pp. 1-3 SI-PIP, Attachment B). This included details of public

consultation and Reference Group meetings with DTMR noting that 'commercial organisations were not directly included in the Reference Group'.

Some other issues highlighted by the submissions included (*responses in italics*):

- whether fishing would be allowed from the new facility- *this will be up to DTMR, the asset owner*
- will it be all-tide access – *some concerns were raised about whether the design allowed for vessel drafts of greater than 1.7 metres and that it did not offer improved tidal access compared to Perry Harvey Jetty. DTMR response clarifies that there will be a significant improvement with the outer pontoon located on the -3.5m contour and the inner pontoon between -2.5 and -3.0m. They state '...on this basis the new facility provides a significant improvement...'*
- the consultation processes conducted by DSD and DTMR not being in good faith- *the details of the consultation process are outlined in the PIP and SI-PIP.*
- how GBRMPA would consider the principles of ecologically sustainable use, the objects of the Act and the precautionary principle in making its decision –*refer to [GBRMPR 88Q\(f\)/QMPR 10\(e\)](#).*

#### **Potential conditions**

A permit condition to monitor the siltation (if any) of the gap to ensure Marine Park Boundary is maintained.

#### **Conclusions**

All relevant issues raised during the public consultation process were adequately considered in this assessment.

## Discretionary Considerations

GBRMPR [88R(a)]	the requirement in section 37AA of the Act for users of the Marine Park to take all reasonable steps to prevent or minimise harm to the environment in the Marine Park that might or will be caused by the user's use or entry;
-----------------	---

### Overview

Section 37AA(3) of the *Great Barrier Reef Marine Park Act 1975* states that in determining whether all reasonable steps have been taken, the following criteria must be considered. An assessment has been made against each of the criteria below to show that all reasonable steps have been taken to prevent or minimise harm to the environment from the user's use or entry:

1. the nature of the harm to the environment that might or will result from the person's use or entry;
2. the risk of the harm from the person's use or entry;
3. the sensitivity of the environment that might or will be affected by the person's use or entry;

The first three criteria relate to the nature and risk of the harm and the sensitivity of the environment that may be affected. Based on the impact assessment under criterion 88Q(a), the risk assessment (Table 2) and monitoring, mitigating and management actions identified throughout this assessment, it is not expected that the proposed activities will significantly impact on the environment.

4. if the person is using or entering a zone – any objectives specified for the zone in its zoning plan;

The activities are located within a Habitat Protection Zone. Under criterion 88Q(c) the proposed activities are consistent with the objectives of that zone.

5. the practicalities, including cost, of steps that will prevent or minimise the harm;

Methods for monitoring, managing and mitigating the potential impacts of the proposed conduct are detailed under [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#). It is considered that all of these methods are reasonable and practicable and there has been no indication that the Applicant will be unable to meet these requirements. Public submission concerns about the ability of CCRC to undertake the ongoing maintenance of the facilities were addressed in the SI-PIP where DTMR explain that the maintenance of land-based infrastructure (car-parks and road) will be funded by CCRC as manager. CCRC costs will be funded from a combination of commercial vessel landing/mooring fees and regular rates collection. Funding of structural maintenance of in-water infrastructure will be covered by DTMR as owner from the Marine Infrastructure Investment Program.

6. whether or not the person's use or entry complies with the laws applying in the Marine Park in relation to the environment or natural resources;

A condition has been recommended which requires the Applicant to comply with the provisions of laws in force from time to time in the State of Queensland the Commonwealth of Australia. The activities require permissions in accordance with the Zoning Plan.

7. whether or not the person's use or entry complies with any relevant code of practice, standard or guideline; and

Compliance with relevant codes of practice, standards or guidelines has been considered under criteria 88R (d). The proposed activities are consistent with relevant strategies, policies and guidelines which have been considered in the assessment of this application. The facilities will also be required to meet engineering and other technical requirements as per other legislation (see #6 above). The SI-PIP and associated appendices also outlined standards to which the facilities will comply.

- a) whether or not the person's use or entry is in accordance with any conditions of a permission granted under the regulations for the purposes of a zoning plan or a provision of this Act.

Any use and entry will be in accordance with relevant conditions for each permission. A compliance program is in effect by GBRMPA and this permit, if granted, will be risk-assessed as part of GBRMPA's annual permissions compliance planning process. – see [GBRMPR 88R\(j\)/QMPR 11\(i\)](#) below.

### Evidence from public submissions

A number of submissions raised concerns that the proposed facility was larger than required or that any upgrades of boating facilities should have been focussed on the nearby Perry Harvey Jetty. The Applicant undertook an extensive process of public consultation and consideration of options and the final option (which



is this application) is presented as providing the intended outcomes of the proposed project within the available budget.

It should be noted that there were a number of public submissions that felt the proposed facility was not large enough and there were also a significant number of submissions stating that it was a good proposal and that government should just get on and start building it.

The Applicant was asked to provide further information on 'clear need for the proposed project' and how the final design (size) was achieved. *"Funding has been provided for the Project by both the Commonwealth and Queensland governments to deliver the benefits noted above (see SI-PIP page 10)... While there will be some impact on the environment during both the delivery and operation of the Project, these will be mitigated as far as is reasonably practical. The Project will deliver significant benefits to the Mission Beach community, and those visiting Mission Beach to access and enjoy the Great Barrier Reef Marine Park. The Project team considers that the Project delivers a strong net benefit, after all considerations and impacts are taken into account."*

DTMR provided the following benefits for Mission Beach:

- The facility provides calm water overnight berthing, which will enable commercial vessel operators to be based in Mission Beach with resulting roll-on benefits to the community.
- The calm water area will significantly improve emergency access, which will benefit all members of the community.
- The calm-water area will provide significantly improved safety for recreational users in situations where weather deteriorates when they are out, providing calm water trailer vessel recovery in an area separate from commercial passenger operations.
- The calm water area will enable safer transfer of passengers in situations where vessel voyages are essential in non-ideal conditions (for example, transfer of passengers from Dunk Island).
- The calm water area will expand the time window for use of the facility for all users.
- With a calm launching/access area and improved time access window, boaties are more likely to use the facility to access other protected Marine Park locations, thus improving access to the Marine Park.

Criteria [GBRMPR 88Q\(a\)/QMPR 10\(a\)](#) details potential environmental impacts from the proposed project if it was to proceed.

### **Potential conditions**

In order to reduce the risk of maintenance activities occurring in the Marine Parks which are not approved by the Managing Agencies and may cause harm, permit conditions requiring a Schedule of Works for the installation, maintenance, upgrading, relocation, de-tackling or removal of moorings will be included in the permit.

### **Conclusions**

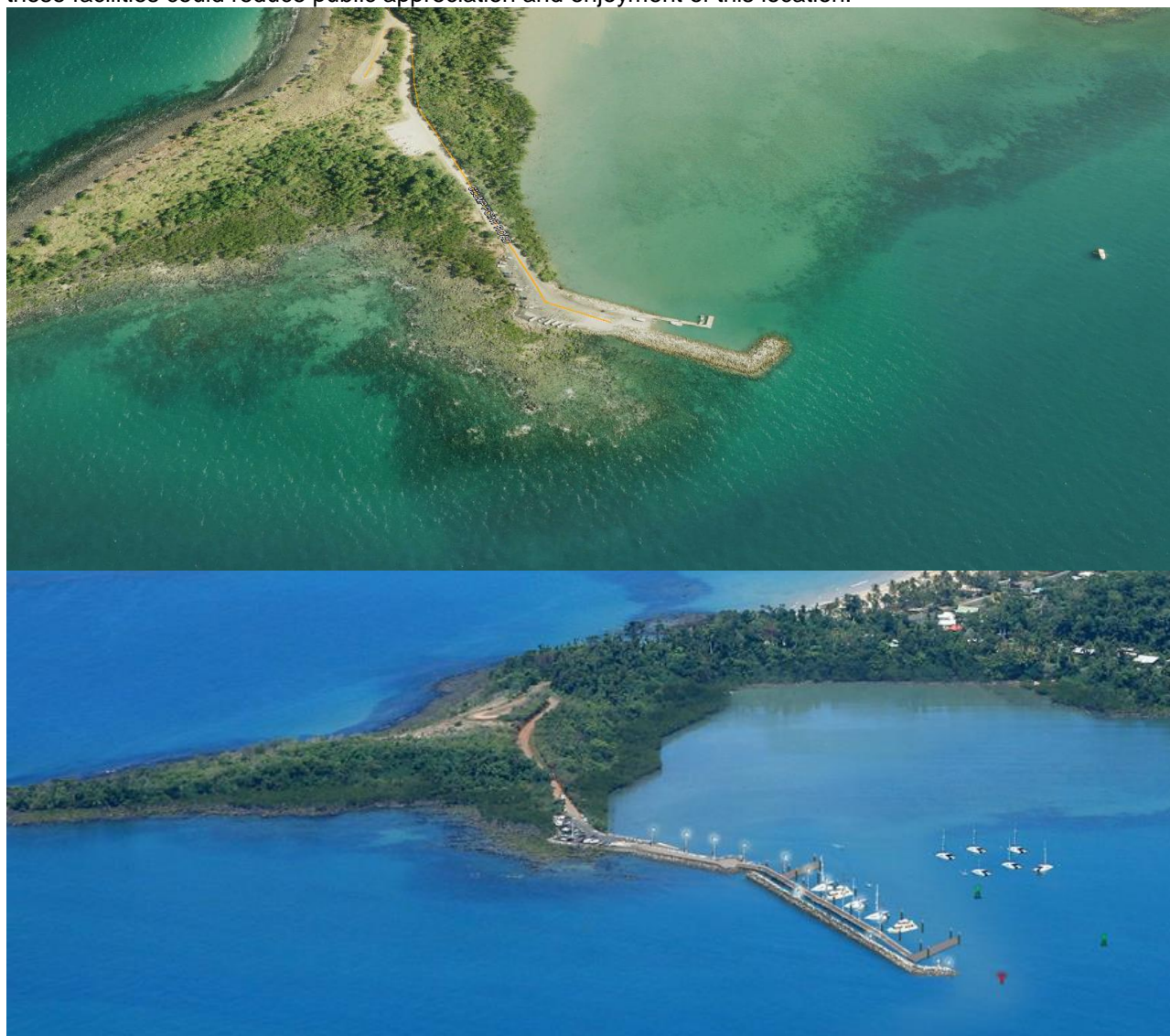
The Applicant (DTMR) has undertaken a rigorous project development process that has taken into consideration environmental factors. They are experienced in the development of projects of this nature and have access to the required technical knowledge. They will undertake suitable tendering processes and all activities will be suitably covered by Environmental Management Plans.

This assessment concludes that the Applicant has, to date, taken all reasonable steps to prevent or minimise harm to the environment in the Marine Park that might or will be caused by the user's use or entry. This should continue to be the case if this proposal is approved.

[88R(b)]	the effect that the grant of the permission will have on public appreciation, understanding and enjoyment of the Marine Park
[11(1)(a)]	the effect that the grant of the permission will have on public appreciation, understanding and enjoyment of the marine park

### Overview

The scenic beauty of the Mission Beach area including Clump Point is one of the key attractions for visitors and residents alike. The diversity of wildlife inhabiting the region's waters including seagrass and coral reef habitats has natural amenity values for many users. Tourists attracted to Mission Beach are in part motivated by a desire to experience their natural values of the Marine Parks. Potential damage to the environment from these facilities could reduce public appreciation and enjoyment of this location.



*Figure 13: (above) The two images here show the current facility (Google Earth) and (below) 'artist's impression of the proposed completed facility (from a flyer supplied by the Mission Beach Boating Association- image developed by Liz Gallie).*

The current Clump Point facility is also one of the main marine access nodes to the nearby National Park islands (e.g. Dunk, Wheeler and Coombe Islands) and individual reefs and cays e.g. Beaver Reef/Cay approximately 40kms to the east. Past, present (and potentially future) commercial tourist operators transport tourists to/from these protected areas from this facility.

The location has been used for decades as a marine access point predating Marine Park gazettal. A number of State / Commonwealth approvals have been issued for the conduct of the facilities and subsequent upgrades over time.

The area, and 27 others, had been previously unzoned Commonwealth Marine Park because of concerns about their potential for industrial or port developments, as well as a limited understanding of their ecological significance ([see more information here](#)).

This application represents an upgrade and extension to this currently operating marine access point to the adjacent Marine Parks for both recreational and commercial users in the Mission Beach and surrounding areas.

The matters to consider under this criterion (that may not have been considered elsewhere) include visual amenity, aesthetics (including the user's 'appreciation of the beauty (visual and emotional) of the Marine Parks') and more broadly the effects the proposed project will have on access to elements of the Marine Parks that will impact on that persons 'understanding, appreciation and enjoyment'.

One of the key objectives of the proposal is to provide improved access to and from the Marine Parks. Opportunity to access many parts of the Marine Parks and (adjacent National Parks) including with more (high quality) commercial operators and in a safer manner should allow for increased appreciation and understanding through visitation.

A major factor in establishing the potential impact the proposal may have on public appreciation, understanding and enjoyment of the Marine Park was the public submissions. This is discussed below.

The impacts to amenity and scenic vista are discussed in criterion [GBRMPR 88Q\(a\) and QMPR 10\(a\)](#).

#### **Evidence from public submissions**

There were a number of comments on the proposal's potential negative impacts on the visual amenity and aesthetics of the area. People felt it would damage the 'village atmosphere' of Mission Beach and be the beginning of a more 'up-market' feel that would result in a more 'Port Douglas' type of environment. There were some people who felt that the expanded facility would negatively impact on their 'enjoyment' of the Marine Park because of an 'aesthetic' impact and/or flow-on changes to the current Mission Beach lifestyle and capacity to enjoy the Marine Park as it is. They also felt there would be increased conflict between recreational and commercial users of the facilities, leading to a less enjoyable experience in going to and from the Marine Park. They felt it would shift the current low-level of development with a focus on the natural environment to one that would be more focused on development and money and with a lower focus on the natural environment.

Submissions supportive of the development tended to indicate that the proposal would not change the current aesthetics of the area and that it would just mean that there were better marine facilities available to access the Marine Park and more commercial opportunities for the stagnant local economy. Their ability to appreciate the visual amenity and aesthetics of the Marine Park it would in fact be boosted by the proposed facilities.

#### **Potential further conditions**

A permit condition could be included that the Permittee needs to put up signage about the values of the area and Boat Bay.

#### **Conclusions**

Public appreciation, understanding and enjoyment of the Marine Park is an important element

The Applicant has taken into account matters that relate to this criterion and have attempted to minimise the visual impacts, physical footprint and size of the facility while seeking to achieve a suitable design for boating facilities.

GBRMPR[88R(c)]	the impact of the conduct proposed to be permitted under the permission in the context of other conduct in the relevant area or nearby areas, or in the Marine Park, that is being undertaken, is planned, is in progress, or is reasonably foreseeable at the time of the Authority's consideration of the application, whether or not related to or a consequence of the proposed conduct;
QMPR [11(1)(b)]	Other matters chief executive may consider under the Marine Parks Regulation 2017 the potential impact of the conduct proposed to be permitted under the permission (the proposed conduct) on other conduct in the relevant area or nearby areas, or in the marine park, that is being undertaken, is planned, is in progress, or is reasonably foreseeable at the time of the chief executive's consideration of the application, whether or not related to or a consequence of the proposed conduct;

### Overview

This assessment does not consider matters generally outside of the Marine Parks that will (or have) come about because of the proposed projects construction and operation other than the extent to which these are compatible with the proposed use of the area. It is considered that these are more suitably assessed by the Queensland Government under the *Planning Act 2016*. These assessment and approval documents including approvals under the Queensland *Environmental Protection Act 1994*, *Coastal Protection and Management Act 1995* and *Fisheries Act 1994* have been reviewed as part of this assessment.

Existing users of the Marine Park in the vicinity of Clump Point and nearby areas include:

- Traditional Owners;
- marine tourism operators most of which use the facility as an access and egress point);
- recreational and commercial fishing vessels (most of which use the facility as an access and egress point)
- land-based fishers, snorkelers (including spear-fishers)
- tourists
- beach-walkers and people accessing the area for its scenic amenity (i.e. no vessel use)

Mission Beach is a popular tourist destination in the Cairns/Cooktown Management Areas. It is a midway point between Townsville and Cairns and provides the closest access to Dunk Island which lies approximately 4 kilometres offshore. Marine access to get to/from the Marine Parks is an important part of any community reliant in part upon Marine and island National Park tourism and recreational use.

The SI-PIP (page 17) states that while the primary objective of the proposed project is to provide safer boating facilities the secondary objective was to create economic benefit to Mission Beach.

### Current Use of Boat Bay

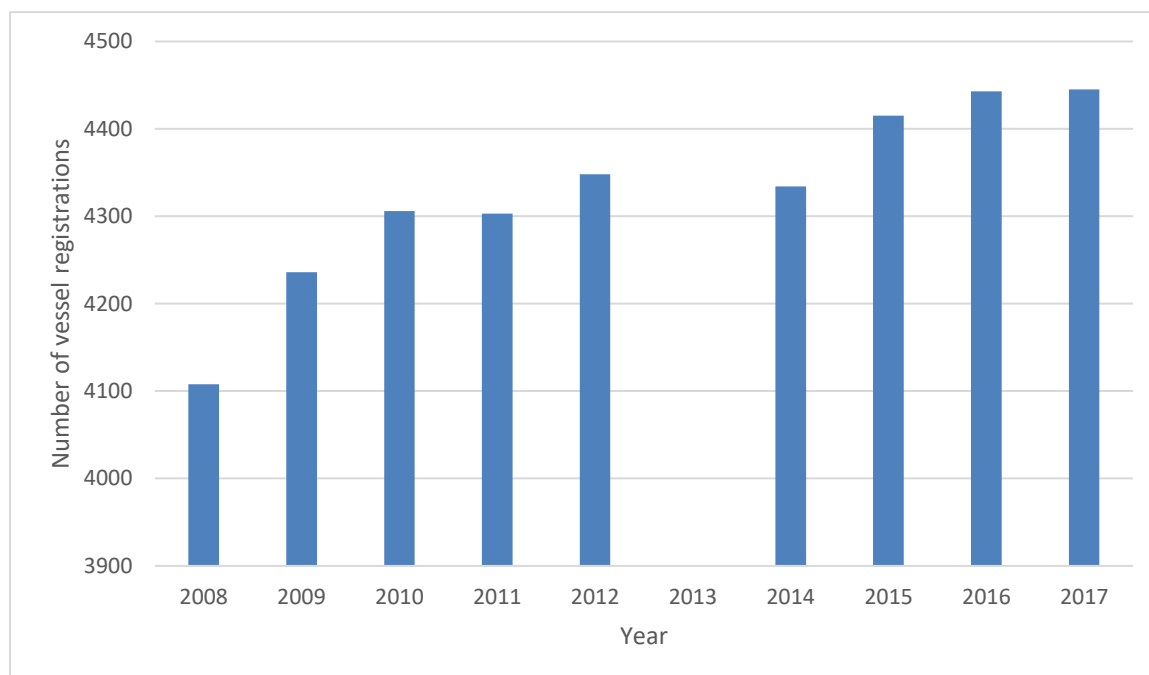
The northerly aspect of the bay provides some level of natural protection from southeasterly winds which makes the area popular for vessel traffic, anchoring and mooring. Historically, there have been 11 private moorings permitted within Boat Bay which were managed by the Clump Point Site Management Arrangements prepared in September 2005. The majority of these permissions have been surrendered or expired. Currently, there are only two (2) permitted private moorings installed within Boat Bay. The bay is typically used for anchoring, traditional fishing by the Djiru Traditional Owners, recreational fishing, commercial fishing and netting and spearfishing around Clump Point.

An accredited Traditional Use of Marine Resources Agreement (TUMRA) for the six (6) Girringun Aboriginal Corporation Sea Country Groups exists and covers Boat Bay. On 12 June 2017 the Girringun Aboriginal Corporation wrote to the GBRMPA and submitted for accreditation a new TUMRA (2017-2027) and implementation plan (2017-2027), these are currently under consideration. While these remain under consideration the 2010-2015 TUMRA and associated documents remain in effect. The 2010-2015 TUMRA includes the capacity for the Djiru Traditional Owners to hunt for turtle within the Clump Point-Boat Bay area (part of Djiru Take Area 2). This allows for an annual maximum green turtle take of 10 (in first year) with subsequent years up to 12 or down to six if '....monitoring shows numbers were not viable'.

The TUMRA 2010-210 Implementation Plan states (at issue 17) that '*...at an early stage, advise and consult the Steering Committee in relation to any Significant Marine Management matters impacting the TUMRA area (Future Act Notices, quarterly up-dates)*'. The Managing Agencies (GBRMPA/QPWS) were aware DTMR were engaged (and consulting) with the Djiru Traditional Owners on the proposed facility. It is considered that the Native Title Notification processes detailed at 'Background and Application Summary' and the consultation undertaken by DTMR satisfied issue 17 within the TUMRA Implementation Plan.



A check of vessel registrations for the Cassowary Coast Regional Council, based on Queensland Transport data indicates a steady albeit small increase in registrations for the local government area since 2008 (Figure 14).



*Figure 14. Recreational vessel registrations as provided by Queensland Transport and available at <http://www.gbrmpa.gov.au/VesselRegistrations/>. Note no data was available for 2013. All recreational vessels includes the combined total of motorboats, speedboats (including personal watercraft) and sailboats*

The [Greater Mission Beach Area Foreshore Management Plan](#) and [Cassowary Coast Planning Scheme](#) make specific reference to marine and coastal development and infrastructure at Clump Point. The CCRC Foreshore Management Plan states ‘there is a need for improved maritime safety in Boat Bay.....it is important to ensure that maritime infrastructure is feasible from an engineering point of view (design and construction) and ensuring potential impacts on the marine environment and coastal processes are minimized and managed. The design and siting .....needs to be sensitive to the visual amenity and character of the area’. The Plan also states that CCRC should ‘continue to liaise closely with the State Government in the redevelopment of maritime infrastructure at Clump Point and Boat Bay’.

The CCRC Planning Scheme states at 3.4.2 (Element—Coastal management) as a specific outcome that ‘Coastal development avoids or minimises adverse impacts on coastal resources and ecosystems by ensuring development is appropriately located and by reducing the scale of development. The CCRC were a member of the Project Reference Group and are in support of the proposed project design.

Potential impacts associated with the proposal on users of the area include:

- Disruption to existing users and tourists during construction activities – area closed
- Intensification of use in the area may cause some level of displacement to some existing users and level of enjoyment
- Traditional use of the area (refer to criteria [GBRMPPR 88Q\(a\)/QMPR 10\(a\)](#))
- Further concentration of commercial and recreational use.

#### **Evidence from public submissions**

The public feedback expressed both strong views for and against the proposal. There were also a number of submissions, that while in general support for the proposed project, felt the design was wrong in terms of capacity i.e. they either wanted more or less facilities within the proposal.

There was significant public feedback on matters that were considered to be outside of the Marine Park e.g. impacts on cassowary and their habitat during construction, impacts on vegetation and the impacts on roads and the broader community from large numbers of trucks carrying stone. In some cases the Applicant was asked to provide further feedback (on matters generally considered to be outside the Marine Parks) if it was

felt that they did have some connection whether physically, visually or in relation to the proposed project development process. For example, further information was required about facilities and services such as toilets, lighting, power, re-fuelling and wash-down areas and how decisions were made around the provision (or otherwise) of these. Further details were also sought around parking options and traffic management. The response to these matters (if relevant) are considered in other parts of the assessment ([GBRMPR 88Q\(a\)/QMPR 10\(a\)](#), [GBRMPR 88Q\(b\)/QMPR 10\(b\)](#)).

The relevant Development Approval (1711-2484 SDA) under the Queensland *Planning Act 2016* and approval under the Queensland *Environmental Protection Act 1994* have been reviewed by the Managing Agencies. These assessment and approval processes have considered those matters (outside this assessment) that do have some potential to impact on the Marine Parks. For example the quality and condition of rock for breakwaters, erosion and sediment control measures and traffic management plans.

With regards to potential economic benefits of the proposed project a group representing the business community send in a supportive submission and a community group (representing local ratepayers) indicated strong support from the majority of their members.

There was also some concern from members of the public on how people were to access the Marine Parks during construction. In the SI-PIP the DTMR stated that it was their intent to minimise the impact on ramp access to recreational and commercial users as much as possible. The works are expected to take around nine (9) months to complete.

#### **Potential further conditions**

DTMR to advise closure dates and alternative ramp access. This notification must also be available on site for out of town tourists who may not be aware of the works.

#### **Conclusions**

There will be some level of disruption to existing users of the area during the construction period which is estimated to be around 9 months. The proposed improvement in marine facilities is likely to lead to an intensification of use in the area. The area (Boat Bay) has a long history of commercial (Perry Harvey Jetty) and recreational use. This proposal will effectively concentrate both user groups to the one location.

Clump Point boating facilities have been in existence for decades with a number of upgrades to the public boating facilities made over the years by DTMR. As such, it does not represent a change (or barrier) to the current use of the area. Therefore it is unlikely that the proposed conduct will have a significant impact in the context of other conduct in the relevant area.

GBRMPR [88R(d)]	any policies or guidelines issued by the Authority about the management of the Marine Park or the performance of the Authority's functions under the Act and these Regulations;
QMPR [11(1)(c)]	Other matters chief executive may consider under the Marine Park Regulation 2017 any policy or guideline issued by the chief executive about the management of the marine park or the performance of the chief executive's functions under the Act;

### Overview

A range of policies and guidelines provide a framework for the assessment of proposed actions within the Marine Parks.

### Reef 2050 Long-Term Sustainability Plan (LTSP) (Commonwealth of Australia 2015)

The LTSP is one of the key joint State/Commonwealth management documents providing the overarching strategy for the management of the GBRWHA. Part 3.2 of the LTSP describes the governance, legislation, international obligations and cooperative management for the GBRWHA. Matters raised have been detailed in other parts of this assessment or adhered to through the processes followed in undertaking this assessment. In particular the plan refers to the Intergovernmental Agreement providing a clear and effective framework for facilitating cooperative management of the complex landscapes of the Reef.

Part 4.4. of the REEF2050LTSP relates to principles in decision making. These have been adhered to including basing decisions on the best available science, the principles of ecologically sustainable development and the precautionary principle and impacts are avoided and residual impacts mitigated.

The proposed activities are consistent with the following actions identified in the Reef2050LTSP (CBA5, CBA7, CBA8, EHA19).

#### **CHA5 - Ensure community benefits derived from the Reef are considered in local and State-level policy and planning instruments and development and management decisions.**

A range of community benefits are likely to be derived from the proposed conducts.

**CBA7 - Ensure the aesthetic values of the reefs, islands and the coast are considered and protected through planning and development decisions.** The potential aesthetic impacts of the proposed project have been considered and documented. See in particular [GBRMP R88Q\(a\)/QMPR 10\(a\)](#). While the proposed project does change the aesthetics of the specific site it is considered that the overall aesthetic values of the area including adjacent coastal and island areas will remain intact.

#### **CBA8 - Industry, community and governments work together to implement policies and programs that address tourism and recreational use of the Great Barrier Reef Marine Park:**

- ensure that tourism and recreation activities are ecologically sustainable
- maintain visitor satisfaction through high quality presentation and tourism services, including quality world heritage interpretation
- maintain recreational opportunities for Reef visitors (e.g. recreational fishing, sailing and diving)
- provide adequate and well-maintained visitor infrastructure such as public moorings, reef protection markers, island facilities and interpretive signs.

It is considered that the proposed project contributes to all of the above dot-points listed under action CBA8 listed in the REEF2050LTSP. This project represents a sound example of community and government working together (using contemporary policy) to develop a suitable and ecologically sustainable facility that improves recreational (and commercial) opportunities for both visitors to the reef and the local and regional community.

#### **EHA19- Develop guidelines for assessing cumulative impacts (including climate change pressures) on matters of national environmental significance including ecosystem and heritage values in the World Heritage Area.**

Commitments arising from REEF2050LTSP included a cumulative impact assessment policy. The potential cumulative impacts of the proposal have been assessed against the draft Cumulative Impact Management Policy under criteria [QMPR 11\(1\)\(j\)](#).

### Great Barrier Reef Biodiversity Conservation Strategy 2013 (GBRMPA 2013)

The purpose of this strategy is to provide that overarching framework to guide and coordinate actions for the protection and conservation of biodiversity in the Region. The Strategy identified elements of biodiversity

potentially at risk and the pressures that acted upon them. Those species and habitats most relevant to this application include:

- Marine Turtles, Dugongs, ,Dolphins, Shorebirds, Crocodiles, Seagrass, Coral Reefs

GBRMPA has completed vulnerability assessments for some of these at risk habitats, species or groups of species. These vulnerability assessments have highlighted existing and future management actions to ensure the long-term protection of these species or groups of species. The following are relevant to this application:

- Public education of management actions through programs such as GBRMPA's Reef Guardians and listing of responsible reef practices for marine turtle protection within the Tourism Operator's Handbook: *Looking after protected species in Queensland: a comprehensive guide for commercial fishers* (Fisheries Queensland).
- Targeted compliance and enforcement through the joint Queensland Government and GBRMPA Field Management Program and Indigenous Eyes and Ears compliance program.
- The Marine Wildlife Strandings Program reports on strandings and causes of mortality of marine turtles and dugongs in Queensland.
- Work to establish arrangements with key authorities and non-government organisations to prevent rubbish entering the marine environment; support the removal of discarded fishing gear/marine debris; raise public awareness and compliance activities to encourage the responsible disposal of fishing gear/rubbish; and, investigate the origins of fishing gear/marine debris.
- Improvements to water quality through the *Reef Water Quality Protection Plan 2009* which sets targets for improvement and is supported by the resources of the Australian and Queensland governments as well as significant investment by industry to implement change and monitor progress.

The activities proposed in this application and the permit conditions recommended to manage risks as a result of those activities are consistent and support the above identified conservation priorities.

#### **Environmental Impact Management Policy (GBRMPA 2010)**

This policy provides a transparent, consistent approach to environmental impact management within the Great Barrier Reef Marine Park. It gives consistency and efficiency when allocating projects to levels of assessment and recommends environmental impact management tools, such as deeds and bonds, to reduce possible risks or impacts to the environment from a proposed activity. The management tools recommended for this application include the following:

- Deed of Agreement (between the Great Barrier Reef Marine Park Authority, the Queensland Department of Environment and Science and the Queensland Department of Transport and Main Roads).
- Environmental Site Supervision by the Management Agencies of parts of the construction works
- Publically available Environmental Management Plans for construction and operation of the facility.

#### **GBRMPA's Site Management Arrangements**

Site management arrangements are localised plans for the use of a particular site. They are non-statutory plans that identify significant values of the specific site and describe current management arrangements for those sites concentrating on specific use issues and cumulative impacts. Relevant exclusions or restrictions will be conditioned within the permit to meet the intention of site management arrangements.

The Site Management Arrangements – Clump Point, Mission Beach acknowledge that the facilities located in the Bay (Boat Bay) including a boat ramp and jetty provide a departure point for commercial and recreational users to access nearby Dunk Island and the Great Barrier Reef. The Site Management Arrangements focus on the location of buoy moorings and was developed in conjunction with Maritime Safety Queensland, Queensland Parks and Wildlife Service and the Great Barrier Reef Marine Park Authority. The trigger for the Site Management Arrangements was the receipt of mooring applications. The Site Management Arrangements depict areas to be free of moorings and areas set aside for anchoring vessels at Clump Point.

#### **Moorings in the Great Barrier Reef Policy**

This policy provides a framework for the management and use of tourism and recreational vessel moorings that protects the environment and promotes ecologically sustainable access to the Great Barrier Reef. This policy states that the Managing Agencies encourage best practice design, installation and operation of moorings in the Great Barrier Reef. It recommends that in addition to the considerations under the *Great*



*Barrier Reef Marine Park Regulations 1983*, when assessing an application for permission for a private mooring the requirements of the Managing Agencies include, but are not limited to:

- consideration as to whether the mooring is required at the proposed location;
- consideration as to whether the mooring design incorporates best practice to minimise environmental impacts;
- consideration of the intended use of that private mooring; and
- where the application is to continue an existing permission, the Applicant demonstrates with a current compliance certificate, that appropriate and ongoing maintenance of the private mooring has been undertaken following installation.

Furthermore, the policy states that to reduce the risk posed to the environment by breakage or dragging of the moorings, the Managing Agencies require that moorings are regularly maintained and that each mooring is inspected by an appropriately experienced person. Permittees will be required to provide a compliance certificate, obtained in the preceding 12 months, upon request by the Managing Agencies or with any application to continue or transfer a mooring permission. The policy clarifies that a Permittee with permission for a private mooring is responsible under the permission for the costs associated with the installation, on-going maintenance and removal of their mooring, including obtaining compliance certificates, design drawings and schematic drawings. Best practice mooring designs incorporate riser buoys to ensure that the tackle (chain) is not dragging on the seabed and potentially damaging coral or seagrass. The DTMR have stated that they will use Environmentally Friendly Moorings.

The policy states that it is a standard condition of each permission that a Permittee must produce a compliance certificate on request by the Managing Agencies. Failure to supply a compliance certificate to the Managing Agency upon request, or with an application for continuation may result in the Managing Agencies requiring a Permittee to de-tackle the mooring or suspending and/or revoking the permission, not renewing the mooring permission nor withdrawing a specific Mooring Notification Approval.

#### **Recreation Management Strategy for the Great Barrier Reef Marine Park (2012)**

Within the Marine Park, recreational use is managed through a range of legislative and other tools administered by both Australian and Queensland Government agencies. Combined, they provide a comprehensive set of management arrangements for recreational use. With regard to its responsibilities, the GBRMPA employs a number of management tools, ranging from the Act and the Great Barrier Reef Marine Park Regulations 1983 (the Regulations) to partnership programs and education. These tools are underpinned by a risk-based approach.

The population of the Great Barrier Reef catchment continues to increase steadily. An increasing population is likely to mean an increase in recreational use of the Marine Park. Vessel ownership has been steadily growing in the Great Barrier Reef catchment over several decades, with a rate of increase outstripping the rate of population growth. It is anticipated that an increase in vessel ownership will translate into an increase in recreational use. With increasing use of the Marine Park comes an increasing demand for coastal infrastructure to access the area (for example, marinas and boat ramps). Construction and operation of these facilities can threaten the Great Barrier Reef ecosystem through damage to coastal habitats, dredging, dumping of spoil and effects on water quality. High demand and long wait times at popular access points can result in use being spread to adjacent, less popular areas as people choose to spend more time travelling and less time queuing. Unregulated beach access is also a threat to coastal habitats that support the Great Barrier Reef.

In all management actions, a high priority will be placed on open communication with interested parties and on respecting their needs and aspirations. In addressing any emerging issues for recreation, the consideration of new management arrangements will continue to include appropriate consultation with interested stakeholders and Traditional Owners.

The proposed conducts aim to provide safer boating as well as increased access to the Marine Parks from which greater understanding and appreciation of the values of the Marine Parks can be developed.

#### **Evidence from public submissions**

Some public submissions raised matters related to policies, guidelines and other documents produced by the Managing Agencies as well as other statutory bodies (State and Commonwealth). These have either been considered if appropriate or were not relevant to this assessment.

The REEF2050LTSP was raised and DTMR was asked to provide evidence of how the REEF2050LTSP had been considered. This was provided in DTMR SI-PIP and concluded that the provision of safer boating facilities and improved opportunities for the public to visit the Great Barrier Reef was consistent with the actions and objectives of the REEF2050LTSP.

Other submissions queried how the site management arrangements were taken into account. DTMR have answered this by providing further information in their SI-PIP (p. 18) and by providing a proposed mooring plan. The SI-PIP suggests the proposed mooring design will require an update to the GBRMPA site management arrangements 2005 to reflect the changed navigational arrangements. A review of the proposed design suggests that the proposed mooring locations (including one currently covered under permit G17/39615.1) will be located in or just outside the south-easternmost corner of the current 'mooring area' shown in Clump Point Site Management Arrangements Map. This mooring area is considered the appropriate location to permit moorings, however the SMA also states '...consideration may be given to constructing or operating mooring facilities outside this area if special circumstances can be demonstrated'. It is considered that this proposed facility upgrade is a special circumstance and that the proposed moorings will not impact on the objectives of the current SMA in any way. There is therefore no need to update the current SMA for this project but it may be appropriate to consider an update to this document at some point following a decision on this proposal.

#### **Potential further conditions**

- Any proposed mooring location will need to be consistent with the Site Management Arrangements or provide 'special circumstances' as per the Site Management Arrangements.
- Mooring installation will require ESS – the exact location of the moorings to be finalised at that time.

#### **Conclusions**

It is considered, that as long as the proposed moorings are installed consistently as per the Site Management Arrangements and stays clear of the transit areas and the mooring free areas then the proposal is considered to be consistent with these site management arrangements. It is not considered necessary to update the Site Management Arrangements as they allow for 'special circumstances' for the installation of moorings outside of the proposed mooring area.

In conclusion, the proposed activities are consistent with the strategies, policies and guidelines mentioned above and have been considered in the assessment of this application. Conditions and best practice guidance have been recommended to reduce possible risks or impacts to the environment.

GBRMPR [88R(e)]	if the application for the permission relates to an undeveloped project the cost of which will be large — the capacity of the applicant to satisfactorily develop and manage the project;
QMPR [11(1)(d)]	if the application for the permission relates to an undeveloped project the cost of which will be large — the capacity of the applicant to satisfactorily develop and manage the project;

### Overview

There is currently an existing boat ramp and the proposed upgrades will be completed by the State of Queensland acting through the Department of Transport and Main Roads. Once completed, the marine facilities will be owned by DTMR and managed by CCRC. In addition, CCRC will be responsible for leasing arrangements for the limited number of berths and moorings associated with the facility.

It is unlikely that the State of Queensland will not be able to satisfactorily develop and manage the costs of this project. The SI-PIP states (p.19) *‘the total available project budget is currently \$18.4 million, which will be spent on construction and any ongoing studies required during construction of the proposed project. No further funding has been proposed. The design is likely to be achievable within the available budget. Some desirable but not essential elements have been tagged as optional. Their inclusion is dependent on the successful tender price. The optional items are identified in the PIP (these included mains power, reticulated water and sewerage toilets)’*.

The Cassowary Coast Regional Council is the trustee of the Reserve (Lot 550 on Plan NR7351). DTMR have entered in to a Deed of Agreement with the CCRC whereby the State will be the legal owner of the in-water infrastructure with the Council appointed as the manager of the facility under Schedule 1 of the *Transport Infrastructure (Public Marine Facilities) Regulation 2011*. DTMR have advised that the process to dispose of the asset (transfer it to another party) would require amendments to the management appointments, would not align with essential terms of any deed of agreement and other financial challenges and therefore be highly unlikely to occur.

### Evidence from public submissions

Some comments were made about the capacity of the applicant to ‘satisfactorily develop and manage the proposed project’. This is addressed in criteria [GBRMPR 88R\(j\)/QMPR 11\(1\)\(i\)](#).

Mention was made of old pontoons from the facility now stranded amongst mangroves (as a result of the impacts of Cyclone Yasi). As part of the SI-PIP the DTMR stated that they would *“investigate incorporating as part of the proposed project the removal of any stray floating walkway modules in nearby mangroves, if this can be achieved without significant environmental impacts”*.

The applicant was asked for further information on matters related to satisfactory clean-up after a cyclonic event. DTMR responded in their SI-PIP that storm damage would invoke an insurance claim. Therefore DTMR, as the owner of the facility will be responsible for lodging any claim on the Queensland Government Insurance Fund (QGIF) and arranging repairs to damaged in-water infrastructure or their recovery if moved as a result of weather events.

### Potential conditions

The following permit conditions are relevant:

- Permit conditions and the proposed Deed of Agreement should adequately ensure that any cyclone damage is properly dealt with. Standard insurance and indemnity conditions (Deed of Agreement) along with standard permit conditions (using current standard wording that require the facility is maintained to a specific standard (including design drawings) are appropriate.
- A permit condition or letter stating that DTMR remove the stray floating walkways modules from the nearby mangroves, if this can be achieved without significant environmental impacts (this will reduce the impact of reduced amenity/aesthetics of the area).

### Conclusions

There are no significant concerns about the Applicant’s capacity to complete the proposed project (funding is in place). Appropriate permit conditions and the related Deed of Agreement and Environmental Management Plans should ensure the Applicant satisfactorily develops and manages the proposed project.

GBRMPPR [88R(f)]	if the proposed conduct also requires an approval or permission under a law of Queensland — whether the approval or permission has been, or is likely to be, granted and, if granted, the terms and conditions of it being granted;
QMPR [11(1)(e)]	Other matters chief executive may consider under the Marine Park Regulation 2017 .....if the proposed conduct also requires an approval or a permission under a law of the State or a law of the Commonwealth or another State — whether the approval or permission has been, or is likely to be, granted and, if granted, the terms and conditions of it being granted;

### Overview

The proposed project will require a joint permission (GBRMPA and QPWS).

Other than the permit approval being considered here the Applicant also has an approval under:

Section 63 of *Planning Act 2016* for:

- Operational works for tidal works
- Operational works for removal, destruction and damage of marine plants
- Environmentally relevant activities (Dredging)

It should be noted that the Development Approval is subject to the following requirements:

- Applicant to enter into an agreed delivery arrangement to deliver an environmental offset in accordance with the Environmental Offsets Act 2014 to counterbalance the significant residual impacts of the matter/s of state environmental significance being 1013.5m<sup>2</sup> of marine plants;
- Applicant to prepare a Construction Environmental Management Plan (prior to commencement of construction).

Terms and conditions of all approvals granted have been reviewed to ensure their consistency and appropriateness with this assessment and recommended draft permit conditions.

In general, GBRMPA will only consider that a required Queensland approval is unlikely to be granted if the Queensland delegate provides correspondence indicating this. No such correspondence has been received in relation to this application.

In most cases, GBRMPA's approval is not conditional on securing other approvals. The applicant should be afforded liberty to determine the most logical sequence of obtaining approvals based on their own circumstances. The one exception is the ability of the applicant to gain Queensland Marine Park approval. If approval from GBRMPA would have no purpose or utility in the absence of permission for the State Marine Park then GBRMPA may refuse the application on this basis.

### Evidence from public submissions

Some public submissions made reference to assessment processes under both State and Commonwealth (relevant) legislation and expressed concern that the appropriate process was not being followed. These have been reviewed as part of this assessment and relevant 'Statement of Reasons' have already been provided by the Commonwealth Department of the Environment and Energy and the Queensland Department of State Development, Manufacturing, Infrastructure and Planning. This assessment finds no matters raised through the public submission process in need of further review.

### Potential conditions

There are no extra permit conditions to be imposed that relate to this criterion.

### Conclusions

All other relevant legislation and required (or not deemed necessary) approvals have been considered and are now in place. There are no other significant permits or approvals outstanding.



GBRMPR [88R(g)]	any international Convention to which Australia is a signatory, or any agreement between the Commonwealth and a State or Territory, that is relevant to the application;
QMPR [11(1)(f)]	Other matters chief executive may consider under the Marine Park Regulation 2017 any relevant intergovernmental, Australian or international agreement, code, instrument, protocol or standard;

### **The Great Barrier Reef Intergovernmental Agreement 2015**

The Australian and Queensland governments have been working together for the long-term protection and conservation of the Great Barrier Reef since its inception in 1975. This cooperative approach was formalised by the Emerald Agreement in 1979. It was updated in July 2009 with the Great Barrier Reef Intergovernmental Agreement to provide a contemporary framework for cooperation between the governments, recognising challenges such as climate change and catchment water quality not foreseen at the time of the 1979 agreement.

The 2015 Great Barrier Reef Intergovernmental Agreement reflects the shared vision for the future outlined in the Reef2050LTSP, and renews the Australian and Queensland governments' commitment to protecting the Great Barrier Reef World Heritage Area including its outstanding universal value. The agreement recognises key pressures on the Reef — such as climate change impacts, catchment water quality and coastal development — cannot be effectively addressed by either government on their own. It aims to ensure an integrated and collaborative approach is taken by the Australian and Queensland governments to manage marine and land environments within the World Heritage Area.

This assessment reflects these complementary arrangements, including a joint application, assessment and decision making process under both the *Great Barrier Reef Marine Park Regulations 1983* and the *Marine Parks Regulation 2017* (Qld). Any permissions granted will form a joint permission under both Commonwealth and State legislation.

### **International Conventions**

Australia is party to numerous environmental conventions and agreements, including:

- Convention for the Protection of the World Cultural and Natural Heritage 1972
- Convention on Biological Diversity 1992
- Convention on International Trade in Endangered Species of Wild Fauna and Flora 1973
- Convention on the Conservation of Migratory Species of Wild Animals 1979
- Convention on Wetlands of International Importance Especially as Waterfowl Habitats 1971
- International Convention for the Prevention of Pollution from Ships 1973
- United Nations Convention on the Law of the Sea 1982
- United Nations Framework Convention on Climate Change 1992
- Japan-Australia Migratory Bird Agreement
- China-Australia Migratory Bird Agreement
- Republic of Korea-Australia Migratory Bird Agreement

The Great Barrier Reef was inscribed on the World Heritage List in 1981, pursuant to the World Heritage Convention. Clump Point is where two World Heritage Area's meet: the Great Barrier Reef World Heritage Area and the Wet Tropics World Heritage Areas.

The Great Barrier Reef Marine Park was the first 'Particularly Sensitive Sea Area' designated by the International Maritime Organisation.

The permission assessment process contributes towards meeting the requirements of these conventions by assessing the impacts of proposals to the values of the Marine Park, within the Great Barrier Reef World Heritage Area.

#### Evidence from public submissions

Some public submissions raised matters related to this criterion in particular the World Heritage Convention and the Convention on the Conservation of Migratory Species of Wild Animals 1979. One submission stated that the proposed project posed '*unacceptable risks to the World Heritage Values including ecological and coastal aesthetic values*'.

The potential impacts have been addressed through this assessment document (see in particular [GBRMPR 88Q\(a\)/QMPR 10\(a\)](#)) which considers not only the impacts to the World Heritage Area but also aesthetics/amenity.

#### Potential further conditions

There are no extra permit conditions to be imposed that relate to this criterion.

#### Conclusions

Based on the impact assessment under criteria [GBRMPR 88Q\(a\)/QMPR 10\(a\)](#), it not expected that the proposed activities will significantly impact on the objectives of, and our obligations under the above conventions.

GBRMPR [88R(h)]	any relevant law of the Commonwealth, or a relevant law of Queensland as in force from time to time, or a relevant plan made under such a law, relating to the management of the environment, or an area in the Marine Park;
QMPR [11(1)(g)]	Other matters chief executive may consider under the Marine Parks Regulation 2017 any relevant law of the State or of the Commonwealth, or a relevant instrument;

### Overview

There are no other relevant laws or instruments of the State or Commonwealth (relating to the management of the environment, or an area in the Marine Park) that require further consideration.

DTMR has gained the necessary Queensland Development Approval (No. 1711-2484 SDA) associated with the proposed project which allows for operational works for tidal works, removal, destruction and damage of marine plants and dredging. DTMR originally intended to dredge 2000 cubic metres of unsuitable material on the western side and dispose of the material off site. After further investigation DTMR have opted to redesign the reclamation area to ensure the soft material (marine mud) is completely contained within the rock revetment perimeter. As such no material is proposed to be removed from the site.

The *Environmental Protection (Sea Dumping) Act 1981* was not considered relevant to this proposal as the placement of material at sea is clearly for the purposes of building a breakwater and not for disposal of that material. This was further confirmed by DTMR in their SI-PIP where they sought further advice from the Department of Environment and Energy (who administer the *Sea Dumping Act 1981*) who confirmed that no Sea Dumping permit was required.

There is also an ILUA and a Cultural Heritage Management Plan in place for the proposed project area (refer to criteria [GBRMPR 88Q\(a\)](#) and [QMPR 10\(a\)](#)).

### Evidence from public submissions

Some submissions highlighted the need for further Queensland Government approvals before the proposed project could proceed.

Submissions also highlighted the need for a permit under the *Environment Protection (Sea Dumping) Act 1980*.

### Potential conditions

All activities conducted under the permit are undertaken with the provisions of the laws in force from time to time in the State of Queensland and the Commonwealth of Australia.

### Conclusions

The proposal is considered to be consistent with Commonwealth and Queensland legislation. There are no further matters to be considered under this criterion.

GBRMPR [88R(i)]	any relevant recovery plan, wildlife conservation plan, threat abatement plan or approved conservation advice, under the Environment Protection and Biodiversity Conservation Act 1999;
QMPR [11(1)(h)]	any relevant recovery plan, wildlife conservation plan, threat abatement plan or approved conservation advice, under the Environment Protection and Biodiversity Conservation Act 1999 (Cwlth), or any conservation plan under the Nature Conservation Act 1992;

### Recovery Plans

The Australian Government Minister for the Environment and Energy (the Minister) may make or adopt and implement recovery plans for threatened fauna, threatened flora (other than conservation dependent species) and threatened ecological communities listed under the EPBC Act. Recovery plans set out the research and management actions necessary to stop the decline of, and support the recovery of, listed threatened species or threatened ecological communities.

The aim of a recovery plan is to maximise the long term survival in the wild of a threatened species or ecological community. An EPBC Act Protected Matters Report was undertaken (BMT WBM 2016) for the area within the study area. The report was used to identify threatened, migratory and marine species, and threatened ecological communities, that occur or could occur within the study area. In summary, the following were identified:

- Threatened sharks: Three threatened shark species were identified as potentially occurring in the study area: whale shark (*Rhincodon typus*), dwarf sawfish (*Pristis clavata*) and green sawfish (*Pristis zijsron*). The whale shark is a pelagic species that tends to prefer offshore tropical waters, and is unlikely to occur in the study area. Green sawfish and dwarf sawfish may occur in the study area from time to time, with Cairns representing the present day southern extent of their geographic distribution along the Queensland coast. Stevens et al. (2005) report that green sawfish has been recorded in the Cairns area in recent decades (i.e. since 1990). However, long term data from the Queensland Shark Control Program indicate a major population decline has occurred since the 1970's, largely due to fishing pressure (targeted and bycatch) and net entanglement. While both green and dwarf sawfish may occur within the study area from time to time, it is likely that the local population is very small and/or transient. Dwarf sawfish are typically considered to be the more common *Pristis* species throughout northern Australia (Stevens et al. 2005), although there are no known recent records from east of Cape York (GBRMPA 2012) – from BMT WBM 2016.
- Threatened marine mammals: two species are mentioned as threatened within the report BMT WBM 2016 (however they are not identified). It appears that the Humpback Whale (*Megaptera novaengliae*) is the only listed threatened whale species (EPBC Act) that may occur near the proposed project area. The Australian Humpback Dolphin (*Sousa sahulensis*) and Snubfin Dolphin (*Orcaella heinsohni*) are listed migratory species (EPBC Act) and are expected to enter the area at times.
- Threatened marine reptiles: six species although green turtle would be the predominant species found within the Bay, with the possibility of loggerhead and flatback turtles also being in the vicinity.
- No threatened ecological communities

Estuarine crocodiles (*Crocodylus porosus*) which may occur in the area are a listed marine and migratory species under the EPBC Act. No Wildlife Conservation Plan has been identified as being relevant for this species. They are also listed as Vulnerable under the *Queensland Nature Conservation Act 1992*. See further discussion on crocodiles below.

The above data was correlated against the Department of the Environment and Energy's current recovery plans and two (2) relevant plans were identified:

- Recovery Plan for Marine Turtles in Australia – 2017. This plan identified the following as the greatest threats to the marine turtle stocks relevant to this application:
  - Green Turtle, Southern Great Barrier Reef (G-sGBR) Stock - climate change, marine debris and chemical and terrestrial discharge.
  - Loggerhead Turtle, South-west Pacific (LH-swPac) Stock. Marine debris, entanglement and ingestion; light pollution; climate change and variability (extreme weather); fisheries bycatch (international longline)



- Flatback Turtle, Eastern Queensland (F-eQld) Stock. Light pollution; Climate change and variability (temperature)
- Sawfish and River Sharks Multispecies Recovery Plan – the principal threats to these sawfish and river shark species come from: fishing activities including: being caught as by-catch in the commercial and recreational sectors; through Indigenous fishing; and illegal, unreported and unregulated fishing and habitat degradation and modification.

#### Conservation advices

The above data was correlated against the Department of the Environment and Energy's current conservation advices and four (4) relevant advices were identified:

- Approved Conservation Advice for *Dermochelys coriacea* (Leatherback Turtle)
- Approved Conservation Advice for *Pristis zijsron* (Green Sawfish)
- Approved Conservation Advice for *Rhincodon typus* (Whale Shark)
- Approved Conservation Advice for *Megaptera novaeangliae* (Humpback whale)

A review of each these advices did not identify any further management strategies or actions (with specific relevance to the current proposal) beyond what is already recommended within the assessment. For example it is recommended that pile driving (acoustic impacts) is limited to low-tides with soft-starts and that marine mammals observers and stop works procedures are in place for these works.

#### Nature Conservation Act 1992 (Qld)

There is an Estuarine Crocodile Conservation Plan in place under the *Nature Conservation Act 1992 (Qld)* which aims to conserve viable populations of estuarine crocodiles in the wild and protect humans from problem crocodiles. The proposed project area is not known to be a significant habitat for crocodiles and as such is unlikely to affect the viability of the species. Provided sound practices occur around the boat ramps / detached breakwater and fish frames are not disposed of in the adjacent waters then you would expect that the proposal will have an unchanged effect on human safety. It is likely that DTMR will install Queensland Government "Be Crocwise" signage which is common place at boat ramps in "croc country".

Although crocodiles were once extensively commercially harvested, their numbers in northern Queensland are now recovering following full protection under Queensland legislation since 1974. The most recent surveys conducted in 2009–10 in the southern two-thirds of the Region showed the population continues to steadily recover.

The Nature Conservation (Estuarine Crocodile) Conservation Plan 2007 and Queensland Crocodile Management Plan 2017 (QCMP) provide Queensland's strategic management framework to ensure the conservation of estuarine crocodiles in the wild, and reduce the risks to public safety from crocodiles. The QCMP is the overarching framework for the state-wide management of public safety risks associated with crocodiles in Queensland. Management is based on crocodile management zones where crocodiles are removed in certain circumstances across different areas of the state in accordance with the level of risk posed and was developed following consultation with key stakeholders and the broader community. Should a specific crocodile be identified in the future as posing a risk at Clump Point it would be managed under this plan (and potentially trapped/removed).

#### Threat Abatement Plans

Threat Abatement Plans provide for the research, management, and any other actions necessary to reduce the impact of a listed key threatening process on native species and ecological communities. Implementing the plan should assist the long term survival in the wild of affected native species or ecological communities. The Minister may decide whether to have a Threat Abatement Plan for a threatening process in the list of key threatening processes established under the EPBC Act.

- Injury and fatality to vertebrate marine life caused by ingestion of, or entanglement in, harmful marine debris is listed as a key threatening process under the EPBC Act. The Threat Abatement Plan for the Impacts of Marine Debris on Vertebrate Marine Life - 2009 outlines objectives for improving waste management practices on land and at sea. In accordance with this plan, the proposed action will meet these objectives by incorporating waste management protocols within an EMP approved by the Managing Agency.

#### **Evidence from public submissions**

Some submissions raised issues associated with marine debris as a potential impact of the proposed project. In particular:

- Fuel and oil spills
- Rubbish from operation of the facility
- Rubbish from rubbish skips on barges
- Run-off from wash down area (fuel, dirt, anti-fouling paint, chemicals, fishing rubbish).

#### **Potential further conditions**

There are no further permit conditions proposed.

#### **Conclusions**

All relevant recovery plan, wildlife conservation plans, threat abatement plans and conservation advices have been considered as part of this assessment.

GBRMPR [88R(j)]	whether the applicant for the permission is a suitable person to hold such a permission, having regard to: <ul style="list-style-type: none"> <li>(i) the applicant's history in relation to environmental matters; and</li> <li>(ii) if the applicant is a body corporate — the history of its executive officers in relation to environmental matters; and</li> <li>(iii) if the applicant is a company that is a subsidiary of another company (the parent body) — the history of the parent body and its executive officers in relation to environmental matters; and</li> <li>(iv) any charge, collected amount or penalty amount that is overdue for payment by the applicant as the holder of a chargeable permission (whether or not the permission is in force); and</li> <li>(v) any late payment penalty that is payable by the applicant as the holder of a chargeable permission (whether or not the permission is in force); and</li> <li>(vi) any unpaid fines or civil penalties required to be paid by the applicant in relation to a contravention of the Act or of these Regulations;</li> </ul>
QMPR [11(1)(i)]	Other matters chief executive may consider under the Marine Park Regulation 2017 whether the applicant for the permission is a suitable person to hold the permission, having regard to – <ul style="list-style-type: none"> <li>• the applicant's history in relation to environment matters; and</li> <li>• if the applicant is a body corporate — the history of its executive officers in relation to environment matters; and</li> <li>• if the applicant is a company that is a subsidiary of another company (the parent body) — the history of the parent body and its executive officers in relation to environment matters; and</li> <li>• whether the applicant owes any amount payable under the Act;</li> </ul>

### Overview

There are no identified outstanding charges or penalty amounts owed by the applicant. A check of the permits and DDM compliance databases (06 March 2018) found the following associated with the State of Queensland Department of Transport and Main Roads:

- G17/33288.1 – failure to submit/comply with management plan/Schedule of Works (SOW)/report – Permittee education conducted – Oct 2017 matter finalised and closed
- G17/39574.1 – failure to submit/comply with management plan/SOW/report – Permittee education conducted – Oct 2017 matter finalised and closed
- G17/39574.1 – failure to display/produce permit – Permittee education conducted – Oct 2017 matter finalised and closed

These are all considered minor matters and do not represent an inability to hold a suitable permission in relation to this project application.

DTMR is the State Government Department tasked with developing and managing public boating facilities in Queensland. They currently hold a number of Marine Park permits in relation to boating facilities.

### Evidence from public submissions

There were a small number of public submissions that hinted at the lack of trustworthiness of DTMR. One submission stated that they had personally witnessed other DTMR projects and that they adopted an attitude of 'overkill' to projects and basically did whatever they wanted regardless of public views. The conclusion of this one submission was that they didn't trust DTMR to be environmentally responsible.

From the evidence provided above (in overview) DTMR is considered a suitable permit holder to hold permissions for boating facilities – as the owner of the Marine Infrastructure Investment Program and several other DTMR-owned boating facilities in Queensland. Day to day maintenance of in-water infrastructure (such as cleaning) will be managed and funded by CCRC as the facility manager.

Concerns were also raised as to the suitability of CCRC as day-to-day managers of the facility. However, as CCRC will not be the permit holder they are not considered relevant to this application. The permit applicant was DTMR and if granted, the permissions will be granted to DTMR. Ultimately it will be DTMR who will be responsible under the permit to ensure that the facilities are maintained up to the standard expected for a World Heritage Area and Marine Park and be compliant with permit conditions.

Further, any infrastructure owned by DTMR is covered by the Queensland Government Insurance Fund (QGIF) for disaster recovery repairs.

#### **Potential further conditions**

- If an incident (meaning an event involving actual or potential harm to the ecosystem) should occur, it is recommended that the Permittee be required to notify the Managing Agency within 24 hours in order to reduce any potential further risks to the environment.
- A deed would provide assurance that should an incident occur or the structures become damaged or abandoned, the costs associated with the clean-up or removal would be covered by insurance.
- In order to provide assurance that a damage assessment is completed should an incident occur, a clause should be included within the deed which requires that should the Managing Agency suspect harm to the environment as a result of an incident, the costs of a damage assessment will be recovered from the Permittee.

#### **Conclusions**

The applicant is the primary Queensland Government Department responsible for the development and maintenance of boating facilities. There are no concerns or further consideration needed as to whether the applicant is a 'suitable person'.



QMPR [11(1)(j)]	Other matters chief executive may consider under the Marine Park Regulation 2017 likely cumulative effect of the applicant's proposed use and other uses on a marine park;
-----------------	--

### Overview

Cumulative impacts are defined in the (draft May 2017) Australian Government Reef2050LTSP policy (endorsed by the Queensland State Government) as '...the interaction of effects between one or more impacts and past, present and reasonably foreseeable future pressures...'

The Draft Cumulative Impact Management Policy states 'Improving management of cumulative impacts to reduce pressures, together with delivering decisions which result in an improvement in the condition of the values, is critical to future health and resilience of the GBR', (p.5)

This proposal is not considered to contribute to the identified main pressures on the Great Barrier Reef:

- Climate Change
- Coastal Land Use change
- Poor water quality from land based run-off
- Some remaining impacts of fishing

The draft policy provides examples of multiple impacts within an area and refer to those presenting high and very high risks to the reefs values which can combine to have a serious cumulative risk to local habitats and species. The formal risk evaluation assessment found that the proposal fell with the low risk category for all activities / elements, except the breakwater construction which was identified as a medium risk activity.

Cumulative impacts are particularly challenging to quantify, assess and manage and have been identified as a program commitment in the Great Barrier Reef Region Strategic Assessment Program Report. Plans of Management have been used as effective tools to manage cumulative impacts of activities such as marine tourism, pontoons, private moorings and protect high value areas / settings.

### Draft Policy on Cumulative Impacts

The Draft Cumulative Impact Management Policy lists the identified pressures and impacts, their definition and associated source in Table A1.1.

This project involves a number of the identified pressures and impacts that are listed in Table A1.1 and these are addressed in the below headings:

#### *Artificial light*

Navigation aids and general lighting will be required at the public boat ramp and on the detached breakwater. This is not expected to have any significant effects on marine life as the area is not an identified turtle or seabird nesting location. The area is also adjacent to a population centre where there is already a significant source of artificial light. The existing Perry Harvey jetty is nearby is also well lit up at night.

#### *Coastal reclamation*

The application does involve some reclamation of the State Marine Park and alteration to the GBR Marine Park (detached breakwater-groynes), however it is considered to be at a scale which is unlikely to affect the values of the Marine Park, on a local or broad scale, now and into the future (refer to criteria [GBRMPR 88Q\(A\)](#), [QMPR 10\(a\)](#) for more detail). The net benefit of the improved public boating facilities will enable greater appreciation and enjoyment of the Marine Park by recreational and commercial users via easier access.

#### *Modifying supporting habitats – clearing mangroves*

In regard to the removal of 1013.5m<sup>2</sup> of mangroves the works have triggered the Queensland environmental offset legislation / policy which is designed to ensure that there is no net loss to the environment (Marine Park) and as such should ensure there are no cumulative impacts to the Marine Parks associated with this aspect of the application (refer to [GBRMP 88Q\(a\)/QMPR 10\(a\)](#) for more detailed discussion on the removal of mangroves).

### Evidence from public submissions

A number of submissions referred to the cumulative impacts statements and objectives within the Reef2050LTSP and how this proposal was considered contrary to the objectives, statements and obligations under the plan. These statements were not supported by evidence, they were merely statements. The information above is considered to adequately address these matters.

### Potential further conditions

None specific to this criteria.

### Conclusion

The risk assessment found that the overall impacts of the proposal would not impair the overall condition of the ecosystem, or a sensitive population or community on a local or wider level. The relatively minor nature and scale of this project combined with the mitigation measures proposed and identified throughout the assessment should ensure that the public boating facilities can be constructed and operated without causing any serious cumulative risks to local habitats and species.

GBRMPP [88R(k)]	any other matters relevant to achieving the objects of the Act.
QMPR [11(1)(k)]	Other matters chief executive may consider under the Marine Parks Regulation 2017 any other matters relevant to achieving the purpose of the Act.

### Objects of the Act

The main object of the *Great Barrier Reef Marine Park Act 1975* is to provide for the long term protection and conservation of the environment, biodiversity and heritage values of the Great Barrier Reef Region. In so far as it is consistent with the main object, the GBRMP Act also allows for ecologically sustainable use of the Great Barrier Reef Region for the purpose of public enjoyment and appreciation, and recreational, economic and cultural activities.

The main object of the *Marine Parks Act 2004* (Qld) is to provide for the conservation of the marine environment. This is achieved through: the declaration of marine parks; the establishment of zones, zoning and management plans; the cooperative involvement of public authorities and other interested groups and persons, including members of Aboriginal and Torres Strait Islander communities; the cooperative implementation of Australia's international responsibilities, and intergovernmental agreements and instruments; a coordinated and integrated approach with other environment conservation legislation; recognition of the cultural, economic, environmental and social relationships between marine parks and other areas, whether of water or land; the provision of opportunities for public appreciation, understanding and enjoyment of the marine environment; application of the precautionary principle in decision-making processes; monitoring and enforcing compliance with the Act; and in conserving marine parks, the State is to maintain, as far as practicable, legislation in line with the Commonwealth *Great Barrier Reef Marine Park Act 1975*.

This assessment reflects that granting a permission subject to conditions would be consistent with the objects of the Acts.

### Marine Park Boundary change

The proposed reclamation at Clump Point for the construction of the additional boat ramp lane has changed a number of times (due to new designs) and is now<sup>1</sup>:

- (a) State Marine Park (change in HAT)= 2421m<sup>2</sup>
- (b) Federal Marine Park (below MLW)= 685m<sup>2</sup>

The construction of the additional boat ramp lane will have the effect of slightly altering the mean low water along the coastline and as such would change the boundary of the Marine Park. Section 31(4) of the *Great Barrier Reef Marine Park Act 1975* states that before the Governor-General makes a proclamation causing an area in the Great Barrier Reef Region to cease to be part of the Marine Park, the Minister must be satisfied that the proclamation would be in accordance with a resolution passed by each House of Parliament on a motion and the notice of the motion was given no less than 15 sitting days at the House before the motion was moved.

However, not every minor and incidental change to the boundary of the Marine Park requires affirmative resolutions from each House of Parliament and the principle of "*de minimis non curat lex*", which means the law does not concern itself with trivial matters, may be considered relevant in this instance.

The change would be considered a minor change to the Federal Marine Park boundary and as a result the procedures under Section 31 of the *Great Barrier Reef Marine Park Act 1975* do not need to be applied.

Minor changes as a result of coastal works have previously been considered to be so minimal in nature as to not require further consideration under the *Great Barrier Reef Marine Parks Act 1975*.

### Evidence from public submissions

One submission stated (in relation to this criterion):

*"At the Information Session (May 2016), the discussion about how to use the de minimis principle to avoid proper assessment, including under the Sea Dumping Act, led to a further discussion about the possibility of using the same method to get breakwalls across the Hinchinbrook Channel. The original plans there were for 900 m long walls."*

---

<sup>1</sup> Correspondence from DTRM to GBRMPA dated 19 March 2018

It is considered that these matters have been dealt with elsewhere within this assessment or are not relevant to this assessment. Further, the *Environment Protection (Sea Dumping) Act (1981)* does not apply to the construction of breakwalls and rockwalls so there was no need to further consider it in this assessment.

Several submissions highlighted the perceived skirting of the legislation by the de minimus interpretation of there not being a significant change to the boundary of the Great Barrier Reef Marine Park. These decisions are made on a case by case basis and rely on several factors to make such an interpretation. These factors can include: size of the area in question, values within the area, and connectivity of the area.

#### Potential further conditions

There are no extra permit conditions to be imposed that relate to this criterion.

#### Conclusions

There are no other matters relevant to achieving the objects of the Act in relation to this criterion.



## References

- Aurecon April 2014 Marine Ecology, Water Quality & Sediment Sampling Investigation Report. Supplied by Department of Transport and Main Roads.
- Australian Institute of Marine Science – Annual Report for Coral Reef Monitoring (marine monitoring program 2016/2017).
- BMT WBM August 2016 Clump Point Development Plan – Terrestrial Ecology Assessment. Supplied by Department of Transport and Main Roads.
- BMT WBM August 2016 Clump Point Boat Ramp: Marine Ecology, Water Quality & Sediment Sampling Report . Marked Confidential. Supplied by Department of Transport and Main Roads.
- BMT WBM February 2017- Clump Point Boat Ramp Development Plan – Coastal Process Modelling Study. Supplied by Department of Transport and Main Roads.
- BMT WBM November 2017 - Mission Beach Clump Point Boating Infrastructure Project: Coastal Modelling Report. Supplied by Department of Transport and Main Roads
- Carruthers, TJB., Dennison, WC., Longstaff, BJ., Waycott, M., Abal, EG., McKenzie, LJ., Lee Long, WJ. (2002) Seagrass habitats of northeast Australia: models of key processes and controls. *Bulletin of Marine Science of the Gulf and Caribbean* 71, 1153-1169.
- Chenoweth EPLA (2007). Biodiversity Significance of Mission Beach, report to Terrain Natural Resource Management.
- Department of Environment and Energy. EPBC Act referral guidelines for the Outstanding Universal Value of the Great Barrier Reef World Heritage Area.
- Department of Environment and Energy (2017). Recovery Plan for Marine Turtles in Australia (2017-2027).
- Department of Environment and Energy (2015) – Conservation Advice (*Megaptera novaeangliae* – humpback whale)
- Department of Environment and Energy – Approved Conservation Advice for Green Sawfish.
- Department of Environment and Energy (2015) - Approved Conservation Advice for *Rhincodon typus* (whale shark).
- Department of State Development (2017). Clump Point Boating Facilities Upgrade- Development Plan.
- Department of Transport and Main Roads (2017). EPBC Act referral - submission #2180 - Mission Beach Clump Point Boating Infrastructure Project
- Department of Transport and Main Roads (2016). Technical Note Metocean Data Collection (BMT WBM 15<sup>th</sup> August 2016).
- Department of Transport and Main Roads (2016) - Technical Note Sediment Sampling and Analysis (BMT WBM 15<sup>th</sup> August 2016).
- Department of Transport and Main Roads (2017) – Clump Point Boating Facilities Upgrade: Construction Environmental Management Plan (BMT WBM June 2017).
- Department of Transport and Main Roads (2017) – Clump Point Boating Facilities Upgrade Operational Management Plan (Framework) (22 June 2017).
- Department of Transport and Main Roads (2017) – Mission Beach Clump Point Boating Infrastructure Project – Public Information Package (BMT WBM 24 November 2017).
- Department of Transport and Main Roads (2018) – Response to Further Information Request (19 March 2018).
- Department of Transport and Main Roads (2017) – Technical Note Clump Point Design Wave Assessment (BMT WBM May 2017).

- Department of Transport and Main Roads (2018) – Technical Note on Littoral Rainforest and Coast Vine Thickets of Eastern Australia (BMT WBM 2018).
- Environmental Protection Agency (2003). Environmental Protection Agency Wet Tropical Coast Regional Coastal Management Plan (December 2003).
- Girrigun Aboriginal Corporation (2007) *Indigenous Cultural Significance Assessment, Mission Beach, Girrigun Aboriginal Corporation Study*, prepared by Djiru Traditional Owners, compiled by P, Pentecost
- GBRMPA (2012). A vulnerability assessment for the Great Barrier Reef – Indo-Pacific humpback and Australian snubfin dolphins.
- GBRMPA (2005). Site Management Arrangements Clump Point, Mission Beach, Townsville.
- GBRMPA (2010). Environmental Impact Management Policy, Townsville.
- GBRMPA (2013) Great Barrier Reef Biodiversity Conservation Strategy 2013, Townsville.
- GBRMPA (2014). Great Barrier Reef Region Strategic Assessment Report 2014, Townsville.
- GBRMPA (2014). Great Barrier Reef Outlook Report 2014, Townsville.
- GBRMPA (2017). Guidelines - Assessments and Decision 2017. Townsville.
- GBRMPA (2016). Guidelines – dugong impact assessment in the permission system (Sept 2016).
- GBRMPA 2018). Guidelines – seagrass value assessment.
- GBRMPA (2017). Guidelines – social values assessment.
- GBRMPA (2014). Moorings in the Great Barrier Reef (Policy).
- GBRMPA (2007). Operational policy on whale and dolphin conservation in the Great Barrier Reef Marine Park (amended 2007).
- Kapitzke, IR, Matheson, MJ and TA Hardy (2002). Reef infrastructure guidelines: tourist pontoons. CRC Reef Research Centre Technical Report No 39, CRC Reef Research Centre, Townsville.
- Pentecost, P (2007). Indigenous cultural significance assessment, Mission Beach: An initiative of FNQ NRM Ltd, Girringun Aboriginal Corporation, Cardwell.
- Reef 2050 Long-Term Sustainability Plan - Commonwealth of Australia 2015.
- Roder, CA, Lee Long, WJ, McKenzie, LJ and AF Roelofs (1998). Proposed Clump Point Boat Ramp & Facilities – Review of Marine Environment Factors (seagrasses and other benthic habitats. Unpublished Report to Queensland Department of Main Roads (Queensland Department of Primary Industries) 11pp.
- Stevens JD, Pillans RD, Salini J (2005) 'Conservation Assessment of Glyphis sp. A (speartooth shark), Glyphis sp. C (northern river shark), Pristis microdon (freshwater sawfish) and Pristis zijsron (green sawfish).' CSIRO Marine Research, Hobart, Australia.
- United Nations Educational, Scientific and Cultural Organisation (UNESCO) - Reactive Monitoring Mission to Great Barrier Reef – (Australia) - 6th to 14th March 2012

## Attachments

Attachment A – Public Information Package (PIP)

Attachment B – Supplementary Public Information Package (SI-PIP)

Attachment C – Department of Environment and Energy's statement of reasons for EPBC 2017/7924