



# Port of Bundaberg Insurance Trench Capital Dredging Dredge Management Plan

## Brief description

This Dredge Management Plan has been developed to document GPC's systems and controls for minimising the risk of environmental impact associated with the Insurance Trench capital dredging project in the Port of Bundaberg.

### Document information

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### Document accountability

Role	Position
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Endorsed by **Port of Bundaberg Manager on 04/08/2022**

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# 1 Terms and definitions

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In this Plan:

“**DA**” means Development Approval

“**DAF**” means Department of Agriculture and Fisheries.

“**DES**” means Department of Environment and Science.

“**AWE**” means Department of Agriculture, Water, and the Environment.

“**DMP**” means Dredge Management Plan.

“**DMPA**” means Dredge Material Placement Area

“**EA**” means Environmental Authority.

“**EMP**” means Environmental Management Plan.

“**EP Act**” means *Environmental Protection Act 1994* (QLD).

“**ERA**” means Environmentally Relevant Activity.

“**GPC**” means Gladstone Ports Corporation.

“**LAT**” means lowest astronomical tide

“**LTMMP**” means PoB Long Term Management and Monitoring Plan 2012-2022.

“**MP**” means Monitoring Procedure.

“**MSQ**” means Maritime Safety Queensland.

“**NAGD**” means National Assessment Guidelines for Dredging.

“**PBPL**” means Port of Brisbane Pty Ltd.

“**PoB**” means Port of Bundaberg.

“**QASSTM**” means Queensland Acid Sulfate Soils Technical Manual

“**SAP**” means Sediment and Analysis Plan.

“**SARA**” means State Assessment and Referral Agency

“**Sea Dumping Act**” means *Environmental Protection (Sea Dumping) Act 1981* (Cth).

“**TSHD**” means Trailing Suction Hopper Dredge

“**USL**” means Unallocated State Land

Terms that are capitalised and not otherwise defined in this Procedure are defined in the GPC Corporate Glossary Instruction (as listed in Appendix 1 – Related documents).

## 2 Introduction

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### 2.1 Purpose

This Dredge Management Plan (“DMP”) is intended to provide the framework for the management of Port of Bundaberg (“PoB”) Insurance Trench Capital Dredging.

The DMP aims to:

- (a) describe Gladstone Port Corporation’s (GPC’s) systems for minimising and managing identified potential risks associated with Insurance Trench Capital dredging activities across GPC including, routine operations, closure and emergencies;
- (b) address compliance requirements; and
- (c) describe the controls and safeguards to be employed for ensuring plant, equipment and measures are maintained and operated in a proper and effective manner.

### 2.2 Scope

The scope of this DMP covers the Insurance Trench capital dredging including sea placement activities by the GPC and engaged Contractors and all associated activities that may impact the environment at the **PoB**.

This plan must be read in conjunction with and also refers to elements of the following associated documents:

- PoB Long Term Monitoring and Management Plan (“LTMMMP”) for Sea Disposal;
- Processes and Protocols of PoB Maintenance Dredging Environmental Management Plan (“EMP”);
- Dredge Contractors EMP (Trailing Suction Hopper Dredger (“TSHD”) Works); and
- Relevant sections of PoB Maintenance Dredging Environmental Monitoring Procedure.

GPC are the holders of a Development Approval (“DA”) DA2021/34/01 and an Environmental Authority (“EA”) granted by the Queensland Department of Environment and Science (“DES”) under the *Environmental Protection Act 1994* (Qld) (“EP Act”). This EA (P-EA-100195853) is for Environmentally Relevant Activity (“ERA”) 16 - extractive and screening activities (dredging).

Contractor(s) are engaged to undertake the dredging works in accordance with the above mentioned EAs. GPC requires the Contractor(s) to develop a DMP that covers the operational scope of dredging works undertaken by their dredger(s). This plan is developed by the dredging Contractor(s) to comply with their contractual requirements, and the relevant pieces of legislation and statutory approvals. GPC maintains the direction of the Contractor carrying out dredging and ultimate responsibility for adherence to the EA.

GPC typically disposes of dredge spoil to sea at the designated site (refer to Section 3.3(b) in accordance with a Federal Sea Dumping Permit (SD2012/2202 Variation 1), issued by the Department of Water, Agriculture and the Environment (“AWE”) under the *Environment Protection (Sea Dumping) Act 1981* (Cth) (“Sea Dumping Act”). This activity is to be undertaken in accordance with the Federal Sea Dumping Permit (SD2021-4017). As the sea placement site falls within both State and Federal waters, GPC also holds a State Operational Works permit (IPDC00649407) regulated by DES and a Disturbance of Marine Plants permit (2007/DB0233) regulated by Department of Agriculture and Fisheries (“DAF”) for placement of the dredge material at sea.

A LTMMMP for sea placement has been developed, approved by AWE and implemented to comply with the requirements of the Sea Dumping Permit and the Sea Dumping Act.

See Section 4.1 of this DMP for more information on the environmental legislation and approvals relevant to GPC’s Insurance Trench Capital dredging works.

## 2.3 Objectives

This DMP is intended to be a working management document to be used in the day to day operations of dredging to ensure environmental best practice and legislative compliance. This DMP provides a structured program for the management of the works to ensure that all reasonable and practicable measures will be implemented to prevent and/or minimise the likelihood of environmental harm being caused during the works.

The EA (P-EA-100195853) requires GPC to implement a DMP that contains the following:

- 1 Clearly stated aims and objectives;
- 2 Description of dredging operation including:
  - (i) type of equipment to be used in dredging;
  - (ii) volume of dredged material to be removed and duration and timing of the dredging campaign;
  - (iii) methods to be utilised for transporting dredged material; and
  - (iv) dredged material placement methods.
- 3 Maps or plans showing:
  - (i) legend, north arrow and scale;
  - (ii) boundaries of dredging operation;
  - (iii) estimated or modelled zone of influence of sediment plumes;
  - (iv) location of designated placement sites;
  - (v) location of sensitive receptors; and
  - (vi) all monitoring locations.
- 4 A detailed description of sediment plume-associated monitoring program including:
  - (i) sampling regime and methods; and
  - (ii) monitoring sites.
- 5 A detailed description of the assessment methodology to provide data in relation to trigger values that will define alert levels.
- 6 Clearly set out data handling and evaluation procedures that demonstrate how exceedance of alert levels will be determined.
- 7 Management actions to be initiated if alert levels are exceeded.

In addition, the DMP provides direction for:

- establishment of contingency plans and emergency procedures;
- recording organisational structures, accountability and responsibility;
- facilitating arrangements for effective communication;
- monitoring all contaminant releases;
- ensuring all Employees and Contractors are trained and aware of legislative requirements pertaining to the works as well as commitments made in this DMP;
- ensuring appropriate records are kept; and
- ensuring that reviews of environmental performance and continual improvement are undertaken periodically.

Dredging must be conducted in accordance with this DMP.

## 2.4 Implementation

Prior to the commencement of works, this DMP will be approved by the GPC Environment Superintendent and the PoB Manager. Works should not be undertaken in a way which:

- contravenes this DMP; and/or
- is inconsistent with the conditions of the statutory approvals which permit this development (Table 1).

Where there is conflict between this DMP and documents compiled by an engaged Contractor, conditions imposed in this plan by GPC will prevail. Following the commencement of works, amendments to this DMP and associated documents must be communicated to and approved by GPC's Environment Superintendent and the PoB Manager prior to the implementation of any changes. All relevant Employees and / or Contractors should be introduced to and made familiar with the provisions of this DMP and with the procedures and processes which will achieve the objectives relevant to this plan.

## 3 Activity Description

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### 3.1 Overview

The PoB is situated 19.3 km downstream from the City of Bundaberg, 4.8 km from the mouth of the Burnett River, and has an entrance channel 11 km in length. The channel is 103 m in width, with a maximum 9.5 m navigable depth ("LAT") and leads into a swing basin 1,165 m in length and 320 m in width.

There are two (2) main wharves. The Sir Thomas Hiley Wharf is used for the shipment of sugar and the John T. Fisher Wharf is used for the bulk loading point for molasses. In addition, the PoB has a marina and a boat harbour for safe anchorage of smaller vessels.

GPC is required under the *Transport Infrastructure Act 1994* (Qld) to maintain navigable depths within the port navigation areas.

As part of the Sustainable Sediment Management Project for Bundaberg, one (1) of the options for keeping the shipping channels navigable was to conduct capital dredging to create an insurance trench to allow sedimentation to occur within a localised area. Larger volumes of siltation can occur (following floods) which can settle in the trench thus reducing the need for maintenance dredging. It is proposed to construct the Insurance Trench adjacent to the existing Sugar Berth (Sir Thomas Hiley Wharf).

At present, the Sugar Berth receives approximately 8,000 m<sup>3</sup>/year in sedimentation during a normal year, and much larger volumes during flood events. The intent of the insurance trench will be to create additional capacity to receive sediment at the Sugar Berth and thereby to potentially reduce maintenance/emergency dredging requirements and associated at-sea placement. The insurance trench has been designed to be ~100% of the size of the Sugar Berth, thereby doubling the space over which siltation can occur. Additionally, as the insurance trench will be deeper than the berth, there will be further capacity within the trench to receive sediment. This additional capacity provide the opportunity to drag-bar/bed-level sediment from the Sugar Berth into the insurance trench, thereby removing the need for immediate dredging to restore appropriate under-keel clearance at the berth.

By providing this additional capacity and the ability to undertake drag-barring, the need for emergency dredging at the berth potentially decreases. Importantly, this both reduces the volume of material that would otherwise be required to be dredged and placed at sea, and reduces the risk that emergency dredging would be required during periods when turtle nesting occurs at nearby beaches (March to September). The additional capacity also provides greater flexibility for GPC in managing dredging at the Sugar Berth more generally.

The location of the proposed insurance trench is shown in Figure 1 and Figure 2. The trench will include a deepening of part of the Sugar Berth pocket (from -11.0 m LAT to -12.5 m LAT) as well as part of the adjoining navigation channel to that same depth. The total dredging volume for the trench will be 50,000 m<sup>3</sup>, of which 30,000 m<sup>3</sup> would be capital material (the remainder is included in existing approvals).

Capital dredging of the trench would be undertaken concurrently with the annual maintenance dredging, either as part of a single capital dredging campaign (i.e. single 30,000 m<sup>3</sup> dredging event) or over two consecutive years (e.g. two capital dredging campaigns of 15,000 m<sup>3</sup> plus maintenance material), with the maximum total annual dredging volume being no greater than 90,000 m<sup>3</sup>. As capital dredging would occur concurrently with the annual maintenance dredging, it will be undertaken by the *TSHD Brisbane*, which currently undertakes maintenance dredging across the majority of the ports in Queensland. Maintenance dredging at the PoB usually occurs in April / May, noting that no maintenance dredging is permitted from October to February (inclusive), to avoid impacts on nesting turtles.

As capital dredging for the insurance trench and maintenance dredging for the port will occur concurrently, GPC is committed to reducing maintenance dredging in the years that the insurance trench is dredged, so that the total volume of material dredged does not exceed the current annual maximum maintenance dredging volume of 90,000 m<sup>3</sup>. Thus, if the insurance trench is dredged in as single campaign of 30,000 m<sup>3</sup>, maintenance dredging will not exceed 60,000 m<sup>3</sup> for that campaign (for a combined total of 90,000 m<sup>3</sup>). Similarly, if insurance trench dredging occurs over two (2) consecutive campaigns of 15,000 m<sup>3</sup>/yr, the total maintenance dredging for each year will be capped at 75,000 m<sup>3</sup>. In this way, the total impact of dredging and placement activities will not exceed that which already occurs as part of a larger maintenance dredging campaign at the port. All dredged material from the insurance would be placed at the existing approved offshore dredge material placement area (“**DMPA**”) (circle of 0.5 nautical miles, centred on 24°42’14.3”S, 152°28’20.8”E). This is the same site used for placement of maintenance dredging material.

### 3.2 Dredging Equipment

The Port of Brisbane Pty Ltd (“**PBPL**”) is routinely contracted by GPC to undertake the normal maintenance dredging in the PoB channels, berths and swing basin, using PBPL’s TSHD the *TSHD Brisbane*. The *TSHD Brisbane* is suitable to undertake the Insurance Trench Capital Dredging project and, subject to obtaining the relevant approvals, will be engage to undertake the capital dredging commencing while in the PoB in mid-April 2022.

The *TSHD Brisbane* is a twin-arm TSHD commissioned by the PBPL in November 2000. The vessel is 84 m long with a displacement tonnage of approximately 3,500 tonnes. During operations, it has a crew of 13, operating in two (2) shifts, 24 hours per day, seven (7) days a week. A more detailed description of the *TSHD Brisbane* and its operation will be provided in the PBPL EMP submitted to GPC before the dredging campaign.

The following specifications are a minimum requirement for dredging equipment:

- all marine vessels used in conjunction with dredging activity shall be in survey and registered;
- the TSHD will be equipped with:
  - (i) an anti-turbidity control valve for below keel discharge of tailwaters;
  - (ii) on-board systems for determining solids to water ration or density of dredge material;
  - (iii) electronic positioning and depth control system for defining the location and depth of dredging activities;
  - (iv) dredge heads and depth control capable of, fitted with a turtle exclusion device (to minimise the risk of direct impact on turtles while dredging); and
  - (v) dredge head jets and ability to adjust pump speed.

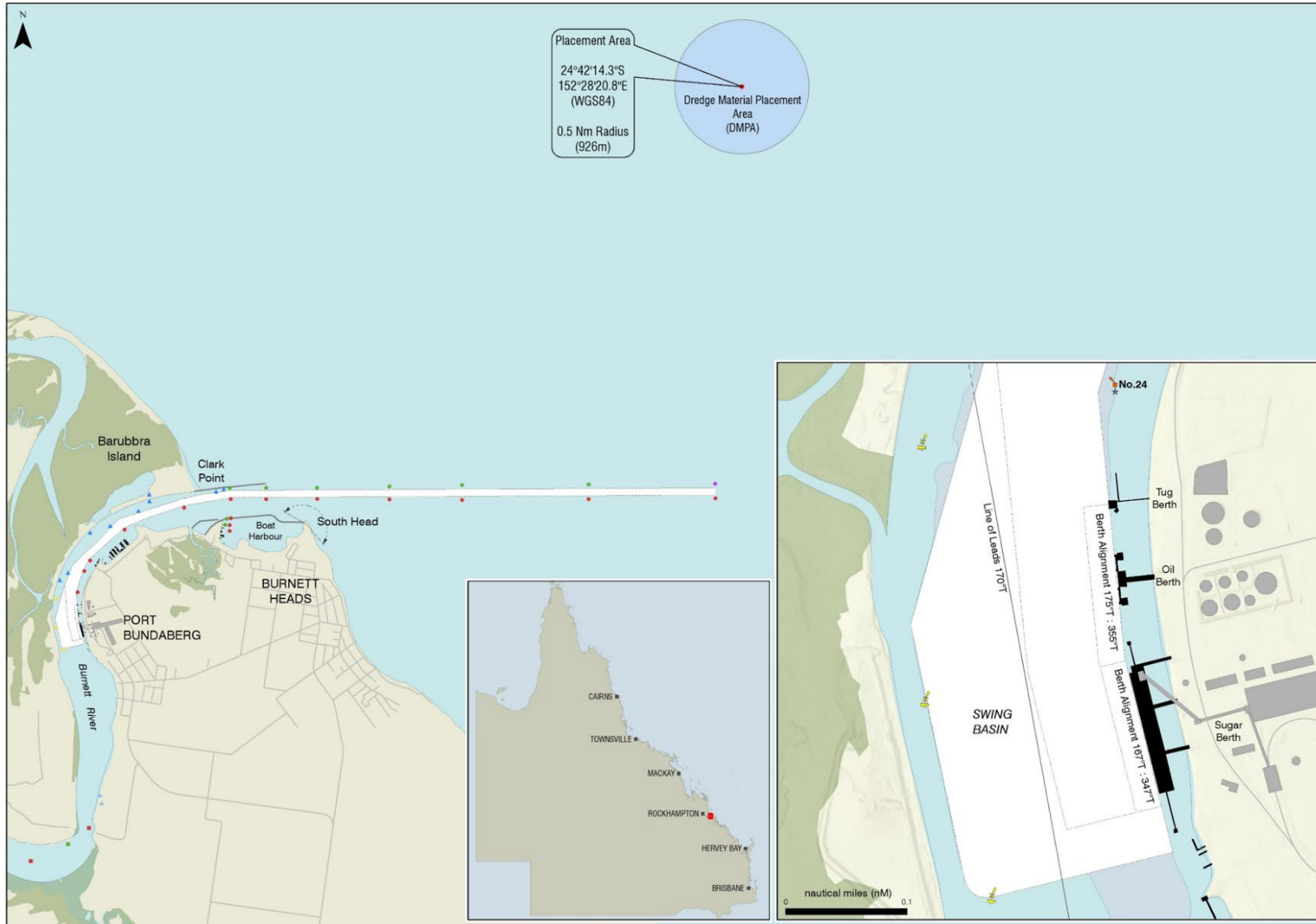


Figure 1 Location of PoB and associated port and navigational infrastructure

Plan: Port of Bundaberg Insurance Trench Capital Dredging DMP #1768587v6

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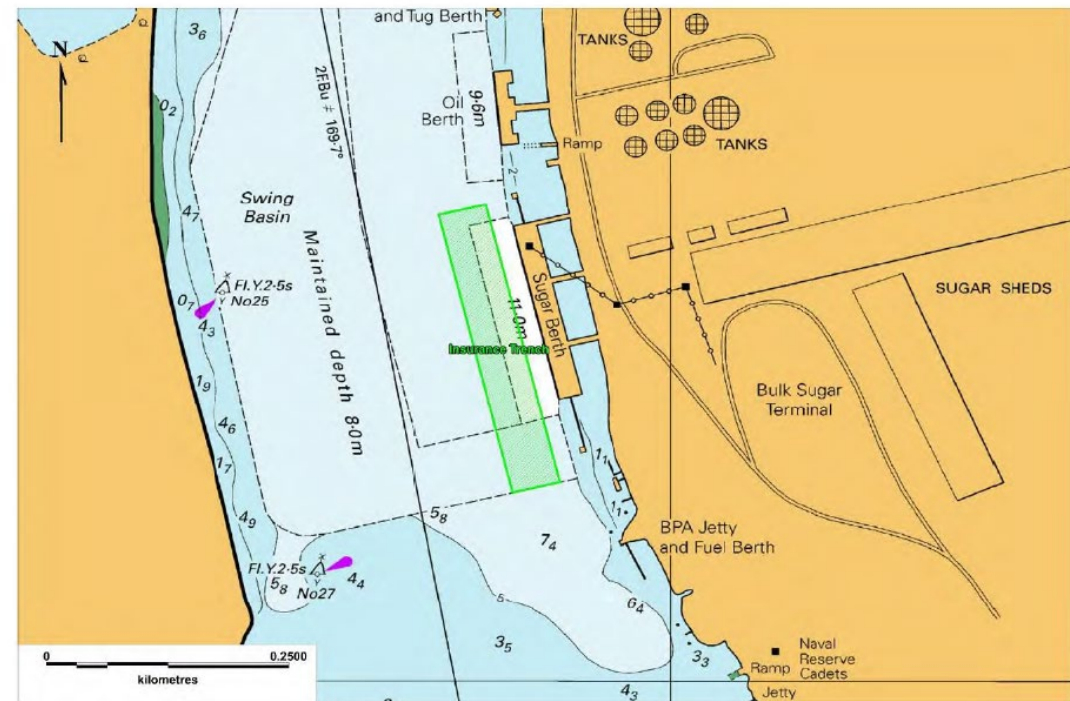
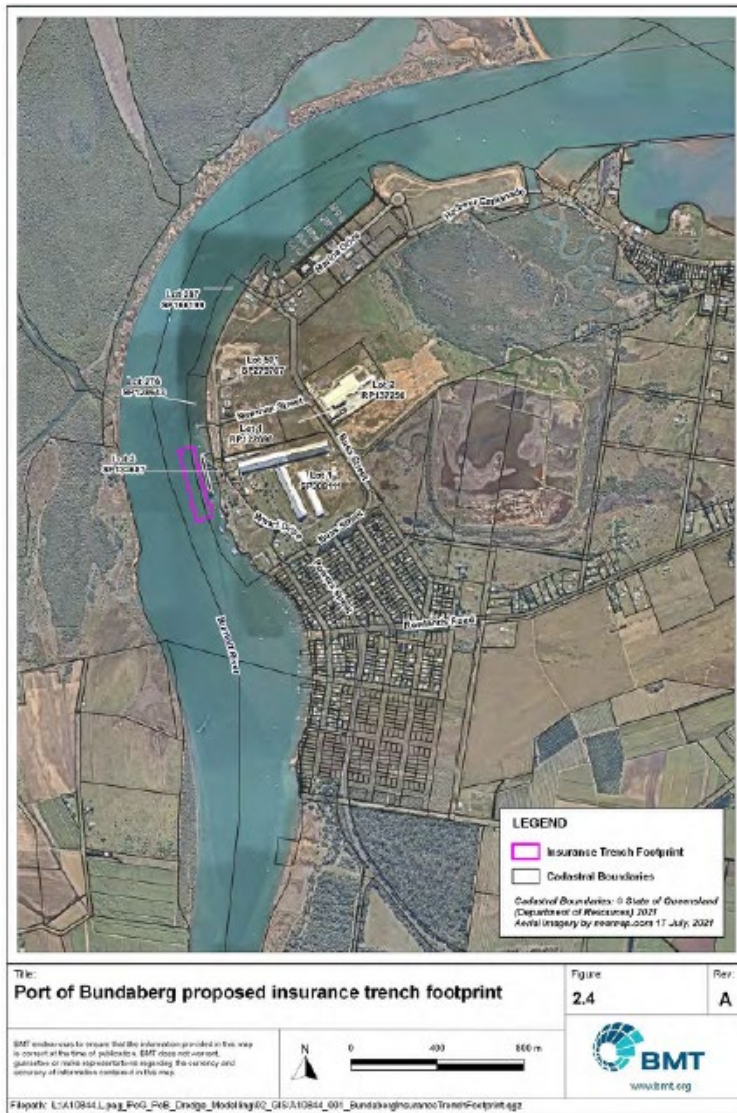


Figure 2 Proposed footprint for the insurance trench capital dredging, locality (aerial) and footprint (plan view)

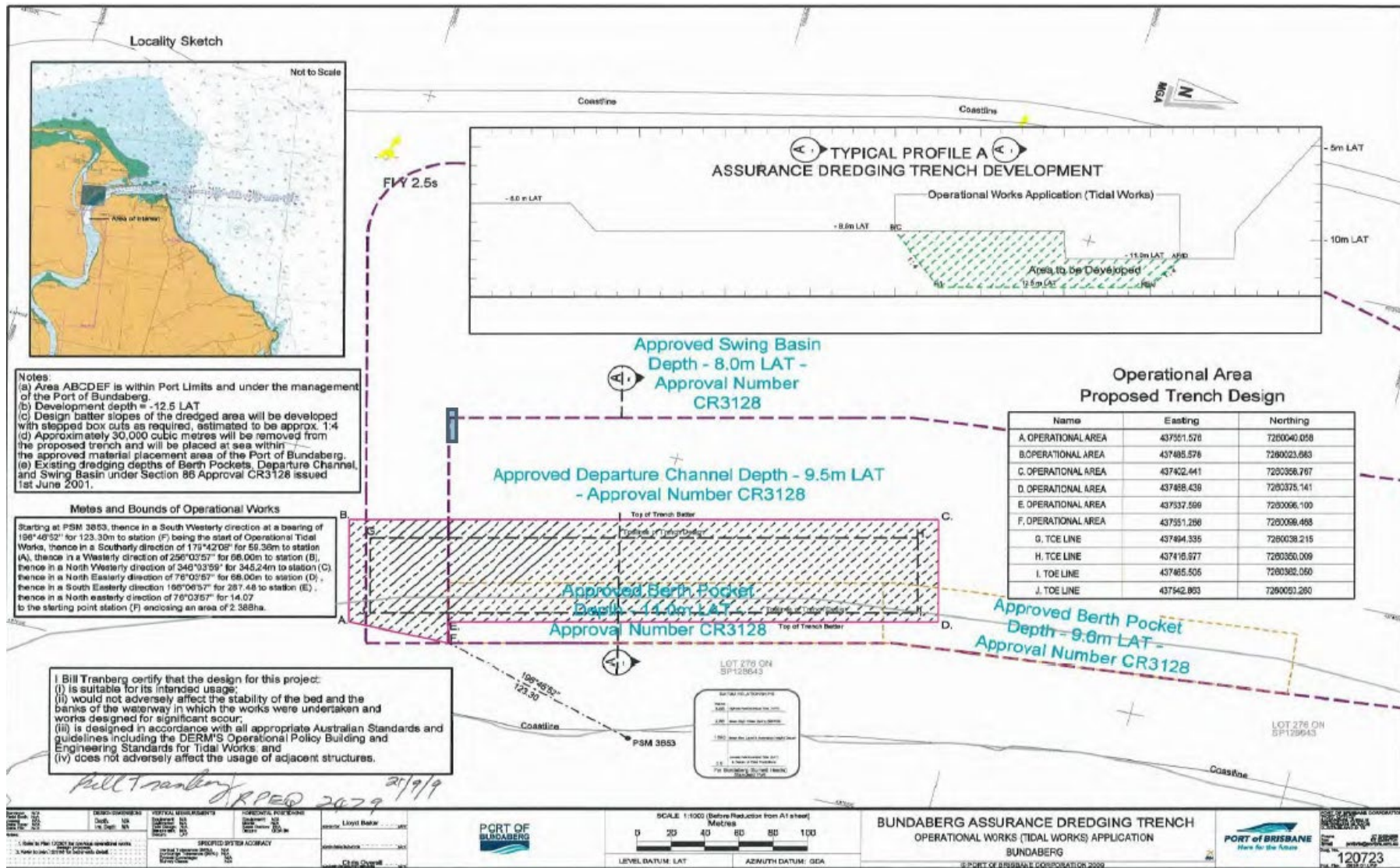


Figure 3 Port of Bundaberg Insurance Trench details

Plan: Port of Bundaberg Insurance Trench Capital Dredging DMP #1768587v6A

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### 3.3 Activity boundaries

#### (a) Insurance Trench Capital Dredging

The volume of material permitted for extraction during the capital dredging under DA DA2021/34/01 and EA P-EA-100195853.

Activity	Maximum scale	Location
Removal of material	45,000 tonnes per year	<b>Bundaberg Assurance Dredging Trench</b> prepared by <b>Port of Bundaberg</b> , dated <b>24/04/2009</b> , drawing number <b>120723</b> , version <b>1</b>
Placement of material		The offshore Dredge Material Placement Area as defined by the following coordinates (WGS84 datum): <ul style="list-style-type: none"> <li>• 24°42'14.3" S 152°28'20.8" E</li> <li>• 0.5 Nm radius (925m)</li> </ul>

Federal Sea Dumping Permit SD2021-4017 allows for sea placement of capital dredging material of up to 30,000 m<sup>3</sup>.

The trench will include a deepening of part of the Sugar Berth pocket (from -11.0 m LAT to -12.5 m LAT) as well as part of the adjoining swing basin to this same depth. The total dredging volume for the trench will be around 50,000 m<sup>3</sup><sup>1</sup>, of which 30,000 m<sup>3</sup> would be capital material (the remainder is included in existing maintenance dredging approvals).

Material removed will be placed at the approved offshore DMPA.

It is envisaged that the capital dredging will occur after maintenance dredging activity using the same vessel (*TSHD Brisbane*), with a maximum of 30,000 m<sup>3</sup> to be removed (approximately three (3) continuous days activity). If required, this will be repeated in the 2023 dredging campaign to reach required depths. It is not envisaged that this capital dredging will continue past 2023 dredging campaign, however, if flooding in the Burnett River occurs causing greater levels of siltation, then this may need to be reassessed.

#### (b) Sea Placement

The DMPA as pictured in Figure 1 is a circle of 0.5 nautical miles (926 m) radius centred on latitude 24°42'14.3" South and longitude 152°28'20.8" East (WGS 84 datum).

This site was chosen based on the following:

- the characteristics of the dredged material and the material at the spoil placement site;
- proximity to sensitive environmental receptors;
- minimising impacts to marine habitats and fauna, including seagrasses and benthic infauna;
- the depth and capacity for ongoing use of the spoil placement site;
- minimising the risk of placed material being remobilised to nearby sensitive areas;

<sup>1</sup> Due to recent minor flooding in the Burnett River, this volume may increase. A full hydrographic survey of the port area will be undertaken in early April 2022 prior to the commencement of dredging.

- logistic and economic considerations, including optimisation of dredge cycle times; and
- safety considerations in the operation of dredging equipment at the spoil placement site.

Prior to sea placement, the vessel must confirm by GPS that it is within the sea placement site. Each load of dredge spoil must be placed in a different location in the defined placement area, so that the dredge material is distributed evenly within the defined placement area.

### 3.4 Sediment Characteristics

The material dredged under this DMP has been analysed and assessed in accordance with approaches set out in the:

- National Assessment Guidelines for Dredging 2009 (“**NAGD**”) to ensure the material is appropriate to dredge and dispose of on land or at sea; and
- Queensland Acid Sulfate Soils Technical Manual V4 2014 (“**QAASTM**”).

The Sediment Analysis Plan (“**SAP**”) was specifically developed for the PoB Insurance trench and the SAP Implementation Report determined that the material in the PoB is suitable for unconfined sea placement, as no results exceeded set trigger values for contaminants of concern. Nickel was found to equal the NAGD screenings level across all horizons which is consistent with all previous sediment testing and therefore considered a natural terrigenous source.

### 3.5 Sensitive Environmental Receptors

Although the approved footprint of the works is viewed as being highly disturbed, GPC understands that it is interconnected to a much greater system extending beyond these boundaries as described above and shown in Figure 4. Within the wider PoB sensitive receptors have been mapped and are included in the PoB Maintenance Dredging Environmental Monitoring Procedure and, following review by GPC, these apply equally to this capital dredging project.

Management actions documented in Section 5 of the PoB Maintenance Dredging EMP will be implemented in order to ensure that dredging and reclamation works do not negatively impact on the identified sensitive receptors. Further information in regards to the monitored sensitive receptor for dredging and sea placement are detailed in the PoB LTMMMP and relevant sections of the PoB Maintenance Dredging Environmental Monitoring Procedure (Section 2.3.1, 2.3.3 and 2.3.4.1).

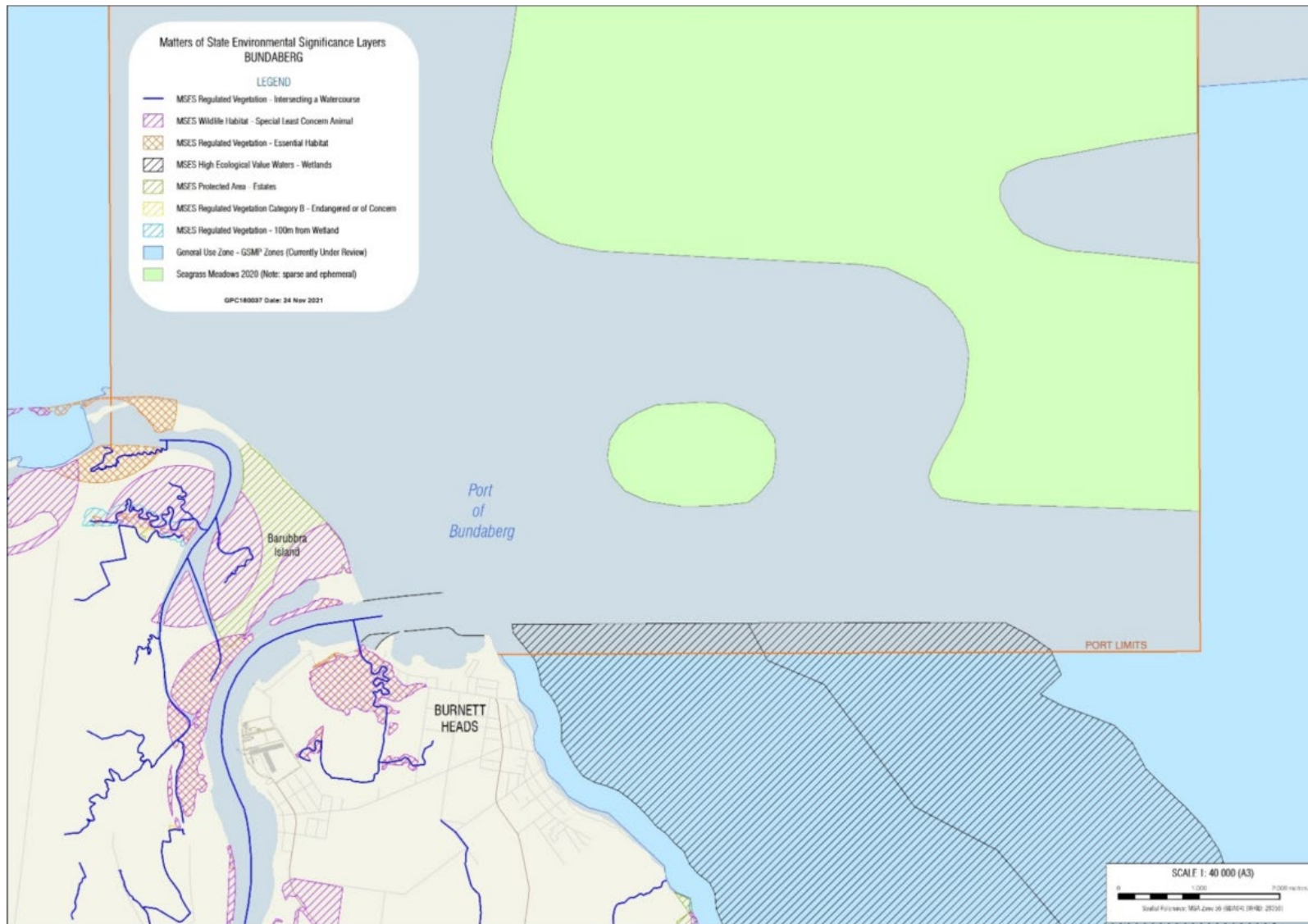


Figure 4 Sensitive receptors and Matters of State Environmental Significance (QSpatial, Smith and Rasheed 2021a,b)

Plan: Port of Bundaberg Insurance Trench Capital Dredging DMP #1768587v6  
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## 4 Capital Dredging Management

### 4.1 Compliance Obligations

Table 1 below outlines the approvals specific to the Insurance Trench Capital dredging and placement activities. A copy of the relevant approvals must be kept in a location readily accessible to the Employees carrying out the activity.

Additionally, GPC must comply with the following regulator notification requirements:

- copies of these approval shall be kept on the dredge at all times; and
- evidence of approval/s must be provided to the relevant regulator upon request.

Table 1: Statutory Approvals for Insurance Trench Capital Dredging and placement

Development Approval / Permit	Property	Permitted Activities	
P-EA-100195853	Bundaberg – Inner and Middle Reach of Burnett River and Navigation Channels. Adjacent to Lot Plan 276/SP128643	ERA 16 (Extractive and Screening Activities) – (1b) Dredging	<a href="#">#1774660</a>
DA2021/34/01	45 Wharf Drive, BURNETT HEADS and adjoining Unallocated State Land (“USL”)	Development Permit for Material Change of Use – Port Services – Dredging (capital dredging) Development Permit for Operational Work – Tidal Works (capital dredging) Environmental Authority for Environmentally Relevant 2112-26541 SRA State Assessment and Referral Agency (“SARA”) Page 2 of 10 Activity (ERA No. 16 Extractive and screening activities – dredging more than 10,000 tonnes but not more than 100,000 tonnes in a year)	<a href="#">#1775468</a>
SD2021-4017	Bundaberg – Inner and Middle Reach of Burnett River and Navigation Channels. Adjacent to Lot Plan 276/SP128643	Federal Sea Dumping Approval for 30,000 m <sup>3</sup> of capital dredging	<a href="#">#1774835</a>
IPDC00649407 (with MSQ & DAF concurrences) 2007DB0233	Sea Dumping and Removal of Marine Plants	Operational Works 2.2 million m <sup>3</sup> State Sea Dumping Approval DAF habitat disturbance (Marine Plants)	<a href="#">#494589</a>
DA2021/34/01-GPC	DA for material Change of use -port	<ul style="list-style-type: none"> <li>• Approval sought under Planning Act 2016 –</li> </ul>	<a href="#">#1783242</a>

Development Approval / Permit	Property	Permitted Activities
	Services Capital Dredging	Material Change of Use and <ul style="list-style-type: none"> <li>• Operational works that is tidal works on Strategic Port Land and Strategic Port</li> <li>• Land tidal area</li> </ul>

## 4.2 Project Risks

GPC's Risk Management Framework provides the processes to ensure processes suitably identifies, analyses and evaluates, manages and monitors all aspects under the control or influence of GPC. The risk management process is an integral component of GPC's organisational and operational decision making and ensures all elements of potential impacts are assessed i.e. environmental, compliance, interested parties (stakeholders), project delivery etc.

Risk Assessments are conducted for all new or changed activities and specifically for capital dredging prior to each dredging campaign ensuring risk controls are current, appropriate, communicated, implemented and monitored. This DMP seeks to prevent harm except when specifically permitted by the EA.

Environmental risks for dredging and placement are assessed and recorded on the GPC Risk Register in accordance with the GPC Enterprise Risk and Resilience Policy and Enterprise Risk Management Standard.

Risk controls are documented and communicated this DMP and associated plans and procedures.

The implementation and effectiveness of risk controls are monitored through processes such as periodical risk reviews, audits, inspections, incident and complaint investigations and reporting.

## 4.3 GPC Standards

GPC has implemented the following Standards to provide clarity of obligations, responsibilities and expectations for capital dredging management:

- (a) GPC Safety, Environment and Security Standard for Contractors and Port Users; and
- (b) GPC PoB Maintenance Dredging EMP.

All activities must be conducted in accordance with these Standards.

## 4.4 Contractor Management

GPC has obligations to ensure that the activities undertaken by, or on its behalf, do not present unacceptable risks to the environment and are undertaken in a lawful manner. To ensure the activities of Contractors are identified, assessed and managed, the following Contractor management controls are in place:

- pre-qualification evaluation;
- Procurement Policy;
- GPC Standards;

- induction;
- regular communication between GPC and the Contractor;
- audits and inspections; and
- incident investigations.

## 4.5 Environmental Management

The environmental management protocols and measures are addressed in Section 5 of the PoB Maintenance Dredging EMP.

The use of this EMP is to provide consistency when both the capital and maintenance dredging activities are undertaken together with the same dredge. It is envisaged that maintenance dredging will be conducted first to design depths, then post a confirmation hydrographic survey capital dredging will be conducted at the Insurance Trench. The implementation of this EMP and the below described Environmental Monitoring Procedure is a requirement of Sea Dumping Permit SD2021-4017.

Based on the hydrodynamic modelling undertaken in the Impact Assessment sediment plumes generated by the activity, as shown in Figure 5 will not have any impact on any sensitive receptors. Figure 5 (95<sup>th</sup> percentile) shows a very conservative assessment of the capital dredging as it models the full dredging campaign of 90,000 m<sup>3</sup>. Of this, 40,000 m<sup>3</sup> is maintenance material mainly from the middle and outer reaches and 50,000 m<sup>3</sup> capital dredging modelled from the berth pocket. The top portion (20,000 m<sup>3</sup>) of the berth pocket is also maintenance material which is deposited directly over the 30,000 m<sup>3</sup> of capital material and therefore needs to be removed first. The yellow and green areas represent short-term increases over 5 NTU which may be visible (with low ambient NTU) however they are also expected to be well within natural variability and of short duration and thus not expected to cause any significant impact.

Key conclusions from the impact assessment include:

- Modelling results indicate that dredging would result in short-term, low intensity turbidity spikes, typically well within the range of modelled ambient turbidity.
- Deposition rates will temporarily increase within and immediately adjacent to the dredge and placement areas (i.e. highly localised effects), however modelled dredging-related deposition rates are predicted to be negligible in the period following the completion of dredging (i.e. only short term effects are expected).
- No major impacts to sensitive receptor habitats (seagrass meadows, reefs, turtle nesting beaches) are expected given the short duration and low intensity of dredge-related turbidity, and the limited spatial extent of sediment deposition (restricted to areas within the DMPA).

## 4.6 Environmental Monitoring

GPC conducts a range of environmental monitoring programs to monitor operational activities that can have an actual or potential significant impact on the environment. An Environmental Monitoring Schedule has been established to ensure the key elements of GPC's operations are being assessed. This document lists when to conduct such monitoring.

GPC is required by environmental approvals and other stakeholder commitments to carry out monitoring to achieve compliance.

The approved LTMMP<sub>1</sub> which is a requirement of GPC's Sea Dump Permit, covers the monitoring of long-term ecological impacts associated with maintenance dredging and sea placement.



GPC implement a PoB Environmental Monitoring Procedure to achieve these outcomes and to address the requirements of the EA and LTMMMP, including all details of the sediment plume-associated monitoring program, should it be required. (Note: the PoB Environmental Monitoring Procedure also includes monitoring for land-based disposal, which is not applicable for this DMP).

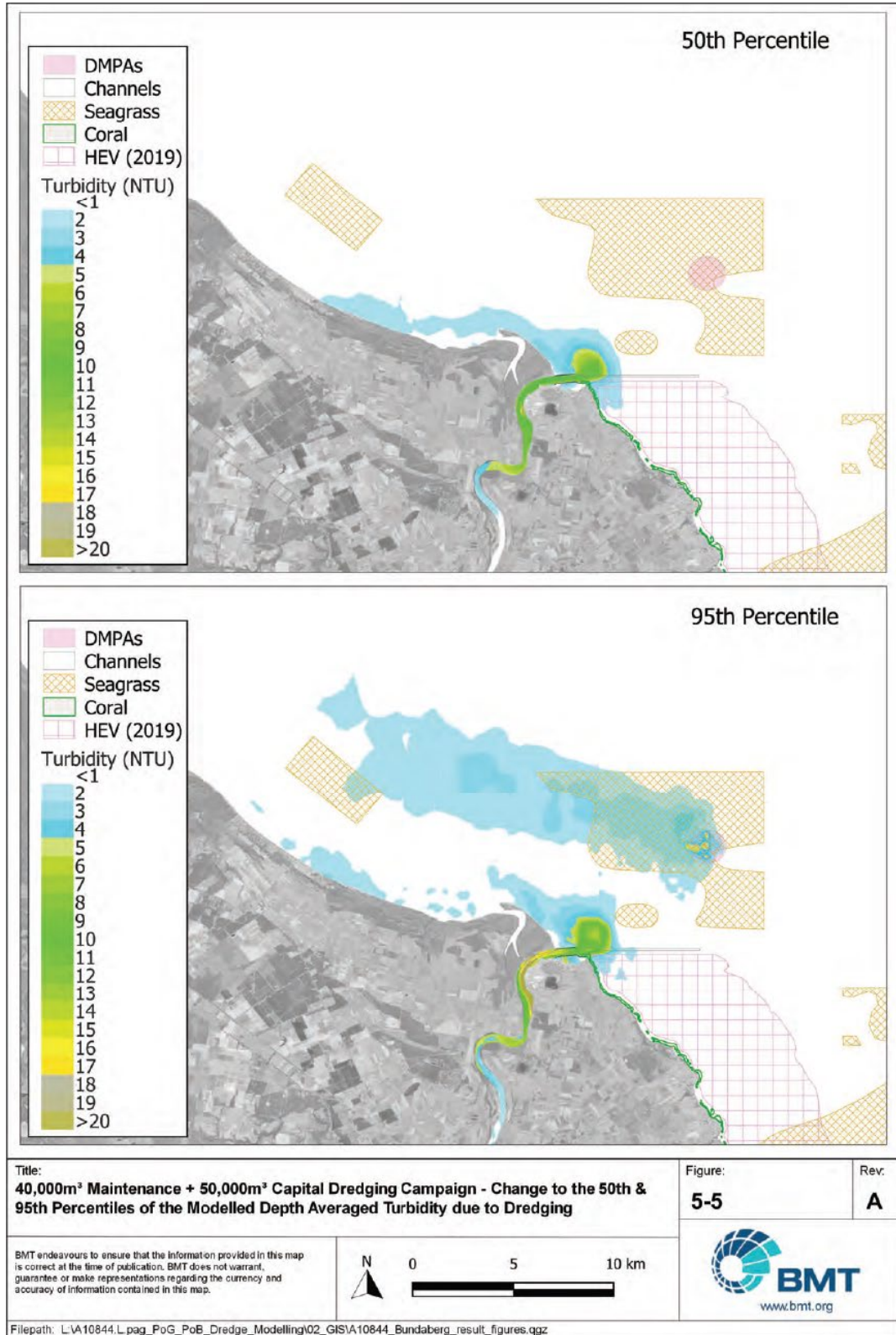


Figure 5 Modelled turbidity changes to the 50th & 95th percentile

Any monitoring required by this DMP (and the PoB Maintenance Dredging EMP) will be undertaken by an experienced and suitably qualified person(s). All instruments, equipment and monitoring devices used for monitoring in accordance with this DMP must be calibrated and appropriately operated and maintained. All analyses and tests required to be conducted under this DMP must be carried out by a NATA-certified laboratory.

Monitoring of volumes of material to be dredged and placed at the spoil ground, shall be recorded and monitored to ensure compliance with allowable dredge volumes in approvals. Bathymetric surveys shall be conducted to monitor residual capacity of the DMPA and to assist with managing even distribution of spoil placement.

#### **4.7 Measures, Plant and Equipment**

GPC will install, maintain and operate all relevant measures, plant and equipment (including monitoring) in a proper, effective and efficient way which ensures compliance with the conditions of this DMP and relevant approvals. There will be no change, replacement, alteration or operation of any plant or equipment if the change, replacement, alteration or operation will increase or is likely to substantially increase the risk of environmental harm during works.

It is the Contractor's responsibility to ensure that they install, maintain, calibrate and operate all relevant measures, plant and equipment utilised in their scope of works in order to ensure compliance with the conditions of this DMP and relevant approvals (e.g. operate in a proper, effective and efficient manner and keep records).

All vessels and floating equipment used for the activity must be registered under the *Transport (Maritime Safety) Act 1995* (Qld).

All plant and equipment associated with dredging must be removed from the approved footprint upon the finalisation of the activity, or the expiry or cancellation of approvals associated with the activity.

#### **4.8 Environmental Training**

GPC must ensure that Employees and Contractors working at GPC facilities have received the appropriate level of environmental training and that all relevant records are retained in accordance with GPC's environmental approvals.

GPC shall ensure that relevant Employees are aware and are familiar with the requirements of this DMP, its associated documents, and the approvals relevant to the task.

It is the Contractor's responsibility to ensure that all dredging Employees, including Subcontractors, are:

- suitably trained for any and all activities for which training is required in order to ensure legislative compliance and to prevent environmental harm during normal operation and in emergencies; and
- reading, understanding and applying the requirements outlined in this DMP, its associated approvals and the *Environmental Protection Act 1994* (Qld);

Untrained persons must remain under the close supervision of a suitably trained person.

Training records shall be maintained and made available to GPC on request.

#### **4.9 Audits and inspections**

Internal auditing may be undertaken to confirm that activities are carried out in accordance with the defined requirements set out in this DMP and relevant approvals. Audits are initiated and completed by the GPC Environment Team or by a suitably qualified auditor. Audit reports may be provided to GPC regulators as and when required.

If requested by GPC, GPC Employees will be afforded access to witness, inspect, examine or audit any part of the Contractor's operations. If requested by a regulatory agency, nominees of the relevant agency will be afforded access to witness, inspect, examine or audit any part of the operations.

GPC shall carry out periodic inspections. Records of these inspections along with any corrective or improvement actions arising from inspections or audits will be entered into GPC's incident management system.

## **4.10 Incidents and Complaints**

### **(a) Complaints**

An investigation into the complaint must be undertaken within 28 days (or a longer period agreed to in writing by the administering authority) into all complaints received to determine:

- (i) The potential circumstances and actions on site that may have contributed to the basis of the complaint; and
- (ii) Reasonable measures that could be implemented to address the complaint.

Measures identified must be implemented within:

- (i) 28 days of the investigation being finalised; or
- (ii) A longer period agreed to in writing by the administering authority.

The following details must be recorded for all environmental complaints received:

- (i) Date and time the complaint was received;
- (ii) If authorised by the person making the complaint, their name and contact details;
- (iii) Nature and details of the complaint;
- (iv) Investigations carried out in response to the complaint;
- (v) The results of investigations; and
- (vi) Measures taken.

Complaints received will be entered into GPC's incident management system. The records will include all relevant details of the incident and / or complainant, details of any immediate corrective actions, investigations and / or monitoring undertaken, conclusions formed, and improvement actions identified to reduce the risk of reoccurrences.

Records of complaints are to be made available to regulators upon request.

### **(b) Incidents**

The PoB Manager is to be notified as soon as practicable after GPC and / or an engaged Contractor has become aware of any non-compliance specific to activities covered by the scope of this DMP. GPC should also be notified of any incident resulting from activities undertaken as part of the works which:

- causes or has the potential to cause harm;
- is unlawful (e.g. works outside approved dredging and placement footprint);
- involves the release of a contaminant (not allowed by approvals);

- identifies a new risk;
- adversely impacts an environmental value (e.g. Marine megafauna injury or death);
- involves a cultural or shipwreck heritage find;
- is a breach of a condition of an approval; or
- is not in accordance with the relevant approvals and / or permits.

This notification is to take place in accordance with the following methods and timeframes:

- verbal notification immediately after occurrence of incident; and
- written notification within 24 hours of occurrence of incident.

The PoB EMP gives more detail for environmental incident response.

Incidents are recorded in GPC's incident management system, which should record all relevant details of the incident including immediate corrective actions, investigations and/or monitoring undertaken, conclusions formed and improvement actions identified to reduce the risk of reoccurrences.

GPC Incident Management and Investigation Procedure is used to guide incident reporting, external notifications, investigations and corrective actions including record keeping requirements. The Contractor's incident reporting procedure shall be included in the Contractors DMP and must include the requirements outlined in this DMP.

#### 4.11 Emergency Preparedness

PoB has an Emergency Management Plan which establishes the process to ensure a controlled and coordinated response to emergency situations for work conducted by PoB Employees and Contractors. It also details the emergency contact numbers for Emergency Services, PoB Employees and external stakeholders. The relevant parts of this will be communicated with the dredging Contractor.

Under a Deed agreement between Maritime Safety Queensland ("**MSQ**") and GPC, GPC is responsible for first-strike response to oil spills, within the boundaries of the port, in accordance with the MSQ First-strike Oil Response Plan (#1433434) attached in Appendix 3.

All emergencies and incidents must be reported as per Section 4.10(b) of this plan. However, in the event of an oil / hazardous substance spill to water, the Harbour Master (07 4973 1200) is to be contacted immediately. Secondary contact is to then be made with the First Strike Oil Response Team Leader on 0428 594 233.

Weather prediction tools are used to inform of adverse weather events that may produce emergency conditions. A decision to stop dredging and secure infrastructure will be made jointly between GPC and dredging Contractor on a case by case basis.

The Contractor's Emergency Procedures will be detailed in their DMP.

#### 4.12 Records

All records must be provided by the Contractor to GPC upon request and/or at the completion of dredging activities. Records shall be retained for verification and audit purposes until the surrender of approvals and for a minimum of 5 years whichever is longer. Records must be supplied to the regulators upon request. GPC will record information either in:

- GPC's Incident Management System; and / or
- GPC's Document Management System.

Record Keeping requirements are displayed in Table 2 Record Keeping:

Table 2 Record Keeping

Record Type	Details
Compliance Obligations	Refer to Section 4.1
Contractor Management	Refer to Section 4.4
Environmental Management	Refer to Section 4.5
Environmental Monitoring	Refer to Section 4.6
Plant and Equipment	Refer to Section 4.7
Training and Awareness	Refer to Section 4.8
Audits and inspections	Refer to Section 4.9
Incidents and Complaints	Refer to Section 4.10
Risks	Refer to Section 5

GPC has an obligation to inform regulatory authorities if any records have been stolen, lost, destroyed or damaged as soon as practical.

#### 4.13 Communication and consultation

The PoB Manager is the main point of contact with the dredging Contractor to achieve compliance with the DMP and associated plans, procedure and approvals.

Daily interactions occur between GPC and the Contractor. GPC dredging meetings will be held as required to track progress and discuss issues.

GPC is the main point of contact for external parties in regards to dredging activities in the PoB. However as the dredge operator, will initiate emergency response calls, incident and complaint notification to GPC, investigation and reporting for works under their contract scope and the scope of their DMP. The dredging Contractor will initiate emergency response calls for any matters outside of their scope of works in the event that GPC's main point of contact is unavailable.

##### (a) Access to reports and data for Insurance Trench capital dredging

GPC publishes the current approved version of the DMP on the internet for public access.

In addition to providing access to reports and data on the GPC website, GPC also has a data request process established for the external dissemination of environmental monitoring data and reports

## 4.14 Document Provision and Review Protocols

This DMP must be provided to the administering authority at either of the addresses below: PALM@DES.qld.gov.au; or DES Permit and Licence Management Implementation and Support Unit GPO Box 2454 Brisbane Qld 4001.

The DMP must be submitted to the administering authority at least 20 business days prior to the commencement of dredging and amended in accordance with any comments made by DES.

If the DMP is amended, it must be provided to DES at least 20 business days prior to commencing activities under the amended DMP.

Any comments made by DES on the amended DMP provided in accordance with condition G18 of the State approval must be addressed to the satisfaction of DES prior to implementing the amended DMP. This applies for each amendment of the DMP.

This DMP, its operation and implementation, and its associated documents will be reviewed as a result of:

- findings of internal and external inspections and / or audits; or
- incident and / or complaint investigations.

Revisions are kept as a new version in GPC's document management system, and must be communicated to all relevant GPC Employees and engaged.

These changes will be captured in Section 6.6 – Document Version Control.

## 5 Capital Dredging Risk Management

### 5.1 Marine Vessel Interaction

Dredging vessels move slowly to be able to collect sediment. This can cause Marine Vessel interactions when in operation.

**Objectives** To avoid causing any impact to maritime operations and maritime safety.

<b>Potential Risk</b>	Vessels with restrictions in movement can increase the risk of marine collision.						
<b>Control Strategy</b>	Follow MSQ requirements						
<b>Actions</b>	<table border="1"><tr><td>1</td><td>At least two (2) weeks prior -Provide written notice to the Regional Harbour Master Gladstone, when the development authorised under this approval is scheduled to commence. Each notice must state this application number (TMR22-035384), the location and name of the registered place and the condition number under which the notice is being given. (a) At least two (2) weeks prior to the commencement of works.</td></tr><tr><td>4</td><td>Within two (2) weeks post - Provide written notice to Gladstone.RHM@msq.qld.gov.au when the development authorised under this approval has been completed. Each note must state this application number (TMR22-035384), the location and name of the registered place and the condition number under which the notice is being given.</td></tr><tr><td>3</td><td>All vessels, structures, plant and equipment associated with the construction of the approved works must be lit/marked in</td></tr></table>	1	At least two (2) weeks prior -Provide written notice to the Regional Harbour Master Gladstone, when the development authorised under this approval is scheduled to commence. Each notice must state this application number (TMR22-035384), the location and name of the registered place and the condition number under which the notice is being given. (a) At least two (2) weeks prior to the commencement of works.	4	Within two (2) weeks post - Provide written notice to Gladstone.RHM@msq.qld.gov.au when the development authorised under this approval has been completed. Each note must state this application number (TMR22-035384), the location and name of the registered place and the condition number under which the notice is being given.	3	All vessels, structures, plant and equipment associated with the construction of the approved works must be lit/marked in
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3	All vessels, structures, plant and equipment associated with the construction of the approved works must be lit/marked in						

		accordance with the following specifications and requirements such that undertaking the construction works does not cause a risk to the safe navigation of ships. So that they will be readily identified by other waterway users Lighting provided must not obscure, disguise or otherwise interfere with the effectiveness of navigational lighting.
	4	The structures must be lit / marked in accordance with the following specifications, such that it does not cause a risk to the safe navigation of other ships. Lighting provided must not obscure, disguise or otherwise interfere with the effectiveness of navigational lighting.
	6	The construction, operation or maintenance of the structures, and any shipped moored at this structure, must not impede the safe navigation or other ships or restrict safe access to or from neighbouring structures.
	6	The Regional Harbour Master is to be advised prior to dredging to issue a 'Notice to Mariners'.  Any obstructions encountered during dredging must be removed to the satisfaction of the Regional Harbour Master.

## 5.2 Sediment / Plume Control

Capital dredging for an Insurance trench at PoB will disturb natural sediments.

**Objectives** To minimise the release of sediments from dredging and disposal activity

<b>Potential Risks</b>	Poor management of dredge plumes causing potential nuisance or harm
<b>Control Strategy</b>	Undertake works with same equipment and protocols used for Maintenance dredging
<b>Actions</b>	<p>1 The characterisation of sediments and suitability for offshore disposal of dredged material must be submitted to the administering authority in accordance with methodology provided in the latest edition of the following:</p> <ul style="list-style-type: none"> <li>• NAGD</li> <li>• QASSTM</li> </ul> <p>and any other relevant guideline specified by the administering authority, at least 20 business days prior to the commencement of the dredging activity.</p> <p>GPC is responsible to ensure that previous characterisation of sediments are suitable for assessing risks to environmental values associated with the dredging campaign to which this environmental authority relates.</p> <p>2 Follow Environmental Management protocols in the PoB Maintenance Dredging EMP.</p> <p>3 Follow relevant sections of PoB Of Bundaberg Maintenance Dredging Environmental Management Procedure.</p>

### 5.3 Biodiversity

The works are restricted to an approved footprint which already has marine plant disturbance approval.

The activity area is adjacent to a key turtle nesting beach at Mon Repos, therefore Dredging with sea placement is not permitted between October to February inclusive (The nesting period for the endangered Loggerhead Turtle – *Caretta caretta*).

**Objectives** To avoid causing any impact to marine plants outside the development footprint.  
To minimise interactions to marine megafauna, in particular marine turtles.

<b>Potential Risk</b>	The risk of impacts to biodiversity from poor project management.	
<b>Control Strategy</b>	<ul style="list-style-type: none"> <li>• GPS control to ensure within defined and approved footprint</li> <li>• Enacting turtle mitigation controls</li> <li>• Appropriate Environmental Management</li> </ul>	
<b>Actions</b>	1	Evidence of any applicable marine plant approval to be provided to SARA, namely DAF concurrence to Operational Works - IPDC00649407
	2	Follow Processes and Protocols of PoB Maintenance Dredging EMP. This includes the physical controls employed by the TSHD to minimise turtle interactions.
	3	Follow relevant sections PoB Of Bundaberg Maintenance Dredging Environmental Management Procedure.

### 5.4 Fit for Purpose

The Insurance trench at PoB will provide fit for purpose infrastructure to allow for acceptance of sediment and better help manage port operations.

**Objectives** The overall aim of the project is to deliver 'Fit for Purpose' infrastructure upgrades for PoB.

<b>Potential Risk</b>	Poor workmanship can lead to the infrastructure not being fit for purpose or causing safety or maritime safety issues.	
<b>Control Strategy</b>	Works executed in alignment with the DA, EA, SDA and associated approvals.	
<b>Actions</b>	1	The development must be carried out generally in accordance with the Bundaberg Assurance Dredging Trench plan, prepared by Port of Brisbane, dated 24 April 2009, Drawing No. 120723, Version 1.
	2	The volume (in cubic metres) of material disposed of in tidal water under this approval must be provided to palm@des.qld.gov.au or mailed to: Department of Environment



		and Science Permit and Licence Management Implementation and Support Unit GPO Box 2454 BRISBANE QLD 4001.
	3	A hydrographic survey must be prepared by a surveyor of the dredge area and the immediate adjacent area likely to be affected by the dredging, following the works being undertaken and submitted to palm@des.qld.gov.au or mailed to: Department of Environment and Science Permit and Licence Management Implementation and Support Unit GPO Box 2454 BRISBANE QLD 4001.

## 6 Roles and Responsibilities

Table 3 below provides a summary of the roles and responsibilities of GPC Employees associated with the implementation of this DMP.

*Table 3 Roles & Responsibilities*

Position	Contact Numbers	Responsibility
PoB Manager	Jason Pascoe 07 4130 2222 0434 606 476	Responsible for overall on-site management of PoB activities
GPC Contractor Manager	Mark Oldfield 0741302225 0428594233	Responsible for overseeing the Contractor's works, operational issues and compliance with GPC's DMP, EMP and Environmental Monitoring Procedure.
Contractor	<i>TSHD Brisbane</i> Michel Willemen Dredge Operations Manager 0476 800 593	Responsible for meeting GPC's contracted requirements, including compliance to DMP and EMP.
Manager Trade Strategy and Port Operations	Liné Corfixen 07 4976 1548 0431 091 798	Overall responsibility for policy, strategy and Management System framework.
Environment Specialist	Anjana Singh 07 49761 552 0436285286	Responsible for monitoring of DMP implementation and compliance with approval conditions.
Employee and Contractors		Responsible to follow DMP.

## 7 Appendices

### 7.1 Appendix 1 – Related documents

#### (a) Legislation and regulation

Key relevant legislation and regulation, as amended from time to time, includes but is not limited to:

Type	Legislation/regulation
Federal Acts	<i>Environmental Protection (Sea Dumping) Act 1981</i>  <i>Environment Protection and Biodiversity Conservation Act 1999</i>  <i>Biosecurity Act 2015</i>
State Acts	<i>Environmental Protection Act 1994</i>  <i>Coastal Protection and Management Act 1995</i>  <i>Fisheries Act 1994</i>  <i>Biosecurity Act 2014</i>  <i>Transport Operations (Marine Safety) Act 1994</i>
Other	<i>International Convention for the Prevention of Pollution from Ships - MARPOL</i>  <i>Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter – London Protocol</i>

#### (b) Gladstone Ports Corporation documents

The following documents relate to this Plan:

Type	Document number and title
<b>Tier 1: Policy</b>	#1412364 Enterprise Risk and Resilience Policy  #366016 Environment Policy
<b>Tier 2: Standard/Strategy</b>	#995910 Safety Environment and Security Standard for Contractors and Port Users  #809151 Environmental Management Framework Standard  #829152 Enterprise Risk Management Standard  #995910 Contractors and Port User Safety, Environment and Security Standard

Type	Document number and title
<b>Tier 3:</b> Specification / Procedure / Plan	#1092359 HSEQ Communication and Consultation Procedure
	#1245255 HSEQ Assurance Activities Procedure
	#142189 HSEQ SAI360 Action Management Procedure
	#1075526 Incident Management and Investigation Procedure
	#1044716 Environmental Complaints Management Procedure
	#724856 PoB Long term Management and Monitoring Plan (LTMMP 2012-2022)
	#971879 PoB Maintenance Dredging Environmental Management Plan
	#964306 PoB Maintenance Dredging Environmental Monitoring Procedure
<b>Tier 4:</b> Instruction / Form / Template / Checklist	#1007885 Legal and Other Requirements Register
	#1292854 Conditions Register
	#764185 Risk Register
	#1621179 GPC Corporate Glossary Instruction
<b>Other</b>	#1774660 Environmental Authority P-EA-100195853
	#1774835 Sea Dumping Permit SD2021-4017
	#1775468 DA2021/34/01#494589 Operational Works - IPDC00649407
	#1437987 PoB Insurance Trench SAP Report
	#1718989 PoB Insurance Trench Impact Assessment
	#1783242- Development Approval for material Change of use- Port Services Capital Dredging

## 7.2 Appendix 2 – Revision history

Revision date	Revision description	Author	Endorsed by
23/02/2022	New – Capital dredging version	Anjana Singh, Environment Specialist	Jason Pascoe PoB Manager
16/03/2022	Alignment to DMP requirements	Terese Tobin, Environment Specialist	Jason Pascoe PoB Manager
03/08/2022	Added DA from GPC	Anjana Singh, Environment Specialist	Jason Pascoe PoB Manager

### **7.3 Appendix 3 – Related documents**

Port of Bundaberg

First- Strike Oil Spill Response Plan

# Port of Bundaberg

## First-Strike Oil Spill Response Plan

A supplement to the Queensland Coastal Contingency Action Plan

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## Document control options

<b>Prepared by</b>	Maritime Services Branch
<b>Title</b>	Port of Bundaberg - First-strike Oil Spill Response Plan
<b>Division</b>	Maritime Safety Queensland
<b>Location</b>	Floor 2, 61 Mary Street, Brisbane QLD 4000
<b>Version No</b>	6
<b>Revision Date</b>	May 2017
<b>Status</b>	Final
<b>File Number</b>	225/00457

### Document sign-off

Version 1 of this document was approved by the Chair of the Queensland National Plan State Committee in July 2006. Subsequent amendments have been of an administrative nature only and have not changed the intent of the document.

### Contact for enquiries and proposed changes

If you have any questions or suggested improvements please phone the Manager, Pollution Response on 07 3066 3911 or email [pollution@msg.qld.gov.au](mailto:pollution@msg.qld.gov.au)

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# 1. Introduction

This plan has been prepared by the Department of Transport and Main Roads in accordance with the agreed arrangements of Australia's *National Plan for Maritime Environmental Emergencies (National Plan)* and the requirements of the *Transport Operations (Marine Pollution) Act 1995*. It is a supplement to the Queensland Coastal Contingency Action Plan.

## 2. Scope

This plan deals with first-strike response to oil spills from ships and other sources within the Port of Bundaberg, Queensland. See Appendix A for details of geographical area.

## 3. Objective

The aim of this plan is to describe the operational arrangements of the Oil Pollution First-Strike Response Deed between Maritime Safety Queensland and the Bundaberg Port Authority (BPA). In doing so the plan describes the first-strike response and handover arrangements for oil spills within the port, identifies available resources, and provides key contact information.

The plan is not a stand alone document and should be read in conjunction with the following:

- The Queensland Coastal Contingency Action Plan (QCCAP)
- Maritime Safety Queensland Standard Operating Procedures for oil spill response
- The Oil Pollution First-strike Response Deed for the port of Bundaberg.

## 4. Roles and Responsibilities

The roles and responsibilities for first-strike response to oil spills within the port limits of Bundaberg are defined as follows:

- Maritime Safety Queensland is both Statutory and Control Agency for response to all ship sourced oil spills.
- Gladstone Ports Corporation is responsible for first strike response, as per the Oil Pollution First-Strike Deed and this contingency plan, to all oil spills within the port limits.
- The Department of Environment and Heritage Protection (DEHP) is the Statutory Agency for all land sourced oil spills and is also responsible for assuming the role of Environment and Science Coordinator (ESC) for incidents where oil and chemical spills occur in:
  - The harbours and working areas of the Port outside of the Great Barrier Reef Marine Park, and
  - Coastal waters outside the Great Barrier Reef World Heritage Area. This role will be exercised in full consultation and cooperation with the GBRMPA.
- The GBRMPA is responsible for assuming the role of ESC where oil or chemical spills occur within the Great Barrier Reef World Heritage Area and adjacent shorelines, excluding those harbours and working areas of the Port which fall outside of the Great Barrier Reef Marine Park. This role will be exercised in full consultation and cooperation with the DEHP.

- Local councils generally assume responsibility for cleanup of oil impacted shorelines. Depending upon the geographical location of stranded oil, the Bundaberg regional council may be requested to undertake shore line cleanup operations following an oil spill within the port.

Details of the roles and responsibilities may be found in Schedule 1 to the Inter-Governmental Agreement on Australia's National Plan for Maritime Environmental Emergencies.

## 5. Direction of Maritime Safety Queensland

Maritime Safety Queensland directs the Gladstone Ports Corporation to initiate and carry out first-strike response operations within the port limits of Bundaberg in accordance with Section 8 of this plan.

## 6. Threat Assessment

In 2010, Maritime Safety Queensland commissioned a semi-qualitative risk analysis of oil spills from ships over 10 metres in length for all ports in Queensland. The study shows there is a risk of an oil spill occurring within the Port of Bundaberg. Whilst small spills of diesel fuel and bilge oil from small commercial and recreational vessels are the most likely to occur, larger spills of heavy fuel oil are also possible. The most likely cause of larger spills is contact with the berths or groundings upon approach to or departure from the port.

The Port of Bundaberg covers a large area which extends from the 'Barrage' to a point approximately 4.5 nautical miles east of Burnett Heads. Most of the small commercial and recreational vessels are located in marinas at Burnett Heads, Port Bundaberg or in the Town Reach of the river. The movement of large trading ships including, bulk sugar carriers, is restricted to the entrance channel and main commercial areas of Port Bundaberg.

Whilst much of the river bank consists of built environment, a large spill of diesel fuel in the Town Reach could have an adverse effect on public safety and the amenity values of the area. Spills of heavy fuel oil at Port Bundaberg or large spills of diesel fuel from either of the marinas at Port Bundaberg or Burnett Heads could move out of the river and impact beaches to the north or south of the river. One area of particular ecological significance is the turtle rookery at Mon Repos.

## 7. Possible Spill Scenarios

The most common type of oil spills likely to occur in the port are small spills of petrol, diesel fuel or bilge oil from commercial or recreational ships or shore based activities. However it is also possible that the following types of spills may occur within the port:

- 300 tonnes of heavy fuel oil from trading ships resulting from serious contact incidents
- 5 tonnes of heavy fuel oil or diesel fuel during 'across-the-wharf' bunkering operations
- small spills of bunker fuel or bilge oil during ships internal transfer operations at Port Bundaberg
- small spills of diesel fuel or bilge oil from commercial or recreational vessels or land sources in either of the three marina precincts
- spills from land based sources

but each of the above scenarios could escalate beyond 'first-strike response'.

## 8. Response Options

The following guidelines apply to first-strike response within the port.

Area	Monitor	Contain Recover	Protect Resources	Shoreline Cleanup	Apply Dispersant
Hervey Bay	Yes	If viable	n/a	n/a	If viable
Northern Beaches (Skyringville)	Yes	Yes	Yes	Yes	No *
Southern Beaches (Oaks)	Yes	Yes	Yes	Yes	No *
Burnett Heads Marina	Yes	Yes	Yes	If viable	No *
Port Bundaberg Marina	Yes	Yes	Yes	If viable	No *
Port Bundaberg	Yes	Yes	If viable	If viable	No *
Millaquin Reach	Yes	Yes	If viable	If viable	No *
Distillery Reach	Yes	Yes	If viable	If viable	No*
Town Reach	Yes	Yes	If viable	If viable	No*

## 9. Incident Control Centre

Depending upon the severity of an incident the Incident Controller may establish an Incident Control Centre and/or Advanced Operations Centre at:

- Bundaberg Port Authority, 45 Wharf Drive, Burnett Heads
- MSQ office, Floor 2, Claude Wharton Building, 46 Quay Street, Bundaberg
- MSQ office, Yarroon Street, Gladstone.

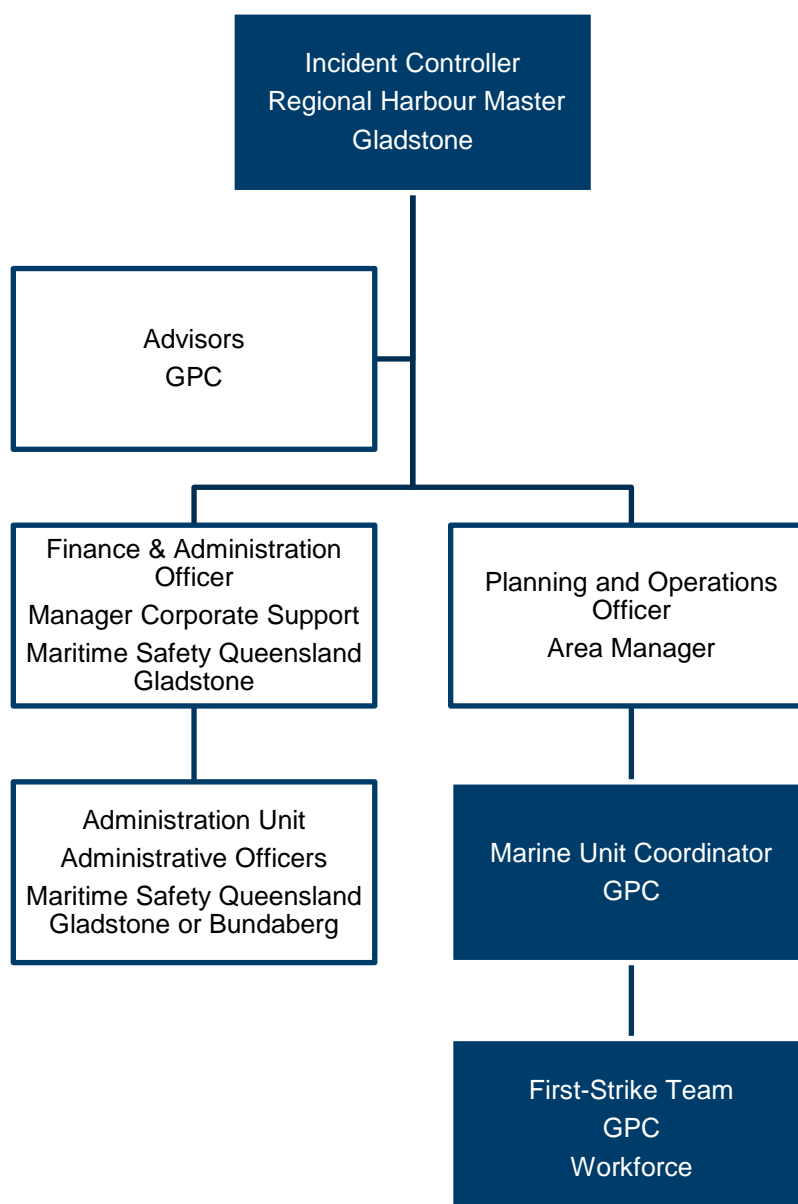
## 10. Response and Handover Arrangements

Early first-strike response action should include an assessment of the time and resources required to effectively manage each incident. Where a response is likely to be prolonged or exceed the port's first-strike response capacity, GPC should request assistance from Maritime Safety Queensland. When determining the need for assistance and hand-over of the response, GPC should consider the number and availability of local trained response personnel, their ability work safely without the need for excessive work hours, and the capacity of the ports' first-strike response equipment. Requests for assistance should be made as soon as possible and preferably in the first or subsequent SITREPs.

## 11. First-Strike Equipment

Equipment	BPA Pollution Shed Wharf St. Burnett Heads
Boom (D2 Lite)	300 metres
Boom (Structurflex Land/Sea)	60 metres
Skimmer (Foilex weir and Spate pump)	1
Container (10m <sup>3</sup> Flexidam)	2
Anchor Kit	1
Sorbent Boom	120 metres
Sorbent Pads	500 pads
Sorbent Mops	150 mops

## 12. Response Team Structure



## 13. Contact List

Role	Position	Phone	Mobile
Gladstone Port Control	Duty VTS Officer Maritime Safety Queensland	4973 1208	24 hours
Maritime Safety Queensland Incident Controller	Regional Harbour Master Maritime Safety Queensland Gladstone	4971 5200	0407 878 852
Planning & Operations Officer	Assistant Harbour Master Maritime Safety Queensland Gladstone	4971 5200	0459 827 398
Finance & Administration Officer	Manager Corporate Support Maritime Safety Queensland Gladstone	4971 5276	0409 340 365
Marine Unit Coordinator	Port of Bundaberg Operational Works Supervisor	4130 2200	0428 594 233
Environment and Scientific Coordinator for spills that impact the GBRMP	DEHP	4121 1889 Managed from Maryborough office.	1300 130 372 Extension 2 24 hours
Environment and Science Coordinator for spills that are likely to impact the GBRMP	GBRMPA	4750 0700	3830 4919 quote 'oil spill'
Shoreline Clean-up Coordinator	Operational Supervisor (Parks and Open Space)	1300 883 699	1300 883 699 24 hours

# Appendix A – Map of Bundaberg Port Limits

