

Public Information Package



Public Comment

North Queensland Bulk Port Corporation now seeks any public comment under Regulation 88PD of the Great Barrier Reef Marine Park Regulations 1983 (Cth).

Public submissions will be considered by the Great Barrier Reef Marine Park Authority (GBRMPA) in making a decision on this permit application.

Submissions

All comments and submissions to:
Great Barrier Reef Marine Park Authority,
Environmental Assessment and Protection Unit,
PO Box 1379,
Townsville QLD 4810
Email: haypoint@gbmpa.gov.au
Website: www.gbrmpa.gov.au/about-us/consultation

Letter from the Chair

Ports have a central role in the Queensland economy and in the generation of national wealth and opportunity.

North Queensland Bulk Ports Corporation (NQBPC) is one of Australia's largest port authorities. NQBPC provides essential access to trade, delivering jobs growth and economic security for the communities in which we operate.

Core to how we do business is getting the balance right – sustainably developing world-class ports and facilitating trade, while protecting the unique environment we are so fortunate to inhabit.

More than half of Queensland's trade by tonnage passes through our operating ports. This includes the ports of Weipa, Abbot Point, Mackay, and Hay Point.

We are privileged to be the only port authority with three ports operating within the Great Barrier Reef World Heritage Area (GBRWHA). The importance of this World Heritage Area is an integral factor in our operations, planning and development.

Just like roads and rail, maintenance work is required to keep our ports operating effectively and safely. NQBPC is proposing to undertake maintenance dredging at the Port of Hay Point. This means responsibly removing natural sediment that has built-up in ship navigation areas and relocating it.

Maintenance dredging is undertaken by port authorities around the world and is critical for maintaining port infrastructure.

We have spent more than three years undertaking detailed studies and engaging with a range of stakeholders to understand the source of natural sediment accumulation and appropriate removal and placement options at the Port of Hay Point.

This work aligns with the recently developed Maintenance Dredging Strategy for Great Barrier Reef World Heritage Area Ports released by the Queensland Government.

Our maintenance dredging management plan has been developed in consultation with a Technical Advisory Consultative Committee consisting of representatives from the Commonwealth, State and local government, port users, environmental/conservation and community interest groups.



By taking a structured, value-based, decision-making approach, we have arrived at a safe, efficient and sustainable solution for keeping the Port of Hay Point open for business.

Our Port of Hay Point Sustainable Sediment Management (SSM) Assessment of Navigational Infrastructure was [peer reviewed by](#) marine scientist [Dr Paul Erftemeijer](#) and is considered best practice.

It weighed up possible options for sediment management and determined that placement of maintenance dredge material at the existing at sea placement area was consistently ranked as the highest performing long-term approach.

Importantly, our [assessment reports](#) have found the risks to protected areas including the GBRWHA and Great Barrier Reef Marine Park and sensitive habitats are predominantly low with some temporary, short-term impacts to benthic habitat possible.

To help stakeholders better understand what we are proposing, we have prepared this Public Information Package.

Brad Fish
Chair
North Queensland Bulk Ports Corporation

Background

NQBP is proposing to remove built-up sediment from within the Port boundaries in order to maintain navigational depths and for operational efficiency of the port.

Natural sediment transport at the Port of Hay Point occurs as a result of wind and wave energy moving marine sediments in a northerly direction. This process results in sediments accumulating in some navigational areas and can affect the efficiency of the Port.

Sustainable Sediment Management Assessment

A range of options were assessed to determine whether maintenance dredging could be avoided, reduced or whether the sediment removed during the maintenance dredging could be recycled. This work is brought together through NQBP's Sustainable Sediment Management assessment.

This study found catchment runoff has minimal influence on sediment movement at the port, but tropical cyclones can significantly change levels of accumulation. This means attempts to reduce catchment runoff would not change the accumulation of marine sediments.

Bed levelling is a modern technique used in many ports and harbours. It involves towing equipment behind a vessel to level high spots and ridges on the seabed. Based on the assessment it was found that occasional bed levelling in key areas could reduce the frequency of the maintenance dredging required but would not eliminate this need.

Another key finding of the assessment was maintenance dredging was considered to provide the most cost effective and lowest Greenhouse Gas (GHG) emissions solution to sediment build up, with low environmental and operational effects and high effectiveness.

The assessment also included an investigation of options to recycle or reuse the dredged material to avoid disposal. However, the assessment found that due to the nature of the material which would be removed by maintenance dredging, there would be limited beneficial reuse options.

NQBP's structured decision-making approach included participation from a range of stakeholders who identified the key metrics used, including environment, cultural heritage, port economics and operations, health and safety, social, innovation and world heritage.

Preferred Sediment Management Option

Placement of material on land was found to be a less favourable option than placement at sea. Placement at the existing Dredged Material Placement Area (DMPA) was identified as the preferred sediment management option.

Environmental Risk Assessment and Management Plans

Underpinning the preferred sediment management option are an environmental risk assessment and best practice maintenance dredging management plans. NQBP will also implement an industry leading adaptive monitoring and management program.

Figure 1. Study approach



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1. About the Port of Hay Point

North Queensland Bulk Ports Corporation Pty Ltd (NQBPC) manages the Port of Hay Point which was established in 1971. It is home to two coal terminals that service mines in the Bowen Basin:

- Dalrymple Bay Coal Terminal (DBCT)
- Hay Point Coal Terminal (HPCT)

They are linked to the mines by an integrated rail-port network. The port primarily exports metallurgical coal, a key resource in the steel-making process.

The coastal port has offshore trestle jetties extending as far as 4km seaward. Its navigational areas include:

- seven ship loading berths
- apron areas
- departure path and
- tug harbour.



Figure 2. Port of Hay Point

Hay Point is located approximately 40 km south of Mackay in Queensland on Australia's east coast. The maritime areas of the Port are within the Great Barrier Reef World Heritage Area (GBRWA) and adjacent to the Great Barrier Reef Marine Park (GBRMP). The departure path extends into the GBRMP.

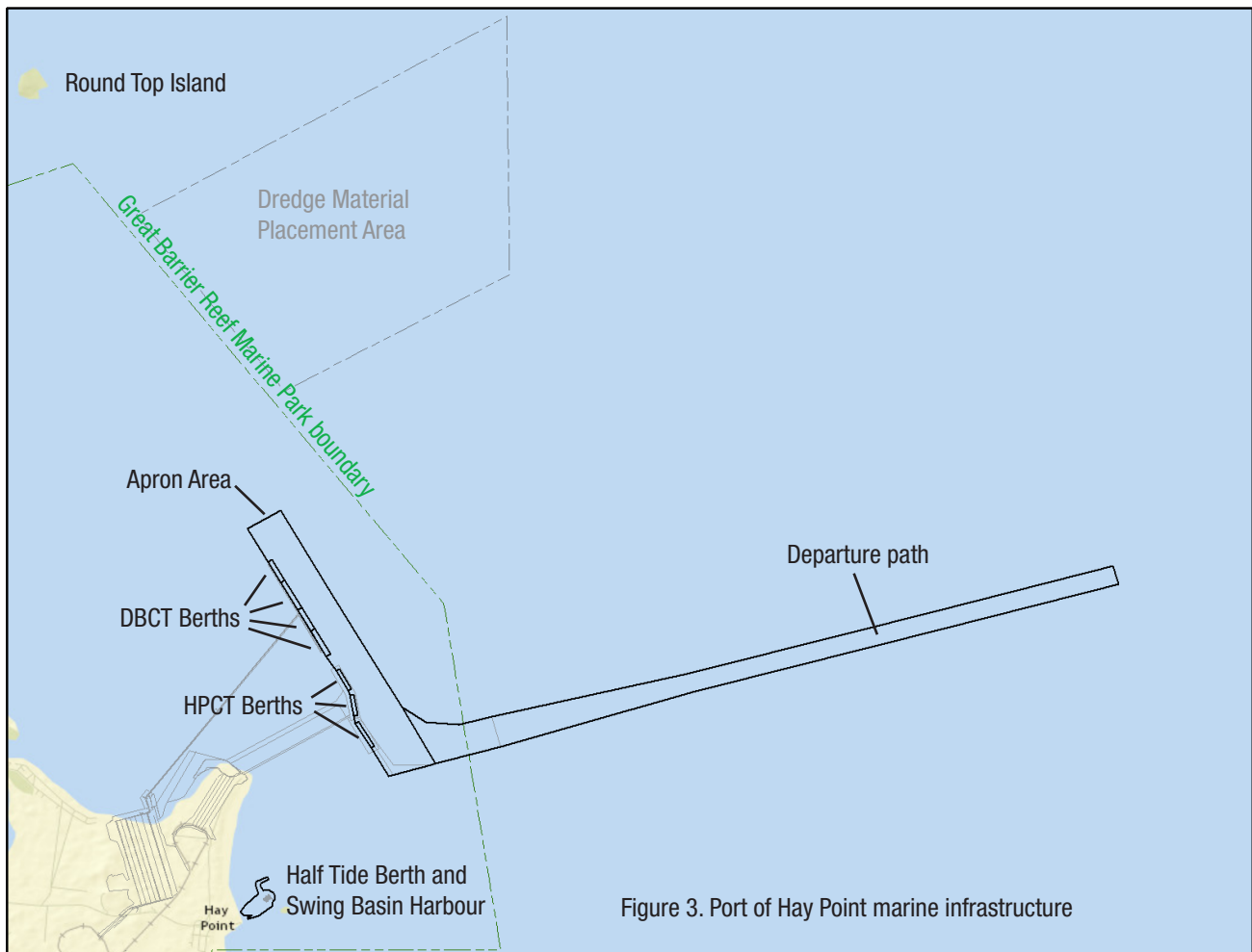


Figure 3. Port of Hay Point marine infrastructure

2. What is maintenance dredging?

When you look out at a port, you'll see the ships, ocean, the wharves and maybe some offloading machinery.

What you won't see is the infrastructure beneath the surface. This includes a shipping channel, apron, and berthing pockets.

All of these are basically man made depressions in the seabed that allow a ship to manoeuvre into port.

Over time, natural forces like tides, storms and cyclones cause some of the sediment that is constantly shifting through the ocean to settle into these channels and pockets.

This sediment starts to reduce the depth of these navigational areas which have a design depth and a declared depth.

- Design depth is the original construction depth that port engineers consider ideal for operating safely and efficiently at both high tide and low tide.
- Declared depth is designated by the Harbor Master, acknowledging this sediment build-up and safe clearance.

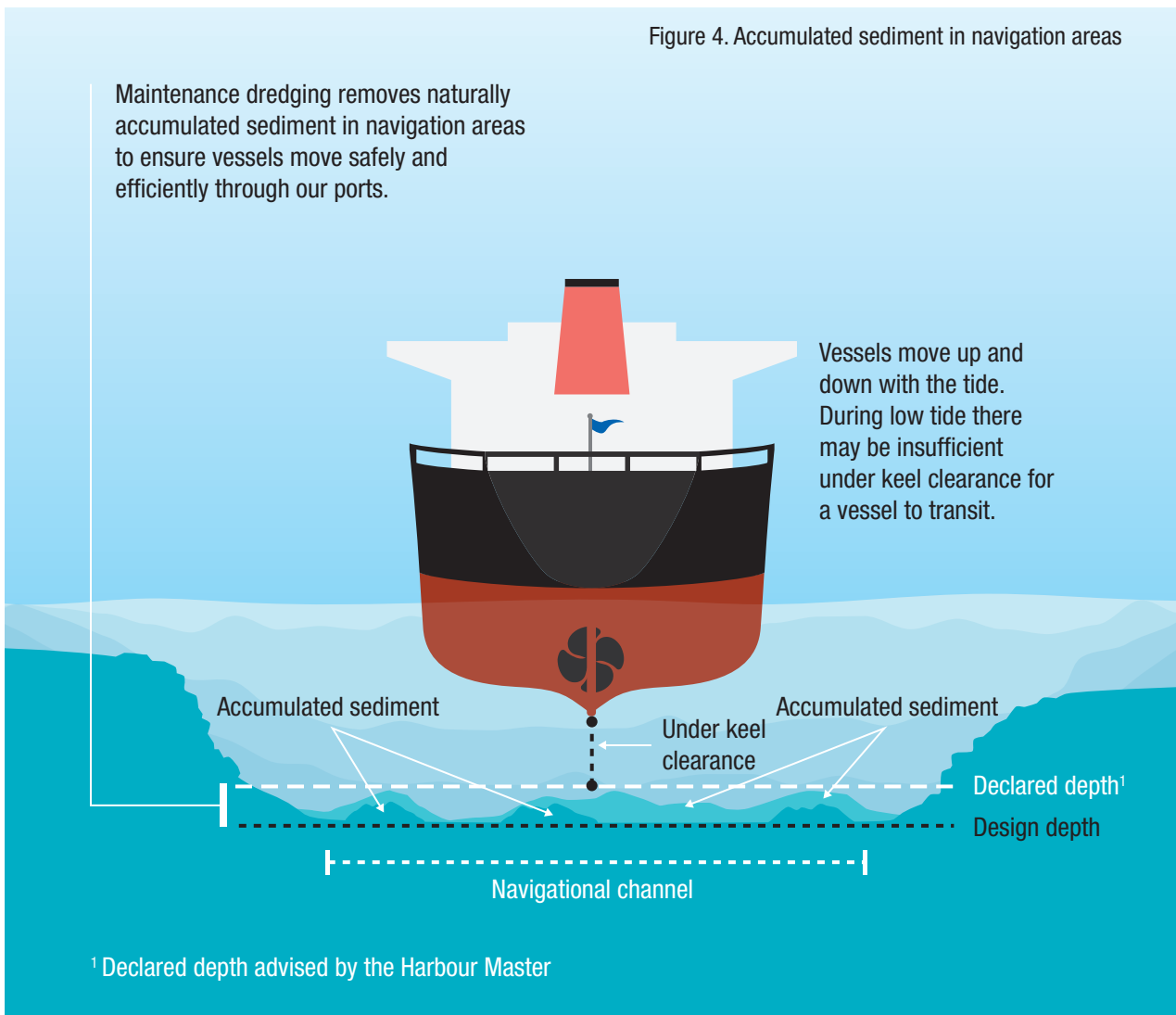
If maintenance dredging does not take place, the channels, aprons and pockets get shallower - illustrated below.

As the distance between ship and seabed (known as 'under keel clearance') reduces, the port's day-to-day activities become more difficult.

The depth necessary for safe loading, manoeuvring and transit of ships is impacted.

This can cause shipping delays that have significant flow-on effects for businesses and the broader economy.

Figure 4. Accumulated sediment in navigation areas



3. How is maintenance dredging performed?

For the Port of Hay Point, NQBP typically uses what is called a Trailing Suction Hopper Dredger (TSHD) to undertake maintenance dredging.

It is mainly used for dredging loose and soft material such as sand, gravel, silt or clay. The diagram below illustrates this more clearly:

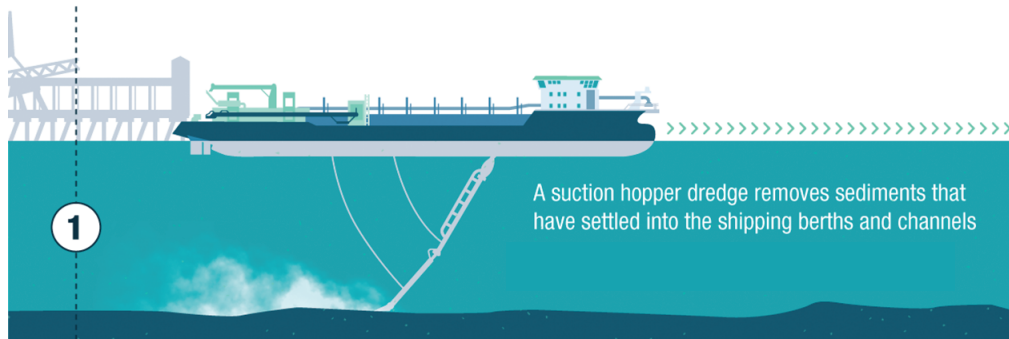


Figure 5.1 Trailing Suction Hopper Dredger undertaking maintenance dredging



Figure 5.2 Trailing Suction Hopper Dredger placing material

In the first step, one or two suction tubes, equipped with a drag head, are lowered on the seabed and the drag head is trailed over the bottom. A pump system sucks up a mixture of sands, silts or clay and water, and discharges it in the 'hopper' or hold of the vessel.

Once fully loaded, the vessel sails to the designated placement site. The material is then deposited at the approved location through bottom doors or valves, as shown in the second step.

Activities to manage marine sediment in ports are highly regulated, in particular any dredging and dredged material placement is subject to detailed regulatory approval processes under international conventions, and under national and state legislation. Australia is a signatory to the London Protocol, an international convention that aims to "protect and preserve the marine environment."

The placement of dredged material at sea may be allowed where in accordance with the London Protocol and the National Assessment Guidelines for Dredging (NAGD).

The NAGD set out the framework for the environmental impact assessment and permitting of the ocean disposal of dredged material. Prior to any decision to dredge and place material a comprehensive assessment is required.

A strict NAGD criteria determines whether dredge material will be suitable for at-sea disposal or whether it must be placed onshore. As NQBP operates three ports within the Great Barrier Reef World Heritage Area, NQBP must have in place State and Federal permits to conduct any maintenance dredging and at-sea disposal within these ports.

NQBP currently has 10-year permits for maintenance dredging for NQBP ports in Mackay and Weipa. This information package is part of the process of NQBP applying for a 10-year permit for the Port of Hay Point from GBRMPA for permission to undertake maintenance dredging, bed levelling and placement of dredged material in the Great Barrier Reef Marine Park.

A separate permit application will be required under the Environment Protection (Sea Dumping) Act for placement of the dredged material at the existing Placement Area.

4. Why is maintenance dredging needed at the Port of Hay Point?

NQBP is proposing to remove built-up sediment and relocate it, to maintain navigational depths and for operational efficiency of the port.

NQBP's assessment reports have found the risks to sensitive marine environments including the GBRWHA and GBR Marine Park and sensitive habitats are predominantly low with some temporary, short-term impacts to benthic habitat possible.

The natural build-up of seafloor sediment within port navigation areas has occurred over time and was exacerbated by Tropical Cyclone (TC) Debbie in 2017. Sudden depth loss from cyclones is a significant risk to the efficiency of the port. The level of sediment build-up can interfere with the way vessels are able to use the Port of Hay Point, including causing loading delays.

Maintenance dredging will only be undertaken as appropriate to maintain navigational depths and operational efficiency.

Maintenance dredging has only been carried out at the Port twice in the past 10 years, in 2008 and 2010. By 2016, approximately 205,800 m³ of material had accumulated in the port's navigation areas. In 2017, TC Debbie significantly added to the accumulation of sediment contributing almost half of the total sediment build-up of 356,553 m³.

[NQBP studies](#) have shown that there is currently no feasible alternative to maintenance dredging.

The impacts of TC Debbie and natural accumulation of sediment have resulted in the following sediment volumes to be dredged to achieve appropriate depths for vessels using the Port:

Location	Volume (m ³)
Apron and departure channel	74,085
DBCT berths	242,525
HPCT berths	8,636
Half Tide Tug Harbour	31,307
Total maintenance requirement	356,553

Queensland's ports contribute significantly to the State economy.

They handled approximately \$47.8 billion of exports during 2015-16. Major commodity ports within the Great Barrier Reef World Heritage Area account for 81% of total Queensland tonnage throughput.*

By any measure Queensland ports are essential to Australia's economy and financial security. Without maintenance dredging, there would be a significant impact on jobs and the economy.

If maintenance dredging is not undertaken, the capacity of the two terminals at the Port of Hay Point will decrease. There will be delays in loading and unloading ships, resulting in reduced export earnings and higher costs associated with delays.

There will be flow-on, indirect negative impacts on other industries. Particularly coal supply chain industries. The indirect impacts will also flow through to the Mackay Isaac Whitsunday (MIW) regions and Queensland economies. The income losses by residents affect their spending on goods and services.

An [economic review](#) by Jerome Fahrner of Acil Allen Consultants was commissioned by NQBP separately to the Sustainable Sediment Management Assessment Report. This review found that without maintenance dredging over a 16-year period, the MIW Region economy is projected to reduce by a cumulative total of \$2.7 billion.

In other words, the region is predicted to experience average economic losses of \$170.2 million per year.

These 16 year projections include:

- a \$450 million loss in coal royalties and
- the loss of 1,685 additional employee years of full-time equivalents or in simpler terms, employment in the region would be reduced by 105 full-time jobs on average

* Maintenance Dredging Strategy, Transport and Main Roads, November 2016

5. What maintenance dredging is being proposed?

Planned schedule

The following table provides a proposed short-term and long-term schedule for proposed maintenance dredging resulting in a total permit amount over a 10-year period of 956,553m³ being sought:

Period	Volume (m ³)
Current	356,553
1 – 5 years	200,000
5 – 10 years	200,000
Cyclone contingency	200,000
Total 10-year permit requirement	956,553

Maintenance dredging at the Port of Hay Point is anticipated to be undertaken infrequently, generally every 5 years or when required as a result of cyclone events.

In normal sea state conditions at the Port of Hay Point NQBP would expect the dredger to be able to remove and relocate around 10,000 m³ per day. This means dredging of 200,000 m³ would take about 20 days and 400,000 m³ would take about 40 days.

Methodology

Maintenance dredging requires specially designed vessels. These vessels are crewed by highly experienced people, with equipment and technology designed to protect the environment. NQBP prefers to use a TSHD for its maintenance dredging programs.

The TSHD which NQBP has used in the past has features such as under keel discharge, green-valve technology and turtle deflectors to reduce the risk of harm to marine life.

The maintenance dredging process involves using a vessel which acts like an underwater vacuum cleaner. This mainly removes loose sand, clay and silt. This process is described in section 3.

Capital versus maintenance dredging

Maintenance dredging is the removal and placement of accumulated material from existing ship navigation areas to an approved placement area. Maintenance dredging is different from a process called capital dredging, which involves the removal of previously undisturbed areas of seabed to expand or create new shipping channels, berths or swing basins.

Placement area

The Dredge Material Placement Area (DMPA) used in the past and which is proposed to be used for maintenance dredging activities, is located approximately 6km north of the Port and within defined port limits.

The DMPA is mostly in the general use zone of the Great Barrier Reef Marine Park with a small portion of the northern part of the DMPA within the Habitat Protection Zone. This DMPA has been used for this purpose by the Port since 2006 and is approximately 100km from coralline reef areas of the Great Barrier Reef.



NQBP has used the TSHD (Trailing Suction Hopper Dredger) *Brisbane* for maintenance dredging in the past.

6. What are the environmental receptors and risks?

Based on three years of studies and peer-reviewed research, NQBP reports and experts have concluded that the risk to environmental receptors from maintenance dredging at the Port of Hay Point will be predominantly low with some temporary, short-term impact to benthic habitat possible.

Environmental Receptors

The environmental values at the Port of Hay Point are reasonably typical of an inshore location along the central Queensland coast.

The inshore marine environment is naturally turbid, with prevailing wind being a key driver of conditions.

Habitats in the area include benthic infauna communities; low density, ephemeral seagrass communities; coral communities fringing inshore islands; and coastal habitats including mangroves.

There are a number of protected fauna species that are known to occur at the Port at times, including marine turtles, whales, dolphins, dugong, migratory shorebirds and the Water Mouse, but the area does not provide critical habitat for any protected marine species.

The features of the Port area and the Mackay region make an incremental contribution to the Outstanding Universal Value (OUV) of the GBRWHA under the majority of the Property's listing criteria, in that the area supports a subset of the features and processes identified in the listing.

However, none of the area's contributions to OUV are critical contributions at the scale of the World Heritage Property.

Risk Conclusions

[All potential impacts were assessed](#) against known environmental values and data to determine the risks posed by maintenance dredging and material placement at the Port of Hay Point. The key findings of this risk assessment are:

- Resuspension of sediments from maintenance dredging and material placement is comparable to natural resuspension.

- Water quality monitoring results and numerical modelling of sediment transport demonstrates that natural suspended sediment levels are much higher than those generated by maintenance dredging.
- Statistical analysis of local water conditions indicated that dredging would not result in impacts to sensitive environmental values if the dredging volume remained under 800,000 m³, in any single maintenance dredging program. The maintenance dredging program proposed is of a much lower volume, being 356,553 m³ and staged programs of 200,000 m³ each.
- Risks to sensitive habitats such coral communities are predicted to be low to negligible as they lie outside of area expected to have altered turbidity and sedimentation.
- Temporary, short-term impacts to benthic habitat is possible. Seagrass communities are naturally low density and ephemeral and have been shown to recover post-dredging.
- Protected species, listed as MNES, are also unlikely to be significantly impacted by maintenance dredging. The Port of Hay Point does not provide critical habitat resources for any marine species and disturbance to habitats will be low. Indirect disturbances can be effectively managed via best practice dredging operations. The short timeframe of each program will also reduce risks.
- Risks to protected areas including the GBRWHA and GBR Marine Park are predominantly low with some temporary, short-term impacts to benthic habitat possible. Other marine users, such as fisherman, may experience short-term disruptions to their activities.
- NQBP will continue its extensive ongoing best practice monitoring programs and also adopt new leading monitoring initiatives around periods of maintenance dredging, to ensure any unpredicted changes are managed.

Over the next page is a summary of the [environment risk assessment](#).

6. What are the environmental receptors and risks? (cntd)

RISK ACTIVITY (CAUSE)	POTENTIAL ENVIRONMENTAL RECEPTORS	POTENTIAL IMPACT	CONSEQUENCE	LIKELIHOOD	RISK RATING
Smothering from dredge material placement	Transient seagrass beds and seagrass habitat Benthic macroinvertebrate communities	Temporary loss of benthic habitat	Minor Temporary, short-term impact	Possible Seagrass growing period July to December Seagrass shown to recover post-dredging	Moderate
Dredging and placement generated sediment plume	Coral and rocky reef habitats at Round and Flat Top islands, and Slade Islet Seagrass	Changes to water quality leading to mortality or changes in coral and seagrass cover/diversity	Negligible Within the natural variation and tolerance of the system	Unlikely for volumes below 800,000 m ³ in a single dredging program	Low
Dredging and placement generated sediment plume	Coral and rocky reef habitats at Round and Flat Top islands, and Slade Islet	Sediment deposition resulting in coral loss	Negligible Within the natural variation and tolerance of the system	Unlikely for volumes below 800,000 m ³ in a single dredging program	Low
Movement of dredge vessel from the Port to the dredge material placement area	Transitory threatened and migratory marine animals	Potential for marine fauna vessel strike	Negligible No impact at the population or sub-population level	Unlikely	Low
Release of contaminants and nutrients	Marine biota	Potential for lethal and sub-lethal effects on marine biota	Negligible Material is consistently suitable for at sea disposal	Rare	Low
Dredging suction	Foraging marine turtles	Potential for marine fauna to be caught	Negligible No impact at the population or sub-population level	Unlikely	Low
Noise	Migrating whales	Potential for alienation of habitat	Negligible No impact at the population or sub-population level	Rare	Low
Lighting	Foraging marine turtles	Alienation of habitat, animal mortality	Negligible No impact at the population or sub-population level	Rare	Low

The TSHD will operate in accordance with the [Maintenance Dredging Environmental Management Plan](#). This plan includes how unlikely incidents such as waste and oil spills will be managed as well as management of emissions such as noise, light and air quality.

In the unlikely event of a pollution incident, management will be in accordance with the TSHD on-board emergency procedures and the Port of Hay Point emergency response procedures.

Modelling

The extensive bathymetric modelling undertaken by NQBP shows that ongoing maintenance dredging and placement volumes at the Port of Hay Point are relatively low and are expected to be undertaken infrequently (approximately every 5 years).

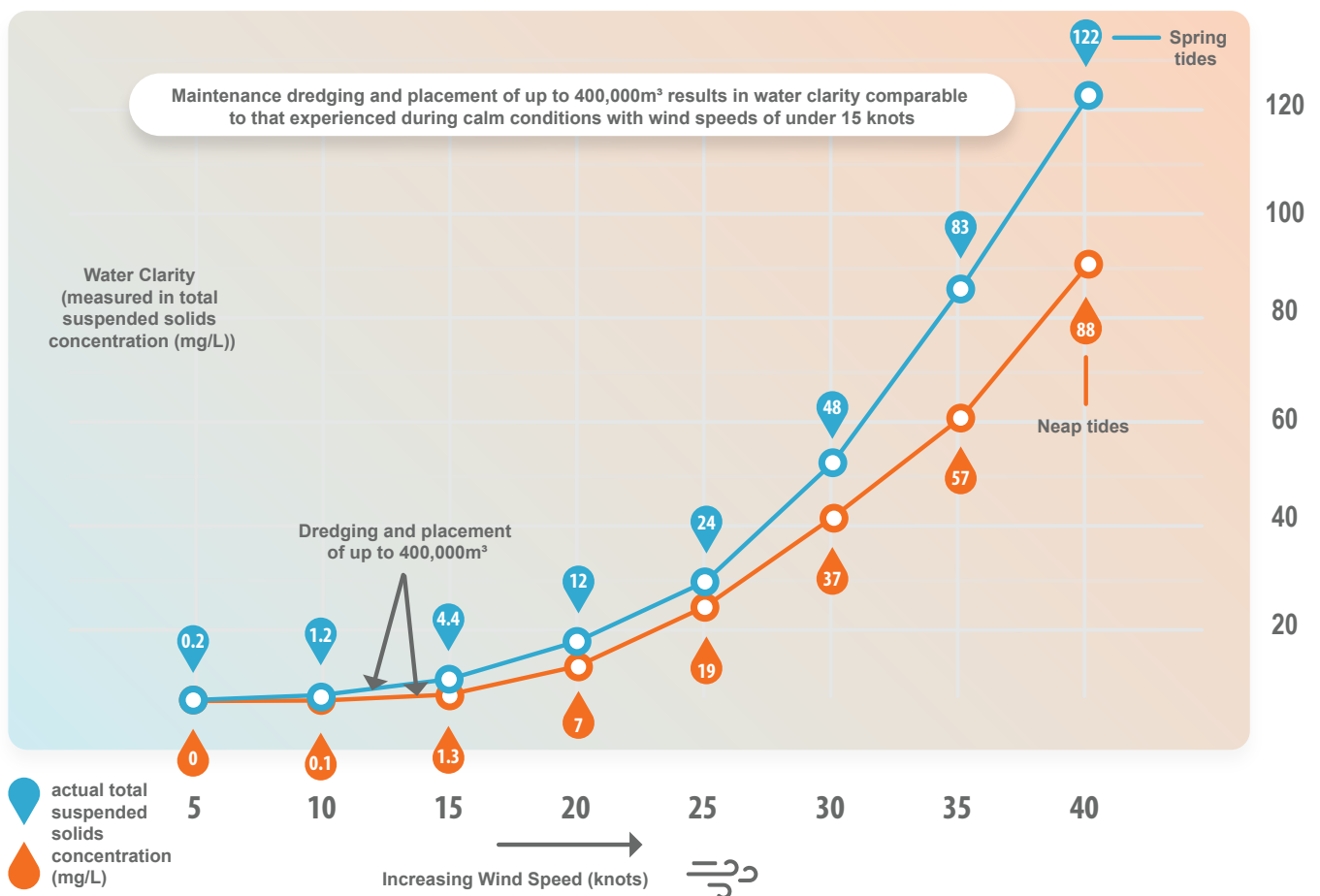
Numerical modelling of dredging and placement was undertaken on volumes of:

- 200,000 m³ (approx. 20 days) expected over a 5-year period, and
- 400,000 m³ (approx. 40 days) which is more than, but approximate to, the current maintenance requirements of 356,553 m³.

It demonstrated that maintenance dredging and placement of up to 400,000 m³ resulted in water clarity comparable to that experienced during calm conditions (wind speeds of 15 knots and under).

This modelling also showed that that suspended solids concentrations (water clarity) would remain within the natural range of the Hay Point area, up until 800,000 m³ or more was dredged and placed in a single maintenance dredging program.

The maintenance dredging program proposed is of a much lower volume, being 356,553 m³ and staged programs of 200,000 m³ each.



7. How will the environmental risks be monitored and managed?

Leading Marine Monitoring Program

NQBP has overseen a comprehensive ongoing ambient marine monitoring program since 2014. The program has previously and is currently undertaken by James Cook University marine scientists as part of a new three-year partnership.

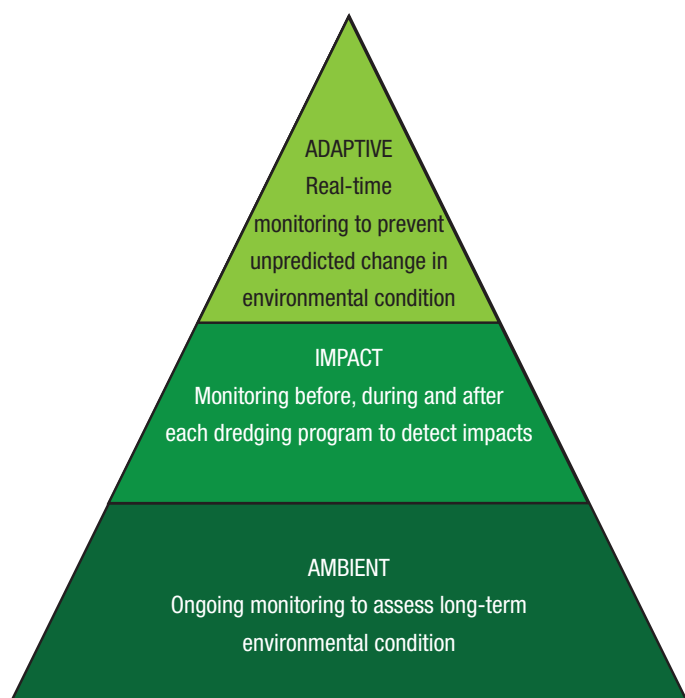
This program helps NQBP understand the natural marine environment and collects data to drive continual improvement.

Maintenance Dredging Monitoring Program

The environmental maintenance dredging monitoring plan aims to:

- Detect any impacts from maintenance dredging
- Respond to real time environmental conditions during maintenance dredging to manage unpredicted changes to water quality.

These aims will be met through the implementation of a three-tiered approach, as detailed in the [Port of Hay Point Marine Environmental Monitoring Plan](#):



Adaptive Management Program	<ul style="list-style-type: none"> • Additional real-time water quality loggers • Monitoring of weather conditions • Measures to avoid marine megafauna (whales, dolphins, turtles)
Impact Monitoring Program	<ul style="list-style-type: none"> • Additional continuous water quality sampling • Additional before and after Inshore Island Fringing Coral Survey
Ongoing Ambient Program	<ul style="list-style-type: none"> • Continuous Marine Water Quality • Annual Seagrass Surveys • Inshore Island Fringing Coral Survey (twice yearly)

Results from each tier of the monitoring program will be used to inform how NQBP manages maintenance dredging.

Monitoring review and updates

The Port of Hay Point Marine Environmental Monitoring Plan will be reviewed after each dredging program and the Plan updated prior to any future dredging.

The review will examine the:

- Effectiveness of monitoring methods
- Response times and outcomes of adaptive monitoring actions
- Monitoring results and data
- Environmental changes and any incidents.

The review will be undertaken in consultation with the Technical Advisory and Consultative Committee (TACC) consisting of representatives from the Commonwealth, State and local government, port users, environmental/conservation and community interest groups. The TACC's feedback will be considered as part of future Plan revisions.

Adaptive management measures

Adaptive management provides for continuous monitoring, evaluation and adjustment of management response measures based on real-time monitoring and environmental conditions. Based on an understanding of natural environmental conditions and thresholds for impact, a series of response levels (triggers) can be established and then monitored to ensure that conditions outside of natural ranges are avoided or stopped before they occur.

Responses to monitoring results will be required if trigger values are exceeded. The nature of the response will be scaled according to the environmental risk.

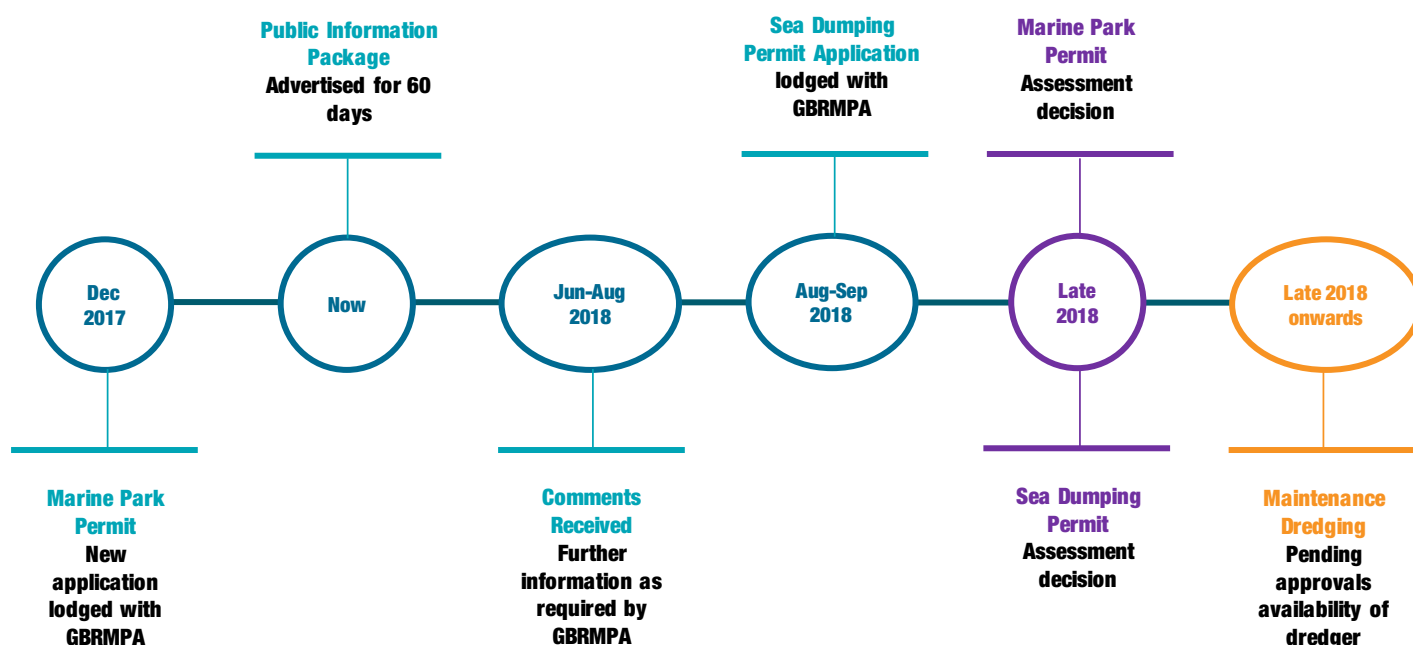
8. What are the timeframes?

NQBP lodged an application for a Marine Park Permit with the Great Barrier Marine Park Authority (GBRMPA) in December 2017. Assessment of the application includes a public information period of 60 days giving the public an opportunity to understand and comment on what NQBP are proposing.

Following this period and the provision of any further information GBRMPA requires, NQBP will lodge a separate application for a permit under the Environment Protection (Sea Dumping) Act for placement of the dredged material at the existing placement location.

Subject to a successful outcome to NQBP's permit applications, NQBP would be in a position to start maintenance dredging in late 2018 or early 2019. This would depend on the availability of the dredging vessel.

This vessel is typically available each year in March to April on its northern voyage or September-October returning to its home base.



9. Will the works impact access by other port users?

Direct physical impact with other port users from collision with the maintenance dredge is unlikely as the vessel will be moving at a slow pace. During maintenance dredging operations the dredge will be displaying the lights and day shapes as required by orders and regulations for preventing collisions at sea.

There will be restricted safety zones around the maintenance dredge equipment. However, this will be minimal and will be designed to ensure the safety of the boating and fishing public.

Port users and mariners will also be provided with notifications and information regarding maintenance dredging operations.

There may be some minor delays to boating at the Half Tide Tug Harbour while the dredger is within the harbour.

10. Who has been engaged and consulted?

NQBP is engaging with stakeholders throughout the application process and GBRMPA's assessment period.

NQBP's maintenance dredging management plan has been developed in consultation with a Technical Advisory and Consultative Committee (TACC).

The TACC consists of representatives from:

- North Queensland Bulk Ports (Port Authority)
- Hay Point Coal Terminal (Terminal Operator)
- Dalrymple Bay Coal Terminal (Terminal Operator)
- Great Barrier Reef Marine Park Authority (Commonwealth Government)
- Department of Environment and Energy (Commonwealth Government)
- Department of Environment and Science (Queensland Government)
- Department of Agriculture and Fisheries (Queensland Government)
- Department of Transport and Main Roads (Queensland Government)
- Maritime Safety Queensland (Queensland Government)
- Mackay Regional Council (Local Government)
- Reef Catchments Limited (Natural Resource Management Group)
- James Cook University (Technical)
- Queensland Seafood Industry Association (Industry)
- Australian Marine Conservation Society (Community)
- Mackay Conservation Group (Community)
- Mackay Recreational Fishers Association (Community)
- Mackay Local Marine Advisory Committee (Community)
- Port of Hay Point Community Reference Group (Community)

11. Where do I go for more information?

Industry-leading research, as well as technical studies, have informed NQBP's approach to the proposed maintenance dredging – the approach has been designed to minimise impacts to the environment.

NQBP have spent more than three years undertaking detailed studies and engaging with a range of stakeholders to understand the source of natural sediment accumulation and appropriate removal and placement options at the Port of Hay Point.

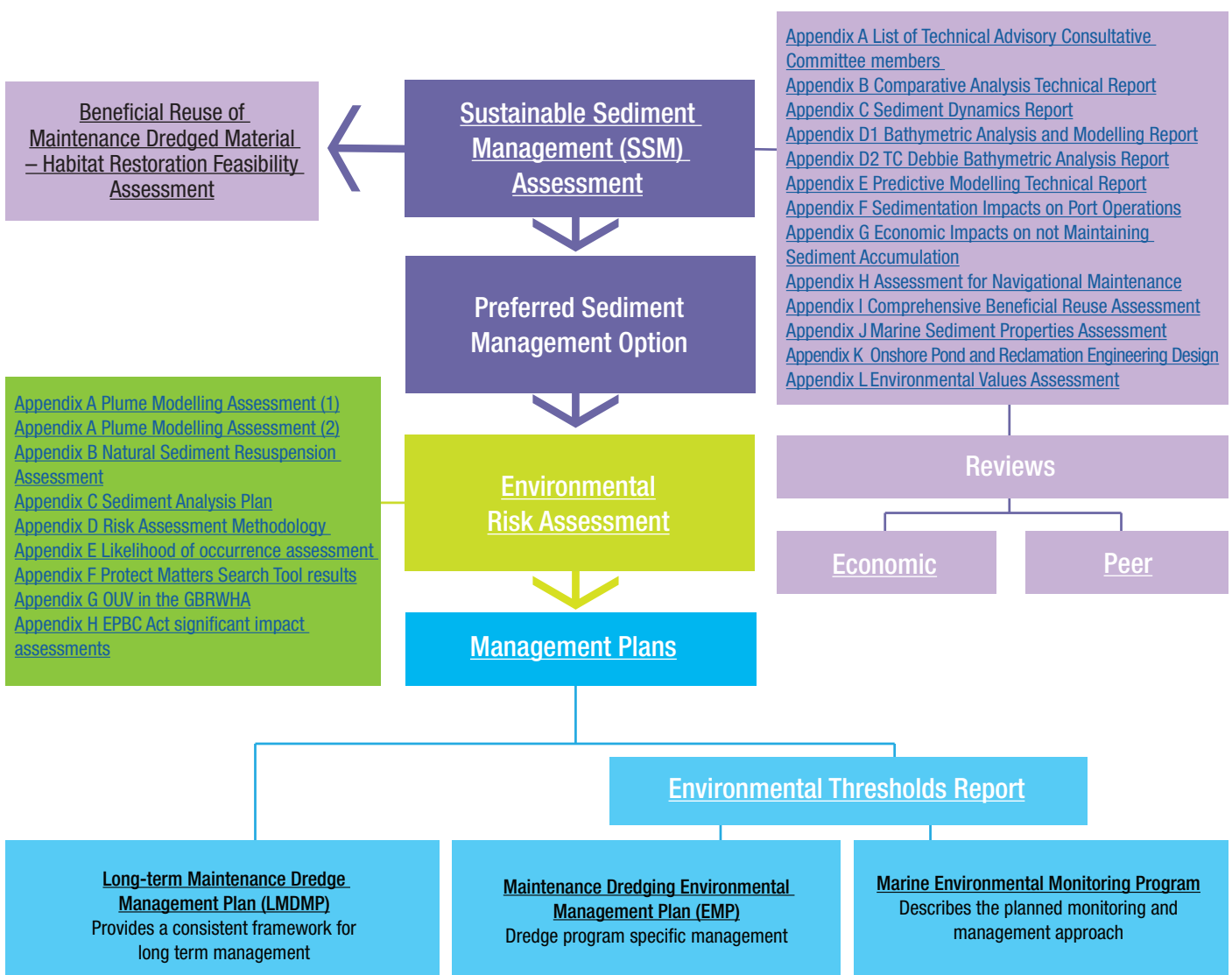
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NQBP's Port of Hay Point Sustainable Sediment Management (SSM) Assessment of Navigational Infrastructure was peer reviewed by Dr Paul Erftemeijer and is considered best practice.

The SSM weighed up possible options for sediment management and determined that placement of maintenance dredge material at the existing placement area was consistently ranked as the highest performing long-term approach.

NQBP's assessment reports have found the risks to protected areas including the GBRWHA and Great Barrier Reef Marine Park are predominantly low with some temporary, short-term impacts to benthic habitat possible.

For more detailed information on any aspect of this assessment please click on the reports below:



12. Further frequently asked questions

Q: Why does NQBP need to undertake this maintenance dredging?

NQBP is proposing to remove built-up sediment and relocate it, to maintain navigational depths and for operational efficiency of the port.

NQBP's assessment reports have found the risks to protected areas including the GBRWHA and Great Barrier Reef Marine Park are predominantly low with some temporary, short-term impacts to benthic habitat possible.

The natural build-up of seafloor sediment within port navigation areas has occurred over time and has been exacerbated by Tropical Cyclone Debbie in 2017. The level of sediment build-up can interfere with the way vessels are able to use the Port of Hay Point, including causing loading delays.

Q: How does maintenance dredging work?

Maintenance dredging is a process, using a specialised ship, to remove built-up sediment from existing shipping areas and relocate it to a selected placement area.

The naturally occurring material to be removed and relocated is predominantly silt, clay and sand. The material will be relocated to the previously approved placement area which has been used since 2006. The Dredge Material Placement Area (DMPA) is mostly in the general use zone of the Great Barrier Reef Marine Park with a small portion of the northern part of the DMPA within the Habitat Protection Zone.

NQBP prefers to use a TSHD for its maintenance dredging programs. The TSHD which NQBP has used in the past includes features such as under keel discharge, green-valve technology and turtle deflectors to reduce the potential for harm to marine life.

Q: What happens if the work isn't undertaken?

If sediment accumulation is not managed at the Port of Hay Point it is projected that there would be a significant reduction in jobs and economic loss as a result of increased shipping delays and reduced efficiency at the port. If left unmanaged, the loss of water depth over a 16 year period at Port of Hay Point is projected to decrease the size of the economy in the Mackay Isaac Whitsunday Region by a cumulative total of \$2.7 billion.

Q: How much material will be relocated?

If approved, NQBP are proposing to dredge up to 956,553 m³ over a series of dredging programs during the 10 year permit period.

The environmental risk assessment report concluded that maintenance dredging and placement activities are unlikely to alter water clarity above naturally occurring ranges, unless maintenance dredging volumes in a single maintenance dredging program are above 800,000 m³. This volume of maintenance dredge material in a single program is double what NQBP are proposing in any single maintenance dredging program during the 10 year period of the permit.

Maintenance dredging has only been carried out at the Port twice in the past 10 years, in 2008 and 2010. By 2016, approximately 205,800 m³ of material had accumulated in the port's navigation areas. In 2017, Tropical Cyclone Debbie significantly added to the accumulation of sediment contributing almost half of the total sediment build-up of 356,553 m³.

Q: What are the timeframes regarding the approvals process?

Before any work can commence, NQBP must gain approval from the Great Barrier Marine Park Authority (GBRMPA) to carry out maintenance dredging. NQBP lodged an application for a new Marine Park Permit with GBRMPA in December 2017.

Assessment of NQBP's application includes this public information package and a period of 60 days from Saturday 23 June ending on Tuesday 21 August 2018. to provide the public an opportunity to understand what NQBP are proposing and to provide written comments.

Following this period and the provision of any further information GBRMPA requires, NQBP will lodge a Sea Dumping Application which will be followed by a further assessment period by GBRMPA.

Q: If approved, when will you commence work?

Subject to a successful outcome to the permit applications, NQBP would be in a position to commence maintenance dredging in late 2018 or early 2019, depending on the availability of the dredging vessel.

Frequently Asked Questions (cntd)

Q: How long will each program take?

The dredging is proposed to be undertaken using a trailer suction hopper dredge. For the initial program NQBP is likely to use the TSHD *Brisbane*. Each program is likely to last between 3-6 weeks.

Q: Will dredged material be relocated to the Great Barrier Reef Marine Park?

The material will be relocated to the previously approved Dredge Material Placement Area which has been used since 2006. The placement area is situated within defined port limits and is mostly in the general use zone of the Great Barrier Reef Marine Park. A small portion of the northern part of the DMPA within the Habitat Protection Zone. NQBP's assessment reports have found the risks to protected areas including the GBRWHA and Great Barrier Reef Marine Park are predominantly low with some temporary, short-term impacts to benthic habitat possible.

NQBP's Port of Hay Point Sustainable Sediment Management (SSM) Assessment of Navigational Infrastructure was [peer reviewed](#) by Dr Paul Erftemeijer (a Principal Marine Scientist and Adjunct Research Fellow, School of Biological Sciences at The University of Western Australia) and is considered best practice.

It weighed up possible options for sediment management and determined that placement of maintenance dredge material at the existing at sea placement area was consistently ranked as the highest performing long-term approach.

Placing material on land was found to be a less favourable option than placement at sea. An analysis of these options was based on factors including environment, cultural heritage, port economics and operations, health and safety, social, innovation and world heritage.

The environmental risk report concluded that maintenance dredging and placement activities are unlikely to alter water clarity above naturally occurring levels, unless maintenance dredging volumes in a single maintenance dredging program are above 800,000 m³.

This volume of maintenance dredge material in a single program is double what NQBP are proposing in any single maintenance dredging program during the 10 year period of the permit.

Q: What environmental impacts has your study identified?

NQBP's assessment reports have found the risks to protected areas including the GBRWHA and Great Barrier Reef Marine Park are predominantly low with some temporary, short-term impacts to benthic habitat possible.

The environmental risk report has concluded that maintenance dredging and placement activities are unlikely to alter water clarity above naturally occurring levels, unless maintenance dredging volumes in a single maintenance dredging program are above 800,000 m³. This volume of maintenance dredge material in a single program is double what NQBP are proposing in any single maintenance dredging program during the 10 year period of the permit.

Various NQBP studies relating to the proposed maintenance dredging have been peer reviewed by Dr Paul Erftemeijer – a Principal Marine Scientist and Adjunct Research Fellow, School of Biological Sciences at The University of Western Australia.

He is a marine scientist with over 20 years' experience in applied marine science focusing on the ecology, management and restoration of (tropical) marine and coastal ecosystems worldwide. Dr Erftemeijer has substantial experience as specialist advisor to address environmental concerns related to human impacts from coastal and marine developments.

While the predicted impacts are minor to negligible, NQBP will continue its extensive ongoing best practice monitoring programs and also adopt new leading monitoring initiatives around periods of dredging, to ensure any unpredicted changes to water quality are appropriately managed.

NQBP has partnered with James Cook University (JCU) to deploy equipment to measure water clarity as part of their well-established, existing ambient marine water program. NQBP already oversees one of the largest ambient marine monitoring programs in Australia across its four trading ports at Hay Point, Mackay, Abbot Point and Weipa.

Q: What other options have you considered other than placement at sea?

Industry-leading research, as well as technical studies,

Frequently Asked Questions (cntd)

have informed NQBP's approach to the proposed maintenance dredging – it has been designed to minimise impacts to the environment. NQBP have spent more than three years undertaking detailed studies and engaging with a range of stakeholders to understand the source of natural sediment accumulation and appropriate removal and placement options at the Port of Hay Point.

By taking a structured, value-based, decision-making approach, NQBP have arrived at a safe and efficient solution for keeping the Port of Hay Point open for business. NQBP's Port of Hay Point Sustainable Sediment Management (SSM) Assessment of Navigational Infrastructure was peer reviewed by Dr Paul Erftemeijer (a Principal Marine Scientist and Adjunct Research Fellow, School of Biological Sciences at The University of Western Australia) and is considered best practice.

It weighed up possible options for sediment management and determined that placement of maintenance dredge material at the existing placement area was consistently ranked as the highest performing long-term approach.

Placement of material on land was found to be a less favourable option than placement at sea. [An analysis](#) of these options was based on key metrics including environment, cultural heritage, port economics and operations, health and safety, social, innovation and world heritage.

Q: Even if it's relocated away from the reef, won't sea currents and wind carry the material onto the reef?

Maintenance dredging and placement activities are unlikely to alter water quality conditions above natural occurring levels, within the parameters of NQBP's planned program. The naturally occurring material to be removed and placed is predominantly silt, clay and sand.

NQBP's assessment reports have found the risks to protected areas including the GBRWHA and Great Barrier Reef Marine Park are predominantly low with some temporary, short-term impacts to benthic habitat possible.

Q: Who is responsible for approving this work?

GRMBPA has a permitting role for any activities or operations which occur in the Great Barrier Reef Marine Park. NQBP have started the application process for a

10-year permit for the Port of Hay Point. Following a 60-day public information period and the provision of any further information GBRMPA requires, NQBP will lodge a Sea Dumping Application which will include a further assessment period by GBRMPA.

Q: What is being done to safeguard the reef? Does maintenance dredging cause loss of water clarity at local beaches?

Industry-leading research, as well as technical studies, have informed NQBP's approach to the proposed maintenance dredging – it has been designed to minimise impacts to the environment.

The environmental risk report concluded that maintenance dredging and placement activities are unlikely to alter water clarity above naturally occurring levels, unless maintenance dredging volumes in a single maintenance dredging program are above 800,000 m³. This is double what NQBP are proposing in any single maintenance dredging program over a 10-year period.

While the predicted impacts are negligible to minor, NQBP will continue its ongoing best practice monitoring programs. It will also adopt new leading monitoring initiatives around periods of maintenance dredging, to ensure any unpredicted changes to water quality are appropriately managed. Some of these activities/initiatives are listed below:

- NQBP prefers to use a TSHD for its maintenance dredging programs. The TSHD which NQBP has used in the past has features such as under keel discharge, green-valve technology and turtle deflectors to minimise the potential for harm to marine life.
- NQBP already oversees one of the largest ambient marine monitoring programs in Australia across its four trading ports at Hay Point, Mackay, Abbot Point and Weipa. A recent \$3 million partnership with James Cook University (TropWater) will ensure this valuable ongoing marine monitoring continues.
- This program has involved ongoing monitoring covering 60km of the Mackay coastline from Slade Point to Freshwater Point, and offshore to Keswick Island. Plankton sampling has been added to the

Frequently Asked Questions (cntd)

monitoring program to understand how blooms of algae and plankton contribute to changes in local water clarity.

- A coral monitoring program is also investigating local fringing coral health, abundance and distribution and includes annual before and after wet season monitoring along the coastline of the Port of Mackay and the Port of Hay Point. Since 2006, NQBP have been completing diver surveys on local island communities near the ports of Hay Point and Mackay. Since early 2015, a team of scientists have undertaken regular surveys of Victor Island, Round Top Island, Slade Islet and Keswick Island twice a year, before and after the wet season. The 2015-16 survey supported NQBP's understanding of natural seasonal fluctuations in algae abundance and showed an increase in hard coral cover at Keswick Island and a slight decline in cover at Round Top Island.
- A seagrass monitoring and research program, undertaken by JCU scientists, aligns with broader Great Barrier Reef seagrass monitoring and provides linkages to the Queensland-wide network of habitat assessment and management. It covers the coastline of the Port of Mackay and the Port of Hay Point. Outcomes of monitoring in 2015 identified seagrass abundance was the highest it has been since 2012.

Q: Have you consulted with the community regarding this maintenance dredging?

NQBP has been engaging with stakeholders throughout the application process and will continue to do so throughout GBRMPA's assessment period.

NQBP's long-term maintenance dredging management plan has been developed in consultation with a Technical Advisory and Consultative Committee consisting of representatives from the Commonwealth, State and local government, port users, environmental/conservation and community interest groups.

This public information package is part of a 60-day public information period managed by GBRMPA to help the community understand what is involved.

Q: Who will be monitoring the program and making sure it is undertaken responsibly?

NQBP's assessment reports have found the risks to protected areas including the GBRWHA and Great Barrier Reef Marine Park are predominantly low with some temporary, short-term impacts to benthic habitat possible.

NQBP will continue its extensive ongoing best practice monitoring programs and also adopt new leading monitoring initiatives around periods of maintenance dredging, to ensure any unpredicted changes to water quality are appropriately managed.

Q: Will there be any operational impact on commercial fishers if maintenance dredging is conducted?

Any operational impact will be temporary and NQBP will communicate any changes to operations. All boating laws and rules will apply.

Q: Will there be any restrictions on boats using the local marine waters?

Any impacts will be minimal and NQBP will communicate any changes regarding the use of the marine area during the maintenance dredge program.

All current marine laws and rules will apply. There may be some minor delays to recreational boating at the Half Tide Tug Harbour while the dredger is within the harbour.

Q: Will maintenance dredging activity result in coal polluting the beaches?

No. NQBP's assessment reports have found the risks to protected areas including the GBRWHA and Great Barrier Reef Marine Park are predominantly low with some temporary, short-term impacts to benthic habitat possible.

Q: Who is responsible for keeping the shipping channels open?

Maintaining navigable port depths and pilotage are the responsibilities of NQBP.

13. Concordance table

Port of Hay Point maintenance dredging (MPP G40185.1) - Regulation 88Q concordance table Great Barrier Reef Marine Park Regulations 1983

88Q Mandatory considerations in deciding whether to grant permission - The Authority must consider the following in deciding whether to grant a permission on an application, and whether or not to impose any conditions on the permission:

Sub-regulations 88Q	NQBP response
a) if the proposed conduct will take place in a zone—the objectives (if any) of the zoning plan for the zone;	<p>The majority of the area of maintenance dredging, including each of the berths and apron area, is located outside of the Marine Park boundary and associated zoning.</p> <p>Approximately 10 km of the departure channel extends into the (light blue) General Use Zone of the Marine Park. Refer GBRMP Zoning Map 12 – Mackay.</p> <p>The Dredge Material Placement Area (DMPA) is also located with the General Use Zone, with a small portion of the northern part of the DMPA within the (dark blue) Habitat Protection Zone.</p> <p>The Great Barrier Reef Marine Park Zoning Plan 2003 provides the following objective for the General Use Zone (light blue):</p> <ul style="list-style-type: none"> the conservation of areas of the Marine Park, while providing opportunities for reasonable use. <p>and Habitat Protection Zone (dark blue):</p> <ul style="list-style-type: none"> 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 in paragraph (a), to provide opportunities for reasonable use.
b) if the proposed conduct will take place in a specific area of the Marine Park to which a legislative instrument under the Act (whether these Regulations or another instrument), or a provision of such a legislative instrument, applies—that instrument or provision; Note: Some examples of legislative instruments under the Act other than these Regulations are a zoning plan and a plan of management. Some examples of provisions are special management provisions of these Regulations for SMAs (such as regulations 47 and 88V) and regulation 117JB (about protection of whales in whale protection areas).	<p>The area of conduct (refer GBRMP Zoning Map 12 – Mackay) is not located within any of the following specific areas:</p> <ul style="list-style-type: none"> Special management area Plan of management, or Site-specific management area
c) whether the applicant for the permission is a suitable person to hold a permission for the proposed conduct, having regard to: (i) the applicant's capacity to engage in and manage the proposed conduct to the satisfaction of the Authority; and	<p>As the port authority, NQBP carries out maintenance dredging to maintain navigable depths for vessels, and:</p> <ul style="list-style-type: none"> is the Port Authority under the Transport Infrastructure Act 1994 is the current and previous permit holder for State and Commonwealth permits for maintenance dredging at each of the Ports of Hay Point, Mackay, Abbot Point and Weipa has a long history of good management of maintenance dredging in Queensland. has had an ISO140001 accredited EMS since 1999
(ii) the applicant's history in relation to environmental matters; and	<p>Core to how we do business is getting the balance right; demonstrating that we take our environmental and social responsibilities as seriously as our commercial acumen.</p> <p>Please also refer to our Marine Park Permit (G40185) application.</p> <p>NQBP has not had any significant environmental incidents or compliance actions. NQBP also has:</p> <ul style="list-style-type: none"> Experience in delivering maintenance dredging and environmental management across all our ports in Queensland. Extensive marine monitoring programs in place (refer Your Ports 2017). ISO140001 accredited EMS A new 3-year, \$3M partnership agreement with James Cook University's Tropical Water & Aquatic Ecosystem Research Centre (TropWATER) to demonstrate our ongoing commitment
(iii) if the applicant is a body corporate—the history of its executive officers in relation to environmental matters; and	<p>NQBP's Board of Directors are appointed by the Governor in Council on the recommendation of shareholding Ministers. All Directors are members or have graduated from the Australian Institute of Company Directors.</p> <p>Further information on NQBP's current Directors and governance can be found here.</p> <p>NQBP has not identified any other relevant matter in relation to its board members.</p>
(iv) if the applicant is a subsidiary of a holding company—the history of the holding company and its executive officers in relation to environmental matters; and	<p>NQBP is not a subsidiary of a holding company.</p>
(v) whether the applicant owes any fee or other amount payable under the Act or these Regulations; and	<p>NQBP has paid \$8,610.00 pursuant to Section 7 of the Great Barrier Reef Marine Park Regulations for assessment of this Marine Park Permit application.</p> <p>No other fees are outstanding or payable.</p>
(vi) any other relevant matter;	<p>NQBP has not identified any other relevant matter</p>
d) 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;	<p>Our studies have determined maintenance dredging is short in duration and therefore unlikely to alter water clarity above naturally occurring levels, unless maintenance dredging volumes in a single maintenance dredging program are above 800,000 m³. This is double what we are proposing in any single maintenance dredging program over a 10-year period.</p> <p>Our assessment reports have found the risks to sensitive marine environments including the GBRWHA and GBR Marine Park and sensitive habitats such as seagrass and coral communities are predominantly low with some temporary, short-term impacts to benthic habitat possible.</p> <p>NQBP will, however, continue its extensive ongoing best practice monitoring programs and adopt new leading monitoring initiatives around periods of maintenance dredging, to ensure any unpredicted changes to water quality would be appropriately managed.</p>
e) whether there are feasible and prudent alternatives to the proposed conduct;	<p>A Sustainable Sediment Management (SSM) assessment of navigational infrastructure at the Port of Hay Point was undertaken and includes a thorough comparative analysis of a range of placement options.</p> <p>The SSM includes a summary report and 11 detailed technical supporting reports.</p>
f) any written comments received under Division 2A.3A in connection with the application;	<p>Not applicable at this stage. Pending public comment period.</p>

13. Concordance table

g) the relevant impacts of the proposed conduct;	Our studies have determined maintenance dredging is short in duration and therefore unlikely to alter water clarity above naturally occurring levels, unless maintenance dredging volumes in a single maintenance dredging program are above 800,000 m ³ . This is double what we are proposing in any single maintenance dredging program over a 10-year period.
h) options for avoiding, mitigating and offsetting those relevant impacts;	NQBP will be implementing best-practice management through a three-tiered monitoring approach , which includes real-time adaptive management during maintenance dredging to avoid unpredicted changes to natural conditions.
i) options for monitoring and managing those relevant impacts;	NQBP will oversee the implementation of a three-tiered monitoring plan , with each component being undertaken by appropriately qualified marine scientists.
j) a law of the Commonwealth or of Queensland as in force from time to time, or a relevant plan (as in force from time to time) made under such a law, that: (i) relates to the management of the environment or to an area in the Marine Park; and (ii) is relevant to the proposed conduct; except so far as that law or plan is covered by paragraph (b);	Maintenance dredging programs are subject to several Commonwealth and Queensland government laws and policies . Including the Queensland Government's Maintenance Dredging Strategy for Great Barrier Reef World Heritage Area Ports . NQBP has the appropriate State approvals for maintenance dredging in place for the Port of Hay Point. A Sea Dumping Permit will need to be sought by NQBP and will progress following the public information package period. The Port of Hay Point Long-term Maintenance Dredging Management Plan (LMDMP) describes the key environmental, cultural and planning legislation and policies that apply to dredging and dredge material placement projects undertaken at the Port of Hay Point.
k) if the proposed conduct also requires an approval or permit under the Environment Protection and Biodiversity Conservation Act 1999: (i) whether the approval or permit 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;	A referral under the EPBC Act is required to be made if a proposed action is likely to have a significant impact on Matters of National Environmental Significance (MNES). NQBP has undertaken an assessment against EPBC Act significant impact criteria for Matters of National Environmental Significance (MNES). The environmental risk assessment report has identified that significant impacts are unlikely. Direct links to the relevant appendices of the environmental risk assessment report are included below: <ul style="list-style-type: none"> • Appendix E - Likelihood of Occurrence Assessment • Appendix F - Protected Matters Search Tool results • Appendix G - Method for Identifying Local Expression of OUV in the GBRWHA • Appendix H - Threatened and Migratory EPBC Act Significant Impact Assessments
l) if the proposed conduct also requires an approval or a permission (however described) 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;	NQBP has the appropriate State approvals for maintenance dredging in place for the Port of Hay Point. <ul style="list-style-type: none"> • Environmental Authority (31 January 2014) – Environmentally relevant activity (EPPR01742813) to undertake maintenance dredging of navigational infrastructure • Development Approval (27 February 2006) – Operational Works / Tidal Works (PDC00339006A12 / IPDE00339106A22) for placement of dredged material below high-water mark
m) any recovery plan, wildlife conservation plan, threat abatement plan or approved conservation advice, that is relevant to the proposed conduct;	No recovery, conservation or abatement plans necessary. NQBP will still be implementing best-practice management through a three-tiered monitoring approach , which includes real-time adaptive management during maintenance dredging to avoid unpredicted changes to natural conditions.
n) any international agreement to which Australia is a party, or any agreement between the Commonwealth and a State or Territory, that is relevant to the proposed conduct;	Dumping of waste and other material (such as dredged sediments) from any vessel, aircraft or platform in Australian waters is prohibited under the Environment Protection (Sea Dumping) Act 1981, unless a permit has been issued. Permits are most commonly issued for dredging operations and the creation of artificial reefs. The Act fulfils Australia's international obligations under the London Protocol (to prevent marine pollution by controlling dumping of wastes and other matter). The Act is administered by the Department of Environment and Energy (DEE); or by the Great Barrier Reef Marine Park Authority (GBRMPA) for activities inside the Great Barrier Reef Marine Park. The Reef 2050 Long-term Sustainability Plan was released by the Australian and Queensland governments in March 2015 and is the overarching framework for protecting and managing the Reef until 2050. The Plan is a world-first document that outlines concrete management measures for the next 35 years to ensure the Outstanding Universal Value of the Reef is preserved now and for generations to come. The Queensland Government's Maintenance Dredging Strategy for Great Barrier Reef World Heritage Area Ports provides a framework for sustainable, leading practice management of maintenance dredging at ports in the Great Barrier Reef World Heritage Area (GBRWHA). Further details are provided in Section 1.3 and 1.4 of the Port of Hay Point Long-term Maintenance Dredging Management Plan .
o) any policies that are relevant to the proposed conduct and the management of the Marine Park or of its environment, biodiversity or heritage values and are: (i) published by the Authority under paragraph 7(4)(a) of the Act; or (ii) adopted by the Department administered by the Minister administering the Environment Protection and Biodiversity Conservation Act 1999;	The Port of Hay Point Long-term Maintenance Dredging Management Plan is designed for dredging activities to align with the principles, elements and objectives described in: <ul style="list-style-type: none"> • Reef 2050 Long term Sustainability Plan (CoA 2015) • Environmental Code of Practice for Dredging and Dredged Material Management (Ports Australia 2016) • GBRWHA Maintenance Dredging Strategy (SOQ 2016) • National Assessment Guidelines for Dredging (NAGD) (CoA 2009). The following Authority policies and guidelines have been used to inform the environmental risk assessment and management plans : <ul style="list-style-type: none"> • Dredging and Dredge Spoil Material Disposal Policy • Environmental Impact Management Permission System Policy • The use of Hydrodynamic Numerical Modelling for Dredging Projects in the Great Barrier Reef Marine Park guidelines • Improved Dredge Material Management for the Great Barrier Reef Region (SKM) The EPBC Act is currently administered by the Commonwealth Department of Energy & Environment. Relevant policies and guidelines include: <ul style="list-style-type: none"> • EPBC Act referral guidelines for the Outstanding Universal Value of the Great Barrier Reef World Heritage Area • Significant impact guidelines – matters of national environmental significance NQBP has undertaken an assessment against EPBC Act significant impact criteria for Matters of National Environmental Significance (MNES). The environmental risk assessment report has identified that significant impacts are unlikely. Direct links to the relevant appendices of the environmental risk assessment report are included below: <ul style="list-style-type: none"> • Appendix E - Likelihood of Occurrence Assessment • Appendix F - Protected Matters Search Tool results • Appendix G - Method for Identifying Local Expression of OUV in the GBRWHA • Appendix H - Threatened and Migratory EPBC Act Significant Impact Assessments
p) any other matters relevant to the proposed conduct and either: (i) achievement of the objects of the Act; or (ii) orderly and proper management of the Marine Park.	None.