

CAIRNS SHIPPING DEVELOPMENT PROJECT

Revised Draft Environmental Impact Statement

Chapter A1: Introduction



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A1.1 Project Overview

A1.1.1 EIS process

This Revised Draft Environment Impact Statement (EIS) assesses the environmental, social and economic impacts associated with the construction and operation of the proposed Cairns Shipping Development Project (henceforth known as ‘the project’ or ‘the CSD Project’) at the Port of Cairns that has been revised as a result of legislative changes since the initial draft EIS. The proponent for the project is Far North Queensland Ports Corporation Limited (trading as Ports North).

The key components of the project involve dredging a wider and deeper entrance channel and cruise ship swing basin to allow port access for larger cruise ships, relocation of the cargo ship swing basin to allow future Navy base expansion, and upgrading berth infrastructure within Trinity Inlet. The dredging operations involve the removal of in-situ sediment material from within and adjacent to the existing shipping channel and placement at a suitable land placement sites. Ongoing annual maintenance dredging (via existing approvals) will continue to be required to maintain the full functionality and safety of the port and entrance channels. There will also be some associated upgrades to landside port infrastructure required to accommodate larger and heavier cruise ships.

The original Project was declared a ‘coordinated project’ under Section 26 (1) (a) of the *State Development and Public Works Organisation Act 1971* (Qld) (SDPWO Act) in September 2012, and it was determined that an EIS was required to assess the impacts of the Project. Terms of Reference (ToR) for the EIS were released by the Queensland Coordinator-General in November 2012. (Refer **Appendix A**)

The project was also referred to the Commonwealth Minister for Sustainability, Environment, Water, Population and Communities (SEWPaC), now the Department of the Environment and Energy (DoEE), to determine whether it is a ‘controlled action’ under the *Environmental Protection and Biodiversity Conservation Act 1999* (Cwth) (EPBC Act). In October 2012, it was determined the project is a controlled action, requiring assessment and approval under the EPBC Act. The Commonwealth EIS Guidelines (EIS Guidelines) were released in March 2013 (Refer **Appendix B**). On 13 December 2016 DOEE confirmed that the EIS guidelines remain applicable to the revised Project.

This Revised Draft EIS must follow the format and content outlined in the ToR and the EIS Guidelines and this single EIS document has been prepared to address the requirements of both documents. Cross-reference tables showing how each requirement of the ToR and EIS Guidelines have been addressed is provided in **Appendix C**.

Once submitted, the Revised Draft EIS will be considered separately under the two assessment frameworks as follows:

1. Under the state (SDPWO Act) process, the EIS and any additional information will be evaluated by the Coordinator-General. The Coordinator-General will then prepare a report that includes the evaluations of, and conclusions regarding, the project’s environmental impacts and proposed mitigation measures. After considering all of this information, the Coordinator-General will recommend the project either:
 - proceed subject to conditions and recommendations designed to ensure the project’s environmental impacts are properly managed
 - be refused on the grounds its environmental impacts cannot be adequately addressed.

The Coordinator-General’s evaluation report on the EIS is not an approval in itself. Subsequent approvals and permissions will also be required for the project under other relevant Queensland and Local Government legislation.

2. Under the Commonwealth (EPBC Act) process, the information presented in the Revised Draft EIS must be sufficient to allow the Minister to make an informed decision on whether or not to approve, under Part 9 of the EPBC Act, the taking of the action for the purposes of each controlling provision.

A1.1.2 Original Project and Assessment

The project as defined in the Initial Advice Statement (Ports North 2012) was assessed in a Draft Environmental Impact Statement (Draft EIS) prepared by Ports North in 2014 (Ports North 2014). Broadly, this involved upgrading of the following infrastructure for the Port of Cairns, essentially to accommodate larger cruise ships and potential future expansions of HMAS Cairns Navy base operations:

- expansion of the existing shipping channel and shipping channel swing basin, resulting in a dredge volume of 4.4 M m³ and associated placement at sea
- placement of maintenance dredge material at sea
- establishment of a new swing basin to support future expansion of the HMAS Cairns Navy base
- structural upgrade of the existing shipping wharves
- provision and upgrade of services to the wharves.

The Draft EIS was based on the then preferred option of marine placement of dredge material. Key steps in the approvals process that have been completed are:

- review by Queensland Government agencies and the Coordinator-General (20 April 2015 to 1 June 2015)
- public notification and receipt of submissions (20 April 2015 to 11 June 2015).

Assessment of the Draft EIS by the Coordinator-General [and the Commonwealth Minister for the Environment] was not completed and due to changed circumstances a Revised Draft EIS was required.

A1.1.3 Changed Circumstances

Since the completion of the Draft EIS, a number of key circumstances have changed:

- The Commonwealth Government determined that placement of capital dredge material would no longer be permitted within the Great Barrier Reef Marine Park (GBRMP) (given effect under Regulation 88RA of the *Great Barrier Reef Marine Park Regulations 1983*).
- The Queensland Government passed the *Sustainable Ports Development Act 2015* (Qld) which prohibits capital dredging above a certain threshold for the Port of Cairns (except under this current EIS process) and requires, under section 36(2), that any subtidal placement options or reclamation of land options within the Great Barrier Reef World Heritage Area (GBRWHA) will need to meet a 'beneficial reuse' test.

The EIS Guidelines and ToR require options for placement of the dredge material, both land and marine, to be assessed. However, given the above new circumstances this is no longer appropriate and material from capital dredging is to be placed on land. Marine placement is still permitted for material from maintenance dredging (Ports North has a current permit for this activity until 2020).

Consequently, scope revision investigations were commenced in 2015 to:

- redefine the extent of channel dredging (the 'revised project')
- expand the land placement site options considered in the Draft EIS via an options study due the reduced scope of dredging and volume of material to be placed..

A1.1.4 The 2014 Draft EIS and 2017 Revised Draft EIS

This current document is described as a Revised Draft Environmental Impact Statement (Revised Draft EIS) as allowed for under the administrative provisions of the SDPWO Act and the Sustainable Ports Development Act (2015). The following points of clarification may assist readers:

- this Revised Draft EIS has been produced to include relevant material from the Draft EIS, either in full or when more convenient, in summary form
- it follows a similar structure as the draft as much as possible for the benefit of readers familiar with the earlier document
- irrelevant material from the draft has not been included, while relevant material has been updated and blended with new work as appropriate
- all relevant appendices from the draft have been either duplicated or updated
- new appendices covering new technical work are included with this Revised Draft EIS.

A1.1.5 Revised Project

The project assessed by this Revised Draft EIS involves:

- deepening of the existing various channel segment target depths to increase the depth declaration from -8.3m to -8.8m, widening of approximately 3 km of the outer channel by 10 m, widening of the channel bend from 150m to 180m, realignment and widening of the channel bend transits over approximately 3 km, by 10 m to 60 m, widening of the inner channel by 20m over approximately 1 km length, deepening of the existing Crystal swing basin and creation of a new (relocated) cargo ship swing basin
- a substantially reduced dredging volume based on the above widening and deepening (up to 1 000 000 m³ in-situ material volume), with this material being required to be placed on land
- structural upgrade of the existing shipping wharves
- provision and upgrade of services to the wharves.

Other aspects of the project are essentially unchanged.

A1.2 Project Need

The existing channel for the Port of Cairns is not wide or deep enough to allow safe access for larger vessels, particularly mega cruise ships, and the existing swing basin location restricts HMAS Cairns' Navy Base expansion capacity.

At present, almost half of the cruise ships visiting the area are unable to enter the Port of Cairns due to their size. Currently, these larger 'mega class' cruise ships must anchor offshore at Yorkeys Knob, located 15 km north of Cairns. Yorkeys Knob does not have a cruise ship terminal and passengers and crew are ferried ashore to the Yorkeys Knob Boating Club facility, before being transported by bus into the Cairns CBD and other day tour destinations. This practice is very inefficient for both the cruise ship operators and for the local economy. It is costly for the operators to transfer passengers into Cairns, crew are generally unable to leave the ship, and during inclement conditions passengers are reportedly often reluctant to come ashore. It is estimated that approximately 10 percent of ship visits are lost entirely when shore transfer by tenders becomes unsafe due to rough weather. The local economy is missing out on potential revenue due to reduced numbers coming ashore and no overnight stays at Yorkeys Knob. Looking forward, the cruise sector is forecast to grow strongly with Australia having the largest forecasted growth of any global market. The growth will predominantly be in the 'mega class' cruise liners which are currently not able to enter the Port of Cairns

Cruise shipping is the fastest growing tourism market world-wide, with a trend for increasing numbers of the larger 'mega class' cruise ships, which are generally unable to access the Port of Cairns. With the existing channel constraints the region will not be able to take advantage of the significant growth and economic value that cruise shipping delivers to the City. It is anticipated that without the project, the future cruise shipping industry growth will not be achieved, due to the inability of the existing infrastructure to adequately cater for the larger mega class vessels / cruise shipping industry's future needs. This will impact not only in Cairns but in other cruise destinations within Queensland as part of the Queensland Cruise Itinerary.

Due to the existing channel's limited depth the Port and shipping industry is exposed to risks associated with loss of channel depth and restrictions to shipping due to significant weather events such as cyclones. The increased channel depth and width delivered by this project will improve the Port's resilience from natural disasters and improve efficiency of existing shipping operations.

The existing channel swing basin location restricts the opportunities for HMAS Cairns' Navy Base to expand its wharves. The future upgrade and expansion of the Base is critical to the regional economy both in terms of additional Navy personnel in the City but also supporting the significant marine shipyards located in Cairns.

The objectives of the project are to:

- provide additional channel and wharf infrastructure capacity to enable access for modern mega cruise ships up to 300 metres, large Navy ships, improve channel safety and resilience, and improve efficiency of bulk cargo ships
- relocate the Cairns channel's swing basin to enable future expansion of HMAS Cairns' Navy base
- grow Cairns as a cruise shipping hub catering for both transit and home porting operations delivering economic benefits to both Cairns and other Queensland cruise destinations.

The expansion of cruise ship facilities in Cairns is an important step in developing increased tourism opportunities in North Queensland and is necessary to support and grow cruise shipping operations in Queensland. The Cairns Shipping Development Project will enable Cairns to attract and accommodate the growing cruise shipping market and secure associated economic benefits. Increased numbers of visiting cruise vessels will result in considerable benefits to the local economy and the wider Queensland cruise industry. This will lead to the general expansion of North Queensland's cruise industry, opportunities for increased cruise itineraries throughout the State and bring growth, stability and diversity to the Cairns tourism market sector.

An enhanced cruise shipping market will:

- Strengthen the regional economy of Far North Queensland.
- Promote tourism and growth for the Far North Queensland and wider Queensland cruise industry which will bring additional stability and diversity to the Cairns tourism sector.
- Create additional employment during both construction and operational phases of the project.

While the main purpose of the project is to take advantage of cruise shipping opportunities, there are also significant other benefits to non-cruise forms of shipping, including:

- Enabling future expansion of the HMAS Cairns Navy base (by relocating the existing main swing basin), in keeping with the Defence Force Posture Review (Hawke & Smith 2012) which recommends upgrading / expansion of bases at Cairns and Darwin. This could bring permanent defence force staff to reside in Cairns.
- The channel expansion would provide access for the existing RAN LHD vessels and also allow larger visiting overseas Navy vessels (in particular US Navy carriers) to enter the port for Rest and Relaxation (R and R) visits.
- The wider and deeper shipping channel will reduce current tidal and loading restrictions on bulk cargo ships accessing the Port of Cairns, thereby improving port efficiency.
- The deeper and wider channel will provide increased resilience for the Port of Cairns against an extreme weather event.

Upgrade of the channel would enable mega cruise ships up to 300 metres to berth safely at the Cairns Cruise Liner Terminal. It would enable a net additional 67 cruise ships to berth by 2026, increasing to 70 with the continuation of home-porting in Cairns and development of the new Brisbane cruise liner terminal. By 2031 an additional 85 mega cruise ships would berth at Cairns, based on a conservative (medium) growth projection, with continuation of home-porting and supporting the new Brisbane terminal.

The project supports growth in cruise shipping and improved shipping productivity. The project delivers significant economic growth to the region resulting in improved prosperity and liveability of the city. The increased cruise visitation will deliver significant economic benefit and jobs. Future expansion of HMAS Cairns is important in diversifying the regional economy to an additional industry apart from tourism. The expansion of HMAS Cairns will deliver greater resilience of the regional economy and improve the marine services industry.

The project will allow the City to take advantage of the significant growth in cruise shipping to the region. Cairns has been identified as one of the highest ranking ports in Australia for cruise passengers and this project will allow additional itineraries out of Cairns and visitations by cruise ships to Cairns into the future.

The establishment of Cairns as an alongside cruise facility for mega cruise ships connects the city to other cruise destinations. Cairns is considered by cruise companies as an 'iconic'/'marque' port of call that is included in almost all cruise ship itineraries along the Queensland coast. The proposed infrastructure improvements at the Cairns Port will upgrade Queensland's attraction as a cruise destination, with wider benefits to other Queensland ports. The project enhances the attractiveness and ability of Cairns Port to offer home porting and hence provide more affordable cruising opportunities for residents of the region to join and complete a cruise in Cairns.

A1.3 Project Alternatives

A summary of various alternative options is provided in order to demonstrate the appropriateness of the proposal and that it is the best approach for increasing revenue and employment from cruise ship visits to Cairns.

The options that have been explored (excluding marine placement) are:

- the 'Do Nothing' scenario
- use of an alternative site to the Port with new jetty for mooring large-size cruise ships
- improved tendering alternatives
- minor upgrades to existing infrastructure, without upgrade of the existing channel.

A1.3.1 The 'Do Nothing' Scenario

This scenario assumes that there is no upgrade to the channel or infrastructure at Port of Cairns (large-size ships would continue to anchor at Yorkeys Knob or at the Cairns Channel entrance).

Cruise shipping is the fastest growing tourism market world-wide, with a trend for increasing numbers of the larger 'mega class' cruise ships, which are generally unable to access the Port of Cairns. With the existing channel constraints the region will not be able to take advantage of the significant growth and economic value that cruise shipping delivers to the City. It is anticipated that without the project, the future cruise shipping industry growth will not be achieved, due to the inability of the existing infrastructure to adequately cater for the larger mega class vessels / cruise shipping industry's future needs. This will impact not only in Cairns but in other cruise destinations within Queensland as part of the Queensland Cruise Itinerary.

In addition the existing channel swing basin location restricts the opportunities for HMAS Cairns' Navy Base to expand its wharves.

A1.3.2 Use of an Alternative Port with New Jetty for Mooring Large-size Cruise Ships

A1.3.2.a Yorkeys Knob Jetty

There are no other sites in the region with a custom cruise terminal already built and operational. Consideration of viability of upgrading Yorkeys Knob to a long (4-4.5 km) trestle structure was considered as part of the Draft EIS. This would need to be a significant structure to cater for issues associated with the transport of passenger/crew/ship supplies along its length, water/sewerage infrastructure and the need to cater for all weather conditions. There are significant logistic issues to transport the large passenger numbers from the berth to the shore and subsequently to the city associated with this infrastructure which would make the operations difficult and unattractive to cruise companies. Fuel supply (bunkering) is likely to be logistically difficult and expensive to provide.

This option was discounted due to permanent visual impacts, costs, navigational safety and recreational boating impacts, potential megafauna impacts if permanent structures out to sea were established, potential impacts of close by sensitive receptors such as the coral at Double Island and ongoing environmental risks associated with trestles such as protective recoating and risk of contamination from fuel spills and paints.

The construction period for the 4-4.5 km jetty required would be 2-3 years and involve continuous high level noise from pile driving. There are also significant and unacceptable costs associated with construction and maintenance of such a structure. The cost of the trestle wharf at Yorkeys Knob is estimated to be \$400 million (excluding ongoing maintenance costs which are likely to be high)..

The trestle structure would not provide the same benefits for the ships as wharf side porting adjacent to the city, but also the port side services such as fuel options and maintenance required to support the cruise operations may not be available which would limit growth in visiting cruise ship numbers and economic benefit to the Cairns economy.

A1.3.2.b Yarrabah Jetty

Recent proposals for a Yarrabah Jetty are considered a complementary location to Cairns rather than an alternative as a jetty at Yarrabah would provide access to a cultural experience. This experience is different from that offered by the Cairns CBD and is not aimed at the mass cruise shipping market. It is located over a steep mountain (low speed) range and is approximately a 50 km, and around an hours drive to the Cairns CBD. This distance would limit the economic benefits to Cairns that a Port of Cairns docking would deliver. As with Yorkeys Knob, Yarrabah does not offer any port services or fuel options. Given its strong cultural setting, it is likely there would be potential cultural heritage and environmental challenges in expanding the jetty to a size that could cater for all classes of cruise ships.

A1.3.3 Improved Tendering Alternatives

There are two options available for improved tendering, Cairns outer channel or Yorkeys Knob. For Cairns, anchoring would be 10 km from the CBD but would allow transfer by tenders straight into the CBD via the existing port channel and Cruise Terminal wharves. The 10 km ferry distance is not attractive to the cruise companys due to cost, inefficiency degradation of shore experience and passenger resistance to long haul transfers.

For Yorkeys Knob the existing arrangement of anchoring 4 km offshore with a 15 km bus transfer into the CBD would be maintained. In 2014 Ports North and the Yorkeys Knob Boating Club installed new infrastructure and operational changes at Yorkeys Knob to improve passenger experience, efficiency and safety such that the tendering operations are now operating as a efficiently as possible. The shallow depth of the dredged entrance channel to the Yorkeys Knob marina which tidally constrains some of the larger tender vessels, would not facilitate the potential growth in cruise shipping. The time to tender and transfer passenger limits the time available for tours and other onshore activities and the number of passengers willing to disembark via tendering is reduced. During inclement weather conditions, which is estimated to be approximately 10 percent of times it would not be possible to transfer passengers to shore.

Improved tendering facilities does not facilitate the ability of crew to disembark and the opportunities to provide support services (e.g. waste transfer, refuelling) is very limited.

This option does not support the long term growth of the cruise industry as it is not preferred by Cruise operators.

Despite the existing facilities upgrade changes, tendering operations will always remain a limitation to the growth of cruise in the destination and is not preferred by Cruise operators; it does not replace the need for improved capacity for alongside berthing in Trinity Inlet.

A1.3.4 Minor Upgrades to Existing Infrastructure, Without Upgrade of the Existing Channel

The economic benefits to be gained from providing fuel for vessels, without upgrading the existing channel have been investigated. Whilst there is some marginal economic benefit in providing these services, it does not improve the ability of large-size vessels to moor at the Cairns Cruise Liner Terminal, although it may attract boutique and mid-sized vessels. The provision of IFO could also make the port more attractive for home porting or transit calls but the types of ships able to utilise the IFO would be limited by the access channel configuration. Therefore, upgrading the landside infrastructure without upgrading the channel infrastructure would not result in substantially increased utilisation of the Port in the longer term.

A1.4 Proponent

A1.4.1 Details

The proponent for the Project is the Far North Queensland Ports Corporation Limited, trading as Ports North, who operate the Port of Cairns as well as a number of other trading North Queensland ports including Karumba, Thursday Island, Cape Flattery and Mourilyan.

Ports North is a Government-owned Corporation established under the *Government Owned Corporations Act 1993* (Qld) that develops and manages port facilities including bulk shipments (e.g. sugar, molasses, fuel, sand, magnetite), marina and tourism facilities.

As a Ports Corporation, Ports North has statutory power under the *Transport Infrastructure Act 1994* (Qld) and the *Transport Infrastructure (Ports) Regulation 2005* (Qld) to issue licenses, leases and permits for the use of its port facilities and provides a number of multi-user facilities at its ports to achieve higher utilisation of infrastructure and greater efficiency. Ports North is also responsible for maintaining navigable Port depths, Port facilities and Port operations while vessels are alongside its facilities. The operations of the port are strongly supported by the community, particularly the cruise operations.

Ports North employs a workforce of 70 employees spanning a variety of professional, technical, trade and administrative roles in fields of planning and projects, environmental management, hydrographic survey, asset management, maritime operations and security, information technology, commercial, financial and corporate services. Ports North's Marine Pilots undertake the pilotage of all cruise ship transits of the Cairns Shipping Channel, berthing arrivals and departures. Relevant trade and tertiary qualifications and long standing experience are held across all fields.

The postal address and contact details for Ports North are:

- Cnr Grafton & Hartley Streets (PO Box 594)
Cairns QLD 4870
Phone: + 61 7 4052 3888
Fax: + 61 7 4052 3853
Email: enquiries@portsnorth.com.au

A1.4.2 Environmental Track Record

Ports North have a successful history of compliance with its environmental obligations, permits and approvals for operations and major projects. It manages several ports and associated shipping activities in areas of high conservation value. Whilst operating in such environments, Port North continues to maintain a high level of compliance and effective management of its port operations without the occurrence of significant environmental harm or major incident, fine or reprimand. An Environmental Management System consistent with ISO14001 is in place which addresses environmental management issues including planning, checking, and continual review of Ports North's management system and procedures inclusive of emergency response plans, loading and unloading of ships, stormwater management, oil spill response and waste controls. The EMS has been subject to external audits with a view to proceeding to ISO14001 certification in the future.

Ports North continues to demonstrate a sound environmental management record, and meets its environmental duty through implementation of systems and procedures, without prosecution for non-compliance with Environmental Approvals, nor have there been any major environmental incident events attributable to Ports North staff, or contractors engaged in activities under its operational control. Ports North's Environmental Policy is provided in **Appendix D**.

As part of the Ports North Environmental Management System a number of Ecological Monitoring Programs are in place to measure and assess potential impacts associated with port operations including:

- a Sediment Analysis Plan for dredging and disposal of maintenance dredge material to an approved marine disposal site
- a Long Term Management Plan for the management of maintenance dredging and dredge material disposal
- a Water Quality Monitoring Program in Trinity Inlet
- a Marine Pest Monitoring Program to detect the presence of marine pests
- a long term Seagrass Monitoring Program.

These programs produce valuable data which helps provide a long term measure of the status of the ecological health of the port catchment. The programs also measure the effectiveness of various management initiatives implemented to control the activities that the port operator can influence, thus reducing the risk of potential impacts to the environment in and around the Port.

Ports North has extensive experience in delivering major projects and managing port infrastructure while maintaining a high level of environmental management. The Cityport Masterplan was subject to an Impact Assessment Study, including consideration under the EPBC Act in the late 1990s and has been subsequently delivered in a number of stages with works involving capital dredging for marina expansions, marina and wave barrier construction, minor reclamation, foreshore protection and beautification, heritage wharf and shed refurbishments and backing land de-contamination. These projects were completed without any major adverse or unforeseen environmental impacts and to the satisfaction of regulatory agencies.

Ports North has maintained compliance with both Commonwealth and State approvals for dredging and disposal over a long period, without compliance action or adverse audit findings, and presently holds a ten-year Sea Dumping Permit and an associated Long Term Management Plan for maintenance dredging activities under the joint *Environmental Protection (Sea Dumping) Act 1981* (Cwlth), *Great Barrier Reef Marine Park Act 1975* and *Marine Parks Act 2004* (Qld) . An approval for Cairns was granted in 2010 and this 10 year permit term expires in 2020.

A1.5 Environmental Impact Statement (EIS) Objectives

The objectives of this EIS are as follows:

- to provide public information on the need for the project, alternatives to it, assess options and make informed decisions for its implementation
- to identify and assess potential direct and indirect environmental, social and economic impacts upon the surrounding physical and human environments during the construction and operational phase of the project
- to recommend mitigation measures to avoid or minimise any significant impacts identified to acceptable levels
- to identify potential residual impacts and design an appropriate management and monitoring program for the construction and operational phases of the proposed project.

A1.6 Environmental Impact Process

A1.6.1 Introduction

This Revised Draft EIS has been prepared to respond to both Queensland and Commonwealth environmental assessment processes and guidelines. Separate assessments will be undertaken by both the state and the Commonwealth.

Figure A1-1 illustrates the EIS Assessment process and shows the relationship between this Revised Draft EIS and the superseded Draft EIS.

A1.6.2 State EIS Assessment Process

A 'Coordinated Project' declaration by the Queensland Co-ordinator General under the SDPOWO Act triggers a comprehensive environmental impact assessment process, which involves the preparation and assessment of an EIS. The assessment process provides an opportunity for formal public consultation to occur prior to a project evaluation being made by the Co-ordinator General. The proponent may be required to respond to public submissions received through the provision of a Supplementary EIS, if required.

The EIS ToR was issued by the Co-ordinator General in August 2012, and are available for public viewing on the Department of State Development, Infrastructure and Planning's (DSDIP's) website. A cross-reference table identifying each of the DSDIP's requirements and where they are addressed in the EIS is contained in **Appendix C**.

A1.6.3 EPBC Significant Impact Referral Process

The project was referred to the SEWPaC (now the Department of the Environment and Energy (DoEE)) under the provisions of the EPBC Act.

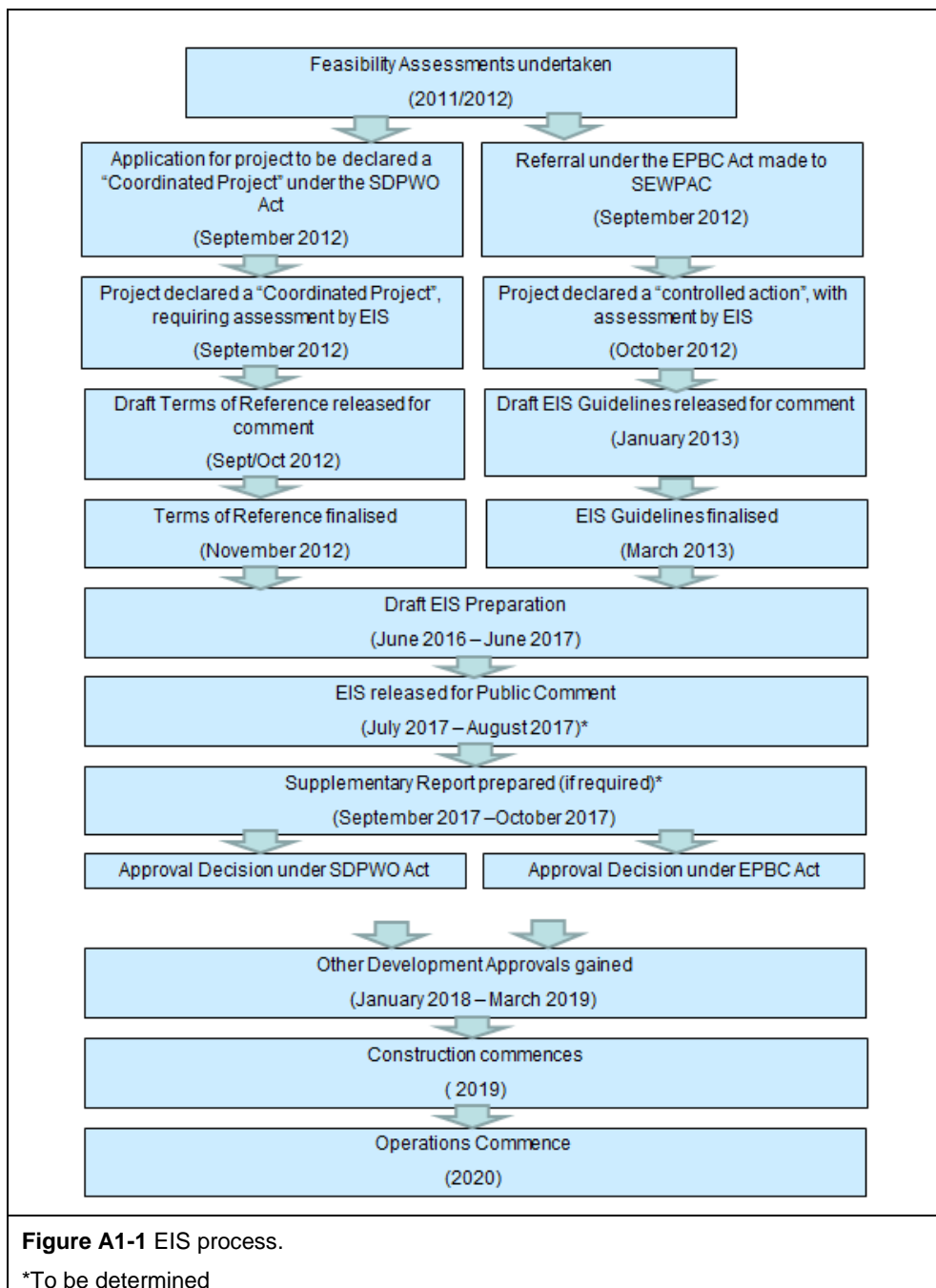
In October 2012, SEWPaC determined that the Project was a 'controlled action' under Section 75 and Section 87 of the EPBC Act and that the project would be assessed by Environmental Impact Assessment. The relevant controlling actions are:

- World Heritage Properties
- National Heritage Places
- Listed threatened species and communities
- Listed migratory species
- Commonwealth marine areas
- Great Barrier Reef Marine Park
- Commonwealth land.

The EIS Guidelines for the project were prepared by SEWPaC (DoEE) and the Great Barrier Reef Marine Park Authority (GBRMPA) to address the requirements of Section 102 of the EPBC Act, Schedule 4 of the *Environment Protection and Biodiversity Regulations 2000* (EPBC Regulations) and the *Great Barrier Reef Marine Park Regulations 88Q and 88R*.

A cross-reference table identifying each of the DOTEE and GBRMPA requirements and where they are addressed in the Revised Draft EIS is contained in **Appendix C**.

The Revised Draft EIS requires approval for publication by the Commonwealth Minister prior to it being published. Similarly to the State EIS process, public consultation will occur, and the proponent must take into account any of the comments received. A report will be prepared by the DoEE for the Minister for the Environment who will decide whether to approve the proposal and what conditions should be attached should approval be granted.



A1.6.4 Stakeholder and Community Engagement

A1.6.4.a Overview

Ports North engaged with a range of stakeholders and community members during the preparation of Draft and Revised Draft EIS.

Given that the major component of this project is proposed dredging to expand the shipping channel, engagement activities focused on the people and groups who have the greatest potential to be impacted by this aspect of the project. This included public sector, private sector, tourism bodies and NGO stakeholders with an interest in the marine environment and economic development.

The views of the broader community have also been taken into consideration during the preparation of the EIS through community engagement activities and the monitoring of public opinion.

Ports North CSDP Stakeholder Engagement Report (refer **Appendix E**) provides a full summary of the engagement activities undertaken for the Project.

A1.6.4.b Engagement Objectives

A number of engagement objectives were articulated for the Project at the outset of the EIS process. These included:

- to provide information about the EIS to relevant stakeholders and community members during the preparation of the EIS
- to provide opportunities for interested people and groups to learn about the EIS as it progresses so they can make informed comments during the public comment period
- to provide opportunities for Ports North to engage with people and groups to better understand the real and perceived impacts and benefits of the project
- to address the consultation requirements of both the Queensland EIS ToR and Commonwealth Government EIS Guidelines.

A1.6.4.c Stakeholders Engaged

Key stakeholders engaged during the Project sit within the following categories:

- decision makers/influencers – those with decision making power or the ability to influence decisions (Ports North, DoE, GBRMPA, Coordinator-General, other government agencies)
- business and industry groups – groups who promote economic development and employment or operate businesses within the region
- Port users and tenants - those who currently use Cairns Port and will continue to do so during construction and operation of the expanded port
- local and regional communities - people who live and work within Cairns and the surrounding area
- community/special interest groups - those who have a specific interest in an aspect associated with the expansion project, i.e. environment groups
- Indigenous groups - groups with current Native Title claims or expressions of interest in cultural heritage matters.

A1.6.4.d Engagement Methods

The engagement program utilised the following engagement tools and activities:

- Meetings, briefings and workshops – These sessions were held with relevant stakeholders to both provide information about the project and gain information from stakeholders regarding their operations and/or opinions of the project. More than 43 meetings, briefings and workshops have been held with stakeholders since March 2016.

- Numerous individual meetings and discussions with owners and lessees of land on which the project works may utilise.
- Fact sheets – Two fact sheets for the CSD Project were distributed to stakeholders and made available on the Ports North website.
- Website – The Ports North website was used as a source of information about the CSDP and provided contact details for those seeking further project information.
Phone/email – Email address enquiries@portsnorth.com.au and phone number (07) 4052 3888 were advertised on the Ports North website and in fact sheets as methods to contact Ports North regarding the project.

A1.7 EIS Methodology

A1.7.1 Study Area

The Study Area for this Revised Draft EIS may vary dependent on the technical investigation being undertaken. Depending on the issue under consideration, various parts of this Revised Draft EIS are relevant to one or more of the following:

- the immediate footprint of the project elements, including the shipping channel, preferred terrestrial placement areas, pipeline routes, and wharf upgrades (known for each element as the 'Project Area')
- a broader area beyond the immediate development footprint (known as the 'Study Area').

However, for the purposes of the EIS as a whole, the broad Study Area is as shown on **Figure A1-2**.

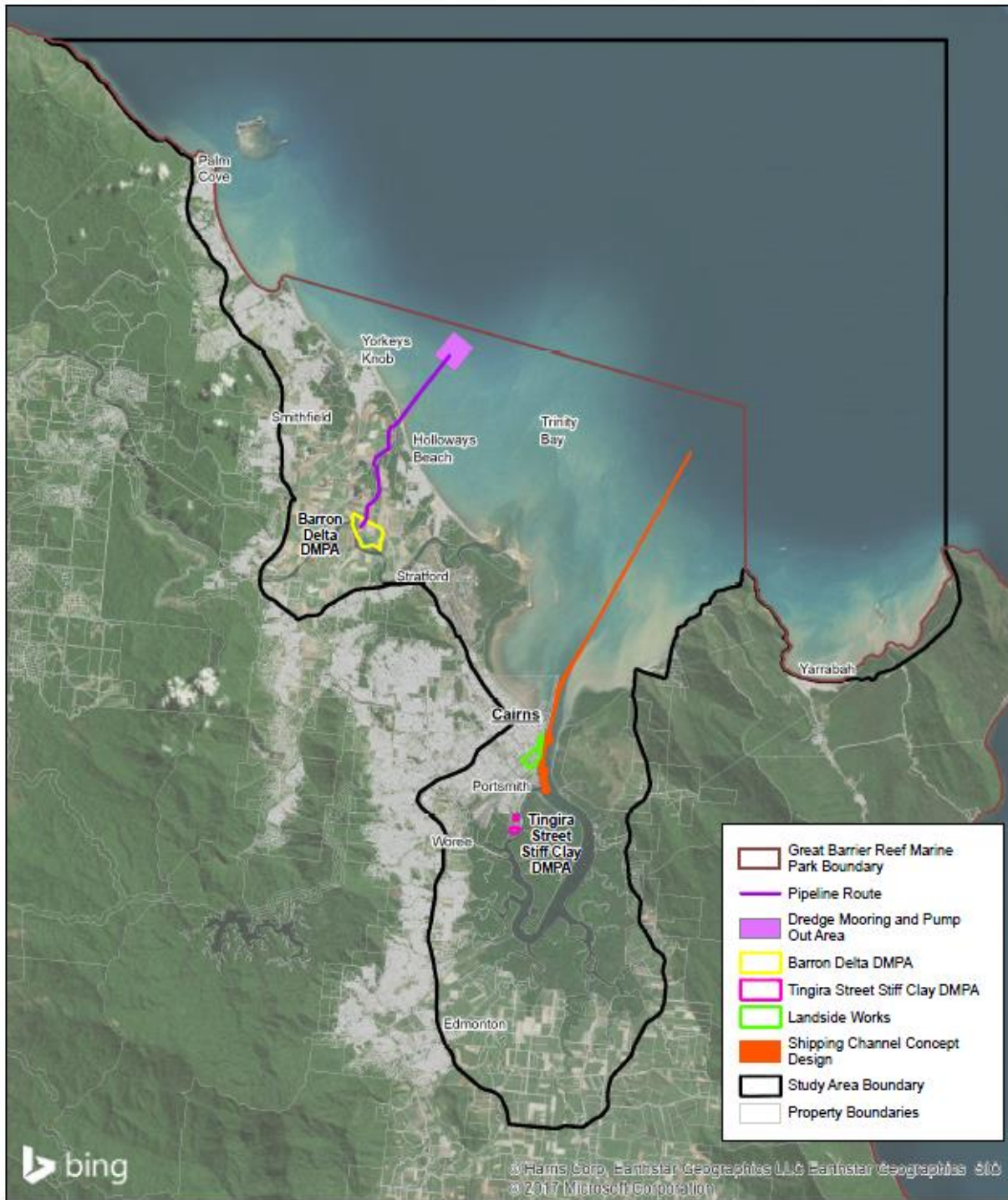
For some assessments (in particular nature conservation and cumulative impacts), consideration of a wider study area is required. This is defined as:

- Great Barrier Reef World Heritage Area (GBRWHA) including both nearshore and offshore areas
- Great Barrier Reef Marine Park (GBRMP).

The Draft EIS defined a Regional Study Area as:

- Wet Tropics region of the Great Barrier Reef World Heritage Area, extending north of Cairns to the Bloomfield River and south to Halifax Bay (to the south of Lucinda)
- Wet Tropics of Queensland World Heritage Area to the extent that impacts may be relevant.

Accordingly, the study area for each technical discipline is defined in the methodology section of the relevant chapter in Part B (Technical Chapters) and Part C (Management Plans).



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**Cairns Shipping
Development Project**
Revised Draft EIS

Project Location Plan

Ref: 3527-02-02
Date: 25/05/2017
Projection: MGA84 Zone 55
Scale at A4 Size 1:200,000



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Figure A1-2 Project location plan.

A1.7.2 Structure of the Revised Draft EIS

The Revised Draft EIS provides the identification and assessment of environmental impacts across a range of environmental and socio- economic disciplines. It is structured as five main components:

- Executive Summary
- Part A – Introduction, Project Background, Project Description, Legislation and Approvals
- Part B – Technical Assessments
- Part C – Management Plans
- Part D – Appendices.

A1.7.3 Technical Assessments

Each chapter contained in Part B (Technical Assessments) contains the following:

- an introduction to explain the context of the chapter
- description of the methodology used to undertake the technical assessment
- description of the existing conditions that may be impacted by the project
- description of the potential adverse and beneficial impacts of the project on the existing conditions, taking into account any inherent design features
- discussion of viable strategies for managing, mitigating or enhancing identified impacts
- description of any residual impact once mitigation measures have been applied and where appropriate, recommendations for offsets.

A1.7.4 Approach to Assessing Impact Significance

Part B of this Revised Draft EIS adopts a risk-based approach to assessing the significance of identified impacts, which considers the geographical extent, duration of the impact, sensitivity of the receiving environment to the impact, and the likelihood of it occurring.

In order to provide consistency, the following approach to assessing impacts used in Part B (Technical Chapters) has been used, and is illustrated on **Figure A1-3**.

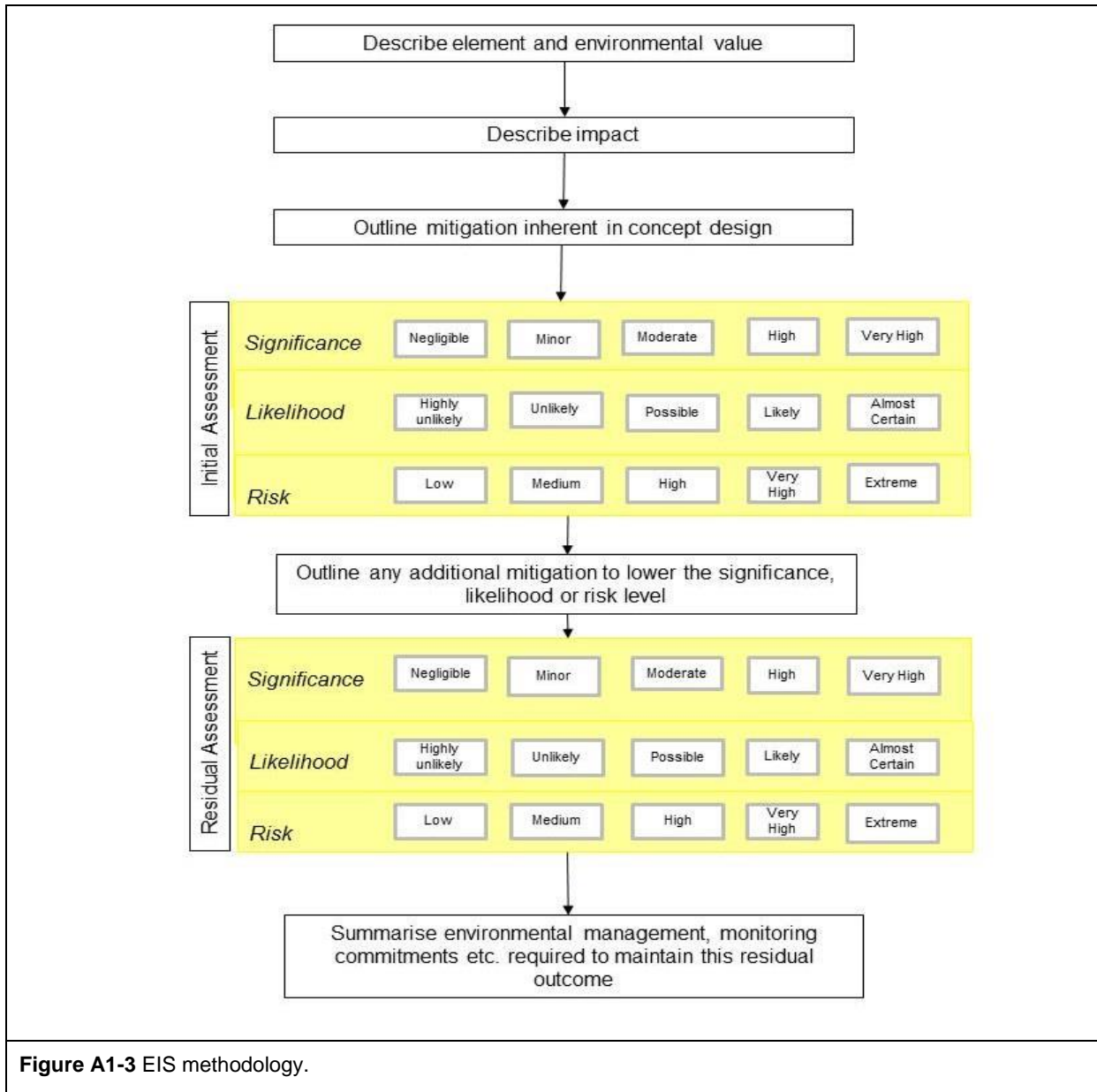


Figure A1-3 EIS methodology.

To assist in defining impact significance, each technical assessment contained within Part B has utilised the assessment tables below to enable a consistent approach across chapters to defining impacts and the risk level for comparative purposes. At the end of each technical chapter, a summary table of impacts and mitigation measures is included.

Consideration of the methodologies and risk matrixes used in other published EISs or by Queensland Government agencies was undertaken when determining the approach this EIS would utilise in assessing impact significance. In addition, the EPBC Act assessment involves its own set of significance criteria and these are adopted where appropriate.

Each technical assessment in Part B utilises a significance table based on that as shown in **Table A1-1** below.

TABLE A1-1 SIGNIFICANCE CRITERIA

IMPACT SIGNIFICANCE	DESCRIPTION OF SIGNIFICANCE
Very High	The impact is considered critical to the decision-making process. Impacts tend to be permanent or irreversible or otherwise long term and can occur over large scale areas. Very high sensitivity of environmental receptors to impact (e.g. national significance such as loss or removal of a population of an EPBC listing status).
High	The impact is considered likely to be important to decision-making. Impacts tend to be permanent or irreversible or otherwise long to medium term. Impacts can occur over large or medium scale areas. High to moderate sensitivity of environmental receptors to impact (e.g. fragmentation or partial loss of populations of EPBC listed threatened flora).
Moderate	The effects of the impact are relevant to decision-making including the development of environmental mitigation measures Impacts can range from long term to short term in duration Impacts can occur over medium scale areas or otherwise represents a significant impact at the local scale Moderate sensitivity of environmental receptors to impact (e.g. removal or significant reduction in the extent of suitable habitat assessed as 'high suitability' for EPBC listed threatened flora across the site).
Minor	Impacts are recognisable/detectable but acceptable. These impacts are unlikely to be of importance in the decision-making process. Nevertheless, they are relevant in the consideration of standard mitigation measures. Impacts tend to be short term or temporary and/or occur at local scale. (e.g. reduction in the extent of suitable habitat assessed as 'high suitability' for EPBC listed threatened flora across the site, however replacement habitat will be provided).
Negligible	Minimal change to the existing situation. This could include, for example, impacts which are beneath levels of detection, impacts that are within the normal bounds of variation, or impacts that are within the margin of forecasting error.
Beneficial	Impacts have a positive outcome on the existing situation. This could include for example, an improvement in vegetation management or an improvement in air quality as a result of the project.

Table A1-2 shows the general approach to classifying the duration of identified impacts.

TABLE A1-2 CLASSIFICATIONS OF THE DURATION OF IDENTIFIED IMPACTS

RELATIVE DURATION OF IMPACTS	
Temporary	Days to Months
Short Term	Up to one Year
Medium Term	From one to five Years
Long Term	From five to 50 Years
Permanent / Irreversible	In excess of 50 Years

Table A1-4 outlines how the likelihood of an impact occurring has been assessed.

TABLE A1-3 LIKELIHOOD OF IMPACT

LIKELIHOOD OF IMPACTS	RISK PROBABILITY CATEGORIES
Highly Unlikely	Highly unlikely to occur but theoretically possible
Unlikely	May occur during construction and operation of the project but probability well below 50%; unlikely, but not negligible
Possible	Less likely than not (<50% probability)but still appreciable;
Likely	Likely to occur during construction or operations or during a 12 month timeframe; probability greater than 50%
Almost Certain	Very likely to occur as a result of the proposed project construction and/or operations; could occur multiple times during relevant impacting period

A risk rating has been generated for the key impacts to environmental values and is summarised at the end of each technical chapter in Part B (Technical Chapters). This has been done by assessing significance versus likelihood within a risk matrix with up to five levels of risk (Negligible, Low, Medium, High, Extreme) possible. Risk is described as the product of likelihood and consequence as shown in **Table A1-4** below.

TABLE A1-4 RISK MATRIX

LIKELIHOOD	SIGNIFICANCE				
	NEGLIGIBLE	MINOR	MODERATE	HIGH	VERY HIGH
Highly Unlikely	Negligible	Negligible	Low	Medium	High
Unlikely	Negligible	Low	Low	Medium	High
Possible	Negligible	Low	Medium	Medium	High
Likely	Negligible	Medium	Medium	High	Extreme
Almost Certain	Low	Medium	High	Extreme	Extreme

The rating of risk as assessed above is as shown in **Table A1-5** below.

TABLE A1-5 RISK RATING LEGEND

Extreme Risk	An issue requiring change in project scope; almost certain to result in a 'significant' impact on a Matter of National or State Environmental Significance
High Risk	An issue requiring further detailed investigation and planning to manage and reduce risk; likely to result in a 'significant' impact on a Matter of National or State Environmental Significance
Medium Risk	An issue requiring project specific controls and procedures to manage
Low Risk	Manageable by standard mitigation and similar operating procedures
Negligible Risk	No additional management required

A1.7.5 Management Plans

Part C (Management Plans) provides a series of Framework Management Plans addressing construction and operational environmental management, dredging management, vessel traffic, and maritime operations management.

A1.8 Study Team

The Revised Draft EIS was prepared on behalf of Ports North by Flanagan Consulting Group (FCG) as the lead EIS consultant. FCG's Project Team was led by Pat Flanagan as Project Director supported by David Finney (Envirofin) as Project Manager, Greg Fisk (BMT-WBM) as the technical lead with specific responsibility for the marine based assessments and David Rivett (Environment North) as the technical lead with specific responsibility for the terrestrial assessments.

Other sub-consultants and professionals were engaged to provide technical advice during the preparation of the Revised Draft EIS and in many cases produced technical reports used in completing the technical chapters. The study team members are listed in **Appendix F**.

A1.9 Submissions

This Revised Draft EIS is made available for public comment in accordance with Section 33 of the SDPWO Act.

The EIS can be viewed online at: <http://www.portsnorth.com.au/>

Hard copies are also available at Queensland State Library (South Brisbane), Cairns City Library (Abbott St) and Smithfield Library (Cheviot Street).

Written submissions on the Revised Draft EIS in relation to the Queensland Governments Terms of Reference may be made to the Queensland Coordinator-General at the following address:

The Coordinator-General

C/- EIS project manager – Cairns Shipping Development Project Coordinated Project Delivery

Office of the Coordinator-General PO Box 15517

City East Qld 4002

Email submissions can be made to: CairnsSDP@coordinatorgeneral.qld.gov.au

For submissions made to the Queensland Co-ordinator General, a properly made submission must:

- be made to the Co-ordinator General in writing
- be received on or before the last day of the submission period
- be signed by each person who made the submission
- provide the name and address of each person who has made the submission.

Submissions must be made to the Coordinator-General by close of business on **Friday 25 August 2017**

Submissions received during the submission period will be collated by the Office of the Coordinator-General and provided to the proponent, Ports North.

Where additional information is required to address submissions, responses will be issued by Ports North, to the relevant government agency for final consideration in assessment of the EIS.