PORT of TOWNSVILLE

North Queensland

Section 9
Conclusions and recommendations

Townsville Marine Precinct Project

Environmental Impact Statement

GHD

9. Conclusions and recommendations

The TMPP involves the construction of an industrial marine precinct about the mouth of the Ross River. The Precinct is proposed to be located on intertidal land to the south-east of existing Port operations. The TMPP comprises both onshore and offshore elements, including construction of an offshore breakwater and an onshore reclamation of approximately 34 hectares of Strategic Port Land. The TMPP project is registered as a Significant Project under the auspices of the *State Development and Public Works Organisation Act 1971* and will be assessed under that Act.

This EIA study has investigated potential environmental impacts, including social, economic and cultural impacts, resulting from the construction and operation of the Precinct. Consideration has been given to the need and alternatives of the project. Desktop literature reviews, database searches and baseline field studies have been undertaken to provide context to the assessment of impacts and identification of mitigation and management measures.

Timing of the project coincides with construction of the TPAR restricting vessel access to upstream Ross River, which will impact upstream marine industries. It also aligns with an increasing demand for industrial maritime construction and maintenance facilities in the Townsville region.

Concurrently within the Townsville region a number of other construction projects are occurring that have the potential to result in compounding or cumulative impacts. These other projects include the development of:

- The Townsville Port Access Corridor road and rail link, including a bridge across Ross River adjacent to the Precinct site;
- Development of Berth 12 to the north of the Precinct site in the outer harbour area of the port;
- Berth expansions within the inner harbour of the port; and
- The TOT to the west of the port.

Each of these adjacent projects is likely to include adverse effects on the environment. In conjunction with the Marine Precinct development there is potential for greater cumulative, impact upon environmental values of the Townsville region and this has been addressed in the impact assessment undertaken for the TMPP.

Within this study construction and operational impacts have been identified and mitigation and management strategies described for a range of environmental values including nature conservation, social, economic and cultural values. Potential impacts to matters of NES have been described and mitigation strategies developed.

No impacts considered to be significant were identified that could not be ameliorated or mitigated. Some habitat losses are expected, however, these can be offset. Design considerations are required to ensure the project meets a number of the potential impacts identified, including meeting potential climate change adaptation needs. Economic benefits to the region are likely if the project proceeds.

An environmental management plan has been developed for the Project, which outlines specific actions and measures, designed to mitigate potential impacts identified through the environmental assessment process. The environmental management plan is implemented in addition to existing management policies and regulations. Several detailed monitoring studies are also proposed to be undertaken in order to assess potential impact and to provide an indication of the longer-term impacts associated with the Project and recovery of impacted areas. These recommended studies will include (but are not limited to):

- Marine Water Quality Monitoring
  - Suspended sediment concentrations as part of a turbidity monitoring program;
  - At sensitive habitats for compliance to site specific water quality objectives;
  - Reclamation tailwater decant water quality;
  - Potential impacts of dredging on seagrass communities; and
  - The construction operations reporting incidents likely to cause environmental harm to the project location and surrounding areas.
- Marine Habitats and Megafauna
  - Monitor the health of adjacent seagrass communities as indicators of water quality impacts and to act as an indicator for potential impacts to marine megafauna;
  - Temporal and spatial persistence of meadows to existing baseline data should be assessed; and
  - Consideration be given to ongoing marine megafauna monitoring to assess any influence on habitat utilisation of threatened and listed species. If marine fauna are sighted during dredging activities the dredge should avoid moving into that area if capture or strike is likely.
- Noise
  - Log any received complaints regarding noise; and
  - Upon receipt of a noise complaint where required undertake monitoring within 3 to 5 working days. If exceedances are detected, the source should be investigated and equipment and operational procedures reviewed to identify means of reducing noise to acceptable levels.
- Air Quality
  - Regularly undertake visual inspections of working areas and access tracks to monitor dust levels;
  - Note visible observations of dust moving off-site; especially during dry and/or windy weather;
  - Conduct daily audit of mitigation equipment and dryness of exposed surfaces;
  - Use dust deposition gauges in front of representative residences if construction activity is likely to be within 500 m for more than 30 days (considered unlikely); and.
  - Make available a free-call number for public complaints and information.

The principal impacts of concern associated with the proposed works are in relation to marine fauna and flora and water quality. Effective mechanisms are in place to manage potential impacts on marine fauna and the studies identified above will assist in the monitoring of

predicted impacts on marine flora. However, the most effective mitigation measure identified to manage potential impacts is to minimise the period of works.

To assist with management of potential impacts from the TMPP the following is recommended:

- Construction, dredging and operational management plans be developed and implemented for the project;
- The Environmental Management Plan drafted for this study should be implemented and adhered to during all phases of the project
- Environmental monitoring programs should be undertaken during construction and operational works, as recommended, to provide ability to detect any adverse environmental impacts and facilitate management response;
- Further sediment quality analysis be undertaken to assist in determining the full extent of reclaimable material;
- Megafauna spotters be used during construction activities to avoid interaction with these species; and
- The critical wading and migratory bird habitats on the eastern side of the Ross River should not be impacted to avoid any flow on effects to the communities using this area.

Under the mitigation strategies identified for each of the environmental values assessed the TMPP is not expected to have any significant long term effects on the regional or local environmental values of the Townsville region or Ross River environ. Importantly the TMPP is not predicted to impact upon protected species including dolphins, dugongs, turtles and birds. Economic benefits to the region accrue if the project proceeds and the project mitigates potentially significant negative impact of other development in the region.