Volume 8: Social, Cultural and Economic Impact Assessment

Annex 8-3: Social Impacts of Swing Basin and Shipping Channel Construction

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8-3.1 INTRODUCTION

This annex describes the social impact assessment of the QCLNG Project Swing Basin and Channel construction. It is provided in this annex as the construction of the QCLNG Project Swing Basin and Channel may constitute an initial component of the wider Western Basin Strategic Dredging and Disposal Project (WBSDD Project) proposed by Gladstone Port Corporation (GPC). GPC has initiated a separate EIS process to cover the broader scope of the WBSDD Project which proposes to undertake development of five new shipping channel and berthing areas/stages and a major new reclamation site in the Western Basin to accommodate material obtained from the dredging of these new areas/stages. GPC will consult through that process on the broader potential social impacts of the entire WBSDD Project.

QGC's description of the social impact assessment is therefore limited to the development of specifically its Swing Basin and Channel construction and includes:

- the potential impacts on social and cultural values of
 - dredging for construction access and shipping access
 - placement of dredged material in approved facilities (provided by GPC)
- · mitigation strategies for these impacts
- the scope of potential cumulative impacts on social and cultural values of other dredging and spoil disposal projects likely to be undertaken contemporaneously with the QCLNG Project works.

8-3.1.1 SOCIAL AND CULTURAL VALUES

A detailed description of the existing social environment in the Port of Gladstone, Curtis Island and The Narrows areas is contained in *Volume 8 Chapter 6.* Of particular relevance to this annex it includes recreational boating and safe harbour uses, and lifestyle and amenity values.

As described in Volume 8 Section 6.3.5.6, recreation access through Gladstone Harbour is integral to the Gladstone lifestyle. Community usage of the harbour is high, with more than 6,000 registered marine vessels and more than 13,000 marine licences held in Gladstone. There is also a strong community attachment to fishing, boating and sailing as part of the local lifestyle, and to the environmental values and community usage of The Narrows/Graham Creek area. Consultation participants were concerned to ensure that access to the harbour for sailing, boating and fishing was protected. QGC is currently undertaking a detailed survey of marine usage of the harbour areas near the LNG Facility to support future planning and impact management.

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Indigenous and non-Indigenous cultural heritage values are discussed in *Volume 8 Chapter 9*.

There appears no likelihood of impacts pertaining to construction of the swing basin and shipping channel on non-Indigenous cultural heritage values.

Acknowledgement of Indigenous cultural values needs to recognise connectivity between:

- environmental values such as habitat, breeding grounds and a clean environment
- cultural values of areas in the project vicinity, such as areas of traditional use and significant places
- social values relating to existing and traditional use of the land and sea
- spiritual values attached to harbour and island waters, The Narrows and the surrounding marine environment.

8-3.1.2 SOCIAL IMPACTS

As described in *Volume 5 Chapter 11*, initial dredging works may be required for construction vessel access to the LNG Facility site. The likely duration for these works is less than six months, with fewer than 20 crew required. Potential impacts of dredging for construction access to the LNG Facility include:

- constraints on community use of the area being dredged, which would be experienced as a minor negative impact. This area is not highly valued for fishing, but exclusion may be experienced as an inconvenience
- use of local short stay accommodation, which is likely to be positive for accommodation providers
- short term impact on the scenic amenity in the area being dredged.

Construction of the swing basin and shipping channel would require one or two dredges for approximately 12 months, and between 90 and 180 crew members. Impacts on social values may include:

- impacts on recreational boating, sailing, fishing and canoeing access, and specifically constraints on community and commercial usage including boat passage in the immediate vicinity of dredges and spoil placement
- need for accommodation for the crew (for up to a year), either short-stay and rental accommodation, or workers' camp accommodation, cumulative with other project demands as discussed in *Volume 8 Chapter 6*
- if camp accommodation is required, potential indirect effects of the camp, including traffic increases
- an incremental increase in demand for social and health infrastructure

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- potential for cumulative impact of dredging crew members with other project workers, regarding use of recreational venues and public places
- audible noise in the harbour in the vicinity of dredging activities
- potential impact on the scenic character of the harbour and The Narrows due to the dredge vessels, disposal site equipment, and potentially suspended sediments
- community concern about changes to marine habitats and potential effect on marine life (sea grass, fish stocks, dugong and turtles) in respect to dredging and spoil disposal.

8-3.1.3 CULTURAL IMPACTS

Potential cultural impacts identified in consultation with indigenous people in the Gladstone region included:

- concerns regarding environmental and cultural significance in areas which might be affected by dredging, water treatment areas or reclamation
- the sensitivity of dredging in or near areas which are feeding, breeding or home grounds for turtles, dugong, fish, sea birds and other marine and estuarine life
- the scale and duration of dredging required in the short and longer term, and potential cumulative impacts on environmental values.
- the need to prevent degradation of the harbour and its environs, particularly given increasing intensity of shipping and associated activities

Consultation with Traditional Owners in the Gladstone area will be required to prevent or mitigate impacts on cultural values.

8-3.1.4 CUMULATIVE IMPACTS

Dredging for the following projects may occur concurrently or sequentially with the QCLNG Project dredging:.

- Wiggins Island Coal Terminal Project dredging and reclamation (WICT)
- dredging to extend the existing Targinie Channel to Fisherman's Landing
 - GLNG Project dredging (GLNG)

Cumulative impacts from these projects could include:

- additional constraints on boating access and scenic amenity from additional dredges and reclamation activities
- additional crew, with consequent impacts on housing and health services

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- concern regarding impacts of higher intensity dredging, over an extended period
- potential noise impacts of higher levels and longer duration.

8-3.1.5 MITIGATION STRATEGIES

Mitigation strategies pertaining to dredging for the QCLNG project are discussed below. Detailed strategies for related issues such as demand for housing and social infrastructure are discussed in *Volume 8, Chapters 6* and 8.

8-3.1.5.1 Social impacts

Mitigation and management strategies for social impacts of dredging include:

- consultation with the Gladstone Harbour Master, Marine Safety Queensland and Volunteer Marine Rescue regarding safety management, to develop detailed strategies which ensure safety for other harbour users
- community education and awareness campaigns about safety and safety management relating to dredging
- training for dredge operators in co-existence with other local marine uses and respect for community values in relation to boating and fishing access
- management of crew accommodation requirements and usage
- standards of conduct for crew relating to public spaces and recreational activities
- consideration of the impacts of dredging crew members as part of total workforce requirements and demands on social resources such as housing and health services
- regular public reporting of environmental and social data.

As detailed in *Volume 8 Chapter 6, Section 4.7.4*, it is proposed that QGC in cooperation with GPC would develop a Marine Transport Management Plan to ensure the recreational values and safety of Gladstone Harbour are protected. The likely contents of this plan, which may be implemented by GPC as part of a management plan for a broader work plan may include:

- consultation with boating, sailing, fishing and environmental groups regarding existing community use, to identify and where possible avoid key activity periods and routes
- management protocols and practices which respect community usage of the Harbour
- safety practices which address both organised and casual marine activities

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- preserving safe harbour usage of The Narrows
- regular liaison with community representatives to monitor the effectiveness of the management plan, and review as required.

8-3.1.5.2 Cultural Impacts

Port Curtis Coral Coast Aboriginal Corporation (PCCC) has formed a steering committee of applicants to deal specifically with cultural heritage issues, and this committee will need to be consulted to identify, avoid and mitigate impacts on Indigenous cultural values. Broadly, mitigation and management strategies for cultural impacts include:

- consultation with Traditional Owners regarding areas of cultural significance
- observance of the *Aboriginal Cultural Heritage Act 2003* provisions with respect to cultural heritage management
- agreement of standards and practices for observance of cultural and environmental values
- cultural heritage clearance procedures, for physical or material cultural heritage
- participative monitoring of environmental impacts
- consultation and development of mutual understanding of shared and separate values attaching to dredging and the area in which it will occur.

Volume 5 Chapter 11 and Volume 6 provide a detailed assessment of the environmental impacts and mitigation strategies in relation to construction of the QCLNG Swing Basin and Channel.