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Re: Submission to Independent Review of the Port of Gladstone

Dear Sir/Madam

WWF-Australia and the Australian Marine Conservation Society welcome the Review and the wide-ranging Terms of Reference. Because of the delay in establishing the Independent Review we are concerned by the short period of time available for the Panel to undertake the Review and adequately address the Terms of Reference.

Overview

- Gladstone Harbour's declining ecological health is typical of coastal ecosystems that are extensively developed and heavily industrialised and where current management approaches have not adequately taken into account the cumulative impacts of past, current and projected activities in the wider context of integrated catchment and coastal zone management.
- Effective coastal zone management requires a good understanding of the connectivity of catchment, estuarine and near-shore marine ecosystems as well as the synergistic and cumulative impacts of all catchment and coastal activities including discharges into the aquatic environment and the consequences of the increased frequency of extreme weather events. For the Great Barrier Reef World Heritage Area this includes the increased frequency and intensity of floods and cyclones in the past 5-10 years.
- Until recently there has been a very poor understanding of responsibilities and requirements to safeguard the Outstanding Universal Value of the Great Barrier Reef World Heritage Area. Clear guidance is required including how these responsibilities are met at the local and regional ecosystem levels.
- Currently development is proponent driven with very limited strategic analysis of long term global and national trends of key markets, and seemingly limited assessment of capacity and efficiency of existing infrastructure to meet ongoing and projected future needs.

- Decisions support tools, including modeling, utilised in the various Environmental Impact Assessment processes for the recently approved developments (Table 1 of the Issues Paper) appear to have grossly underestimated the impacts of dredging and associated sediment plumes and potential mobilization of sediment-based contaminants and toxicants into the water column (including Potential and Actual Acid Sulphate Soils) when combined with major wet weather events in the upper and lower catchments. Additionally, estimates appeared totally inadequate of total vessel movements (including recreation vessels) required for development projects and the subsequent increased likelihood of boat strikes on important marine species.

Key Issues

- 1) **Outstanding Universal Value of the Great Barrier Reef World Heritage Area.** It is imperative that clear guidance is provided to all relevant agencies on the identification of appropriate benchmarks for Outstanding Universal Value in Gladstone Harbour and adjacent ecosystems so that an effective framework for understanding the scale of impacts and measures to avoid and mitigate them is established to guide future management of activities.

Additionally, the Panel should examine whether the conditions attached to Queensland and Commonwealth governments' approval of recent development projects in and adjacent to the Port of Gladstone adequately protect Matters of National Environment Significance and the Outstanding Universal Value of the Great Barrier Reef World Heritage Area.

- 2) **World Heritage Area boundary.** Proposals to remove the Port of Gladstone and Port Alma from the Great Barrier Reef World Heritage Area should be rejected because of the interconnectedness of Gladstone Harbour, the Narrows and the Fitzroy delta with the World Heritage Area. The 1981 World Heritage Area boundaries were drawn recognizing the connectivity of the Great Barrier Reef Region with the adjacent coastal ecosystems and the interdependence on these systems for many Reef species. Redrawing of boundaries would not lessen the environmental management requirements for development and ongoing activities.
- 3) **Geographic boundary.** While recognizing that the Independent Review Panel is focusing on the Port of Gladstone, any analysis of environmental, economic and social issues as well as management arrangements, efficient use of port infrastructure, and implications of shipping and associated impacts needs to take into account the wider regional context including the Fitzroy River delta, all of Rodds Bay and adjacent nearshore marine areas.
- 4) **Fitzroy delta and northern Curtis Island.** The purpose of the review includes to inform decision-making under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) ('EPBC Act'). It is noted that there are two major referrals under the EPBC Act for the Port Alma area: 2009/5158, the Balaclava Island Coal Terminal designed to export up to 35 million tonnes of coal per annum on strategic port land close to Port Alma¹; and 2011/6069 Fitzroy Terminal Project designed to export up to 25 million tonnes of coal per annum

¹ http://www.environment.gov.au/cgi-bin/epbc/epbc_ap.pl?name=current_referral_detail&proposal_id=5158

via a bargaining process². Concerns expressed over development activities at the Port of Gladstone and their potential impact upon the Outstanding Universal Value of the Great Barrier Reef World Heritage Area are equally applicable to Port Alma which has been identified as providing a long term expansion opportunity for the Gladstone Ports Corporation.³

WWF-Australia and the Australian Marine Conservation Society oppose any port development in the Port Alma area and on northern Curtis Island given the significant natural heritage values of the ecosystems, their contribution to the Outstanding Universal Value of the Great Barrier Reef World Heritage Area and the low level of development in the area.

We consider that with increased efficiencies there is sufficient capacity within the existing Port of Gladstone to accommodate projected export demand. This position is supported by the 2012 *Great Barrier Reef Ports Strategy Economic Analysis*⁴ released by the Queensland Department of State Development, Infrastructure and Planning that states, “Some of the available evidence indicates that some of the ports in the GBR region are operating at 45 per cent to 60 per cent capacity. There are possibilities to optimise the capacity utilisation which, with some improvements and proposed expansions, could meet increasing demand for port services (calls)”.

- 5) **Comprehensive integrated planning required, supported by strategic economic analysis and cumulative impact assessment.** Planning for the Port of Gladstone should be integrated with regional land use and natural resource planning for all catchments that flow into these estuarine and marine environments, and include the adjacent State Development Area and other industrial precincts. It should be underpinned by the following:
- a. Strategic economic analysis of short, medium to long-term projections for export and import demands as well as identification of potential efficiencies in the operation of existing and proposed infrastructure linked with appropriate ship management arrangements that optimize access to port facilities.
 - b. An analysis of the economic value of the coastal and marine habitats and natural and cultural areas of the Great Barrier Reef World Heritage Area as these have provided substantial economic value for the commercial and recreation fishing industry and tourism. For example, the economic value of seagrass, mangroves, salt marsh, in-shore coral reefs and other intertidal and marine habitats both in terms of shoreline protection as well as commercial and recreational fishing and tourism values.

² http://www.environment.gov.au/cgi-bin/epbc/epbc_ap.pl?limit=999999&name=current_referrals&text_search=fitzroy+terminal

³ Gladstone Ports Corporation Land Use Plan 2012, p 51.

⁴ DSDIP. (2012). *Great Barrier Reef Ports Strategy Economic Analysis*. Queensland Government Department of State Development, Infrastructure and Planning, September 2012. Brisbane, Australia. 30pp. www.dsdiq.qld.gov.au/resources/plan/gbr-economic-analysis.pdf

- c. Adoption and implementation of a comprehensive adaptive management approach that includes planning, implementation, monitoring, reporting, evaluation and review supported by effective participatory governance arrangements.
 - d. Regular (3-yearly) cycle of cumulative impact assessment that is supported by a comprehensive ambient integrated monitoring program that is independent of industry monitoring and designed to provide condition and trend analysis of water quality and ecosystem health for all freshwater and intertidal wetlands and inshore marine systems. Monitoring data, including current compliance monitoring and offset proposals for all projects, should be publicly available and annual reports of condition and trend of key indicators should be provided.
- 6) **Water Quality Improvement Plan.** Water quality improvement plans should be prepared for both the Port of Gladstone and the Fitzroy River delta including the Port Alma area. These plans should:
- a. Confirm locally relevant water quality and ecosystems health objectives that have been under development by the Fitzroy Basin Association reflecting a long term vision for the region. The recommended vision is “halt and reverse the decline of water quality and key ecosystem health indicators in the Gladstone and Port Curtis area”.
 - b. Provide the strategic framework for prioritization of critical management actions and a schedule for their implementation.
 - c. Assess the appropriateness, or otherwise, of all existing environmental approvals to contribute to meeting the agreed water quality and ecosystem health objectives for Gladstone Harbour and the achievement of the long term vision.
- 7) **Adequacy of existing monitoring programs and modeling decision support tools.** As noted in the Issues Paper there are a number of monitoring programs operating in the Port of Gladstone. However, for effective long term management comprehensive ambient ecosystem and event monitoring programs need to be in place that report annually and include analysis of condition and trend of key ecosystem indicators. The data from these programs should be used to calibrate and validate computer models of the receiving water and coastal environments to assist in well-informed scenario planning and cumulative impact assessment as part of the adaptive management cycle of strategic/master planning as well as assessment of individual development proposals.
- 8) **Public access to comprehensive monitoring data on water quality.**
- a. In 2012 the community experienced unacceptable difficulty in obtaining access to audits and water quality monitoring data to evaluate Gladstone Ports Corporation’s compliance with the conditions of its environmental approval for Western Basin Dredging issued under the Environment Protection Act 1994 (Qld)⁵.

⁵ Capricorn Conservation Council made a right to information request, RTIPS 11-165 in 2012 to the now Queensland Department of Environment and Heritage Protection. The request was

- b. Even though there is a public register under s540 of the *Environment Protection Act 1994* (Qld.) that includes monitoring, there are no monitoring reports pertaining to that environmental approval accessible on the website of the Department of Environment and Heritage Protection.
 - c. Some materials are now available on Gladstone Ports Corporation website⁶ which is an improvement. What is needed on a permanent basis is public, online, free, real time access to **all** monitoring data and audit reports concerning water quality for the Port, including baseline monitoring, periodic monitoring and project specific monitoring⁷.
- 9) **Secure protection for environmentally sensitive areas.** Environmentally sensitive areas must be given permanent protection as protected areas under the *Nature Conservation Act 1992* (Qld). Gladstone Ports Corporation has a strategic land use plan for the ports it controls which includes an environment precinct in some localities. The land use plan is subject to review every 8 years⁸, so the environment designation does not provide equally secure protection as for example a protected area under the *Nature Conservation Act 1992* (Qld). We recommend that the Panel examines the Gladstone Ports Corporation's land use plan, potential use of the *Nature Conservation Act 1992* (Qld) and how to more securely protect environmentally sensitive land.
- 10) **Gladstone Healthy Harbour Partnership.** Establishment of the Partnership is a step in the right direction. However, for this approach to gain sufficient capacity and credibility to address the challenges confronting the Port of Gladstone, it will need:
- a. Extensive involvement of all stakeholders, including the community.
 - b. To provide for open and transparent communication between the science panel, community, industry and government, where 'partnership' is equal for all involved, including community.
 - c. To make publically available the proposed Healthy Harbour Report Card and all data upon which the report card is based.
 - d. Adequate resources both financial and human resources.

for audit reports, water quality data and documentation concerning Gladstone Ports Corporation Western Basin dredging pursuant to approvals under the *Environment Protection Act 1994* (Qld).⁵The request was refused on the basis that it was too large and would unreasonably divert the resources of that agency. Thus it seems the larger the project the harder to obtain monitoring data about it.

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http://www.westernbasinportdevelopment.com.au/water_quality_monitoring/section/environmental

⁷ While some material is online, see <http://www.ehp.qld.gov.au/gladstone/reports.html>, it does not include project specific monitoring and it has often not been released in a timely fashion.

⁸ Chapter 8, *Transport Infrastructure Act 1994* (Qld).

- e. Independent governance arrangements supported by a team of environmental management and communication professionals with a wide-range of experience.
- f. To identify the causes including cumulative and/or synergistic causes of the ecological health problems experienced in the harbour in recent years (such as the fish health, turtle deaths, dugong deaths, increased levels of turbidity, contaminants in sediments, heavy metal exposure, etc.).
- g. To identify and implement management and compliance actions that will deal with issues and concerns identified in the proposed Healthy Harbour Report Card and improve the health of the Gladstone Harbour.

11) **Shipping and vessel movements.** The range of issues associated with the patterns of shipping movements and size of ships visiting the Port of Gladstone need to be well documented including the issue of ships at anchorage that are not contracted for export deliveries. The proposed cumulative impact assessment must include an assessment of shipping impacts and measures to avoid or mitigate these impacts. It must assess the impact of options including the location and operation of anchorage(s) to service the Port. It must include an assessment of vessel based pollution, including ballast water and noise and light pollution. The impacts and consequences of extreme weather events must be taken into account in the design and operation of the Port. Furthermore, the impacts of recreational, passenger, worker and material transport vessels (or barges) must be included in the impact assessment of shipping, as these smaller vessels contribute significantly to shipping and boating impacts such as noise pollution and boat strikes of marine megafauna.

Measures to improve the efficient use of port infrastructure should include arrangements that manage shipping traffic accessing port facilities to optimize the use of existing shipping channels and so minimize capital and maintenance dredging of channels and swing basins.

12) **Dredging.** The catchment and coastal hydrology and geomorphology of Gladstone Harbour predispose the harbour to high catchment-sourced sediment loads and regular resuspension of bed and bank sediment. This is evident by the large amount of maintenance dredging required for the Gatcombe Golding cutting channel and the large volumes of dredge material (46 million m³) for the Western Basin Dredging Project. The proposed 12 million m³ of capital dredge material associated with the Duplication Channel project is of serious concern. Thus, we recommend that this project is rejected and suggest instead improved management of shipping traffic entering and leaving the harbour. Additionally increased controls to reduce sediment plumes from the Western Basin Dredging Project are required along with publicly available, independent monitoring information on indicators and triggers for managing the impacts of dredging.

13) **Offsets and offset arrangements.** Offset conditions, their arrangements, actions, implementation and progress need to be assessed as part of the Independent Review for all approved developments and any proposed future developments. Their adequacy, net losses and gains should be considered in the context of

whether there has been a net loss or gain in the specific habitats. Some existing approved developments and their companies or corporations are all competing for similar offsets whilst there is still a net loss of ecosystem services and habitat. For example, nearly 450 hectares of seagrass beds have been lost or impacted in Gladstone Harbour via dredging and reclamation, even though offsets for this loss include improved management of existing seagrass beds and offsets with other marine habitats. Despite these arrangements there is still a net loss of seagrass in the area which is part of the Rodds Bay Dugong Protection Area.

WWF-Australia and the Australian Marine Conservation Society would welcome the opportunity to meet with the Panel and discuss the range of issues raised in this submission and contribute to the development of solutions for Gladstone Harbour.

Yours sincerely



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