



Australian Government



John Gunn, Chief Executive Officer
TOWNSVILLE | DARWIN | PERTH

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Ms Anthea Tinney
Chair
Independent Review of the Port of Gladstone
GPO Box 787
CANBERRA ACT 2601
Email: gladstonereview@environment.gov.au

Dear Ms Tinney

Thank you for your letter of 25 February, 2013 announcing the independent review of the management arrangements for the Port of Gladstone and matters that may impact upon decision-making under the EPBC Act (1999). The Australian Institute of Marine Science is Australia's tropical marine research agency with leading expertise in the marine environment and its sustainable development. AIMS has made, and continues to make, critical contributions to informing the management of the coastal region including the Port of Gladstone and the Great Barrier Reef World Heritage Marine Park which abuts the port.

We believe that good governance and management cannot be divorced from **evidence-based** decision-making. Better baseline information about the environment in which any port operates would increase confidence in the decision-making by regulators and managers, and boost the efficiency and effectiveness of long-term planning by development proponents.

Given that ports are situated in areas that straddle highly connected terrestrial and marine environments and the magnitude of planned industrial and infrastructure development along the Great Barrier Reef coast, an analysis of the regional impacts needs to encompass and integrate the impacts of existing coastal developments and other pressures that affect the health of the adjacent estuarine and coastal ecosystems.

There is a clear need for regional environmental baselines and science-based information to support development of cost-effective, robust, port-relevant monitoring and response plans. Current port monitoring programs vary in intensity through time and space and, at times, their design is not optimal, nor adaptive to new knowledge or other impacts on the region. Outside the immediate area of interest for a port, the data can be sparse and discontinuous, often designed with a different purpose in mind and hence of limited use in providing the required environmental background to port activities.

Regional scale information not only supports the development of efficient and effective monitoring programs it also allows managers to differentiate between the impacts of a port activity (e.g. dredging) and other impacts. Importantly, it also allows for the assessment of the cumulative impacts of current and proposed activities. To date, many cumulative impacts studies have really been aggregated individual impact studies, which provide information about different components of the region but not how they interact. In order to understand the cumulative impacts it is necessary to examine the effects caused by

Townsville address: PMB No 3,
Townsville MC, Qld 4810
Tel: (07) 4753 4444
Fax: (07) 4772 5852

Darwin address: PO Box No 41775,
Casuarina NT 0811
Tel: (08) 8920 9240
Fax: (08) 8920 9222
www.aims.gov.au

Perth address: The UWA Oceans Institute (M096)
35 Stirling Highway, Crawley WA 6009
Tel: (08) 6369 4000
Fax: (08) 6488 4585

past, present and reasonably foreseeable activities which may be independent of a proposed development but will work in concert with any proposed project(s). Importantly, the effects can be different in nature (e.g. synergistic), larger in magnitude, greater in significance, more long-lasting, and/or greater in spatial extent than is the case with individual effects, and they interact with other environmental changes (e.g. climate change).

The importance of robust baseline data and monitoring has been demonstrated in Gladstone Port. The outbreak of fish disease in 2011 has been a lightning rod for broader community concerns about concentrated coastal development. The cause of the disease remains unknown but the cumulative impact of various activities in the port and catchment areas may have contributed. Lack of suitable baseline data has greatly limited the capacity of the port or the scientific community to answer questions posed by the community and port stakeholders. While it is impossible to forecast all potential future issues, broader and better designed monitoring programs increase the likelihood that answers can be provided when unforeseen events arise. Inclusion of wildlife health (e.g. fish disease, turtle disease) in the baseline studies and monitoring would be beneficial.

No conversation about sustainable development can ignore discussion of environmental and biodiversity offsets. The recently released EPBC Act (1999) Environmental Offsets Policy requires that a minimum of 90% of required offsets for any given impact must be met directly through initiatives with measurable conservation gains such as habitat creation and threat reduction. However, deviation from this 90% rule is allowed where scientific uncertainty is so high that direct offsets cannot be determined, with the marine environment specifically cited in the policy as a case of a poorly understood ecosystem. Investment into scientific research that builds our baseline knowledge of the area likely to be impacted, as well as adjacent and other connected systems should be recognised as a preferred mechanism for environmental offsets. Consideration of regionally relevant research as an environmental offset would not only provide benefit back to proponents by providing scientific information on which to implement cost-effective monitoring programs, it would also provide improved information to regulators for effective management and future offset decisions.

While not specific to the Port of Gladstone, we also recommend that guidance be provided to proponents and stakeholders alike as to which 3rd party regional or global models are considered to be state-of-the art and therefore suitable for reference in site-specific studies undertaken as part of the EPBC Act (1999) assessment process. For instance, in some cases, out-dated climate models have been used in EIS investigating future possible scenarios rather than using more recent models with significantly reduced uncertainty. Likewise, initiatives such as eREEFS which already draw upon substantial knowledge and intellectual power from several major research providers can provide a hydrodynamic reference for smaller scale studies such as those relevant to the Port of Gladstone. Where possible, standardising the tools and approaches to be adopted will be beneficial to all stakeholders.

We thank the panel for the opportunity to make a submission to their deliberations. We note that the panel intends to visit Gladstone after the submission closing date, meet with port stakeholders and may contact some parties for follow-up consultation. As an independent provider of marine and coastal knowledge including within and adjacent to the Port of Gladstone, we would welcome any opportunity to deliver more detailed briefings directly to the Panel.

Yours sincerely



John Gunn
Chief Executive Officer