Australian Government
Great Barrier Reef
Marine Park Authority

Commissioner Melinda Cilento
Australian Marine Fisheries and Aquaculture
Productivity Commission
GPO Box 1428
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Dear Commissioner Cilento

Great Barrier Reef Marine Park Authority submission to the Marine Fisheries and Aquaculture public inquiry

The Great Barrier Reef Marine Park Authority (GBRMPA) welcomes the opportunity to provide a submission to the Productivity Commission's public inquiry into marine fisheries and aquaculture. The Great Barrier Reef Marine Park Authority is the Australian Government statutory authority with responsibility for the long-term protection and conservation of the environment, biodiversity and heritage values of the Great Barrier Reef Region.

GBRMPA recognises that fishing and aquaculture are important social, economic, and cultural activities to all Australians. Ecologically sustainable fishing and aquaculture activities are well established and legitimate uses of the Marine Park, World Heritage Area and adjoining catchments.

Aquaculture within the Great Barrier Reef and adjoining catchments

The *Great Barrier Reef Outlook Report 2014* found that the Great Barrier Reef ecosystem is under pressure. Cumulative effects are diminishing the ecosystem's ability to recover from disturbances. Some threats are increasing, driven mainly by climate change, economic growth and population growth. The emerging success of some initiatives (such as improving land-based run-off) means some threats may be reduced in the future. However, there are significant lags from when actions are taken to improvements being evident in the ecosystem. More than ever, a focus on building resilience by reducing all threats is important in protecting the Region's ecosystem and its outstanding universal value into the future.

Given that the Reef's ability to tolerate further impacts is severely limited, all future developments in the adjacent coast must ensure they can operate without significant impact to the Reef's ecosystems. The Australian Government has direct regulatory involvement in the development of aquaculture in, and adjacent to the Marine Park through the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Where an application includes activities within the Marine Park, the *Great Barrier Reef Marine Park Act 1975* (Marine Park Act) also applies. Where both the EPBC Act and the Marine Park Act apply, a single administrative process is employed to fulfil the requirements under both Acts.

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GBRMPA has previously regulated aquaculture ventures adjacent to the Marine Park in accordance with the Great Barrier Reef Marine Park (Aquaculture) Regulations 2000 (Aquaculture Regulations).The Commonwealth Minister for the Environment accredited Queensland's *Environment Protection Act 1994* and *Integrated Planning Act 1997* in March 2005. This accreditation administratively turned off the Aquaculture Regulations. GBRMPA is undertaking a process to revoke the Aquaculture Regulations.

Terrestrial aquaculture ventures adjacent to the Marine Park require permissions from GBRMPA for:

- the intake of seawater directly from the Marine Park
- the discharge of aquaculture waste directly into the Marine Park
- the installation, operation and maintenance of structures in the Marine Park.

Where works traverse the intertidal areas adjacent to the Marine Park, the Queensland Government and GBRMPA have a joint permitting process that deals with all state and GBRMPA regulatory requirements in a single process.

Marine aquaculture requires permissions from GBRMPA for an aquaculture facility located in the Marine Park. Due to the high environmental risk posed by intensive marine aquaculture to the outstanding universal value of the Great Barrier Reef, it is unlikely that approval for the conduct of these operations would be granted unless the proponents of such activities could demonstrate that the operational procedures and technologies employed, substantially mitigate ecological risk (http://www.gbrmpa.gov.au/__data/assets/pdf_file/0018/3915/GBRMPA_position_statement_aquaculture.pdf).

GBRMPA supports the development of an ecologically sustainable aquaculture industry in the Great Barrier Reef Region on the understanding that these industries commit to playing their key role in ensuring that Australia meets the targets and objectives described in the Reef 2050 Long-Term Sustainability Plan and in the *Great Barrier Reef Region Strategic Assessment and Program Report*.

The key objective for water quality is that "*Over successive decades the quality of water in or entering the Reef from all sources including industry, aquaculture, port (including dredging), urban waste and stormwater sources has no detrimental impact on the health and resilience of the Great Barrier Reef.*"

Key water quality targets that the aquaculture industry must contribute to include:

- by 2018, at least a 50 per cent reduction in anthropogenic end-of-catchment dissolved inorganic nitrogen loads in priority areas, on the way to achieving up to an 80 per cent reduction in nitrogen by 2025
- by 2018, at least a 20 per cent reduction in anthropogenic end-of-catchment loads of sediment in priority areas, on the way to achieving up to a 50 per cent reduction in by 2025
- by 2018, at least a 20 per cent reduction in anthropogenic end-of-catchment loads of particulate nutrients in priority areas
- by 2020, Reef-wide and locally relevant water quality targets are in place for urban, industrial, aquaculture and port activities and monitoring shows a stable or improving trend.

GBRMPA welcomes this review and strongly supports the development of a plan that underpins the proposed expansion of the aquaculture industry in the Great Barrier Reef Region on the basis that it includes:

- acknowledgement that the current condition of the Great Barrier Reef World Heritage Area is poor and declining particularly in the southern inshore waters (*Great Barrier Reef Outlook Report 2014*, *Great Barrier Reef Strategic Assessment and Program Report*, Long-Term Sustainability Plan)
- acknowledgement that any new developments in the Great Barrier Reef Region must demonstrate how they will contribute to the successful delivery of the targets and objectives described in the Reef 2050 Long-Term Sustainability Plan and *Great Barrier Reef Region Strategic Assessment and Program Report*
- a review of the ecosystem health and sustainability science as it applies to the aquaculture industry in the Great Barrier Reef Region
- development of assessment guidelines to determine the assimilative capacity of waterways in the Great Barrier Reef Region to accept the discharge of aquaculture wastewaters (particularly sediment and nutrient loads)
- a site selection process for the location of new aquaculture facilities in the Great Barrier Reef Region based on the assimilative capacity of the receiving waterways.

<u>Ecologically sustainable fisheries in the Great Barrier Reef Marine Park and World Heritage Area</u>

The *Great Barrier Reef Outlook Report 2014* identified two 'very high' fishing-related risks to the Reef ecosystem: illegal fishing and poaching and incidental catch of species of conservation concern; and three 'high' fishing-related risks: extraction from spawning aggregations, discarded catch and extraction of predators. Though some mitigation of these risks is occurring through proactive and collaborative fisheries and marine park management interventions, more concerted efforts to address these risks are required.

Most fisheries within the Great Barrier Reef Marine Park are managed under Queensland legislation and GRBMPA works collaboratively with Queensland to improve fisheries sustainability. Commercial dive-based harvest fisheries are the only fisheries within the Marine Park that require GBRMPA permission under the Great Barrier Reef Marine Park Zoning Plan 2003 (Zoning Plan). Fishing within the Marine Park is also regulated by the Zoning Plan, which is the primary planning instrument for the conservation and management of the Great Barrier Reef Marine Park.

The Zoning Plan takes account of the World Heritage values of the Marine Park and the principles of ecologically sustainable development. The Zoning Plan aims, in conjunction with other management mechanisms, to protect and conserve the biodiversity of the Great Barrier Reef ecosystem within a network of highly protected zones, while providing opportunities for the ecologically sustainable use of, and access to, the Great Barrier Reef Region by current and future generations.

The Marine Park is managed as a multiple use area. This means that, while enhancing the conservation of the Marine Park, the Zoning Plan provides for a range of recreational, commercial and research opportunities, and for the continuation of traditional activities. The Zoning Plan sets out the purposes for which each zone may be used or entered without permission, and the purposes for which each zone may be used or entered only with the written permission of the Managing Agency.

There are demonstrated benefits to fisheries management from the network of no-take zones established by the Zoning Plan and Queensland's Marine Parks (Great Barrier Reef Coast) Zoning Plan 2004. The network of no-take zones in the Great Barrier Reef is recognised by Fisheries Queensland as ensuring a significant portion of targeted Great Barrier Reef fish stocks is not subjected to fishing. For example, the inaugural 2014 Queensland coral trout stock assessment clearly demonstrates that the significant portion of the coral trout stock within the no-take zones contributes to the ecologically sustainable management of the species (http://era.daf.qld.gov.au/4547/). Recent innovative research at a more local scale has demonstrated that no–take zones contribute to increased abundances of juvenile coral trout and other valued fish species, within and outside of no–take zones, than would otherwise have been achieved in the absence of the network of no-take zones (http://dx.doi.org/10.1016/j.cub.2012.04.008).

Within the Great Barrier Reef Marine Park and World Heritage Area, as compared to other areas, higher standards of demonstrable ecological sustainability are expected by all levels of government, the Australian public and international community. The Marine Park has a special status, as it is the substantial part of a World Heritage area and a separate matter of national environmental significance in its own right under the EPBC Act. The EPBC assessment process for Queensland-managed fisheries provides evidence that many of these fisheries are not yet at a best practice standard. Failure to manage incidental entanglement and mortality of protected species, primarily dugong and inshore dolphins, in large mesh set nets used in East Coast Inshore Fin Fish Fishery is the most pressing concern. The monitoring and management of shark species taken in this fishery is another (http://www.environment.gov.au/marine/fisheries/qld/east-coast-fin-fish). The stock status of all shark species and many other target species remains undefined (https://www.daf.qld.gov.au/fisheries/monitoring-our-fisheries/data-reports/sustainability-reporting/stock-status-assessments).

To realise demonstrable ecologically sustainable management of fishing and collection of fisheries resources in the Great Barrier Reef Marine Park and World Heritage Area the following are required:

- comprehensive policy, legislation and effective decision-making reforms
- consideration of regional management and resource allocation initiatives
- enhanced monitoring, information collection and assessments
- enhanced compliance, including vessel tracking technology across all commercial fisheries
- adequate resourcing and stakeholder participation.

For detailed marine fisheries related recommendations from GBRMPA please consider the GBRMPA submission to the MRAG Asia Pacific 2014 Queensland fisheries review (Attachment 1).

Great Barrier Reef Traditional Owners

There are more than seventy Aboriginal and Torres Strait Islander Traditional Owner clan groups that have long continuing relationships with the Great Barrier Reef Region and its natural resources. These clan groups have relied on the sea to provide food for thousands of years. Fishing and collecting marine resources is an important part of Aboriginal and Torres Strait Islander culture and diet.

GBRMPA highly respects and values our relationships with these clan groups and through the Australian Government Reef Program, we are delivering the Land and Sea Country Indigenous Partnerships Program worth $10 million over a five-year period (2013-2018).

I thank you for the opportunity to make this submission to the Marine Fisheries and Aquaculture public enquiry.

Yours sincerely

Bruce Elliot
General Manager
Biodiversity Conservation and Sustainable Use

31 March 2016

Enc

cc: Mr Scott Spencer, Deputy Director-General, Fisheries and Forestry, Queensland Department of Agriculture and Fisheries