**National Aquaculture Council Inc.**

*ABN 96 912 231 582*

**Productivity Commission Inquiry (2016) into the Regulation of Australian Marine Fisheries and Aquaculture Sectors.**

**Submission from the National Aquaculture Council Inc.**

***Background***

The National Aquaculture Council (NAC) is the national peak body representing the Australian aquaculture industry. NAC is aware of several previous inquiries and reports relating to the framework and practice of regulations applied to Australian aquaculture.

- Productivity Commission, 2004: *Assessing Environmental Regulatory Arrangements for Aquaculture.*
- Aquaculture Committee Report to PIMC, 2005: *Best practice frameworks of regulatory arrangements for aquaculture in Australia.*
- Productivity Commission, 2007: *Annual review of regulatory burdens on business: primary sector*, *draft research report*.
- Seafood Services Australia, 2009: *The costs of regulatory compliance in the Australian seafood industry*.
- Peters, E. ANI Program, 2015: *Barriers to aquaculture expansion in northern Australia - A case study into prawn farming in Queensland.*
- Joint Select Committee on Northern Australia, 2015: *Opportunities for expanding the aquaculture industry in Northern Australia.*

Various aquaculture industry associations, including NAC, have provided input into most of these studies.

Of these studies, the Productivity Commission's 2004 Research Paper on regulatory arrangements for aquaculture is the most comprehensive, worthy of study in the context of this Inquiry in 2016. The Key points from this report (page XX) are reproduced below. Whilst the status of progress with aquaculture planning in the three States mentioned in point 5 may have changed, each of the eight points remain largely valid today.

Key points

1. The aquaculture industry is diverse and each sector has different potential environmental impacts of varying degrees of significance.

2. Aquaculture production is subject to an unnecessarily complex array of legislation and agencies — covering marine and coastal management, environmental management, land use planning, land tenure, and quarantine and translocation.
3. State aquaculture and/or fisheries legislation have multiple objectives and these are not always clearly defined. The objectives may overlap or conflict, and there is often a lack of guidance as to the relative weights to be placed on each objective.
4. State government departments primarily responsible for aquaculture regulatory arrangements often have potentially conflicting functions of policy development, implementation of regulation, industry promotion and development, and research.
5. New South Wales, Queensland and Western Australia have made limited progress with marine aquaculture planning. This may constrain marine aquaculture, or result in ad hoc approvals for individual sites, and conflicts over resource use.
6. In most jurisdictions, there are complex approval processes. Obtaining required approvals can take significant time. There would appear to be scope to rationalise the number of approvals, coordinate approval processes, and incorporate statutory timeframes for assessing approvals. This complexity is compounded when there are other statutory authorities that can override other regulatory agencies (e.g. GBRMPA)
7. Increased efficiency and effectiveness of regulatory arrangements for aquaculture could be obtained from greater use of environmental risk assessment based on species, production system, management practices, site location and the condition of the environment.
8. There is potential for greater use of innovative policy instruments to complement (or in some cases replace) existing regulatory and administrative controls. For example, auctions could be used to allocate leases of public land or water, and tradeable permits could be used to manage pollution discharges.

NAC contends that the regulatory constraints to aquaculture development flagged in 2004, and frequently since, have not been adequately addressed. An underlying factor is that aquaculture falls somewhere in the regulatory gap between “fishing”, which is essentially hunting a natural resource for commercial production or recreational or cultural purposes in public waters; and “farming”, which involves rearing of animals which are the property of a commercial entity.

Further, the plethora of various regulations controlling aquaculture are applied under a combination of Commonwealth, State/Territory, and Local Government legislation. As an example, the following is a list of the legislated Acts & Regulations which the Tasmanian salmonid farming industry must demonstrate compliance with (reproduced by permission of the Tasmanian Salmonid Growers Association). This burden is typical of most aquaculture industries in Australia and can also be overlaid with controls implemented by various Authorities.

**Overarching regulatory constraints to aquaculture development; not resolved since flagged in PC Report on Aquaculture Regulations in 2004:**

1. The current legislation governing aquaculture is convoluted, covered by too many acts of parliament, and extraordinarily difficult to navigate. Further, it is handled by too many agencies and authorities, most of whom have power of veto and all of whom can cause significant delays.
2. The current legislation in most states does not define clear pathways, parameters and actionable timeframes for sustainable aquaculture growth. The South Australian and Tasmanian legislations do clearly define these things in a single act. National harmonisation is essential.
3. Governments are disproportionately risk-averse in assessing performance and further development of aquaculture. Assessments, particularly assessment of possible environmental impact, should be based on science and on an acceptable level of risk, not zero risk.
4. There exists an inequity in the regulatory compliance burden between Australian produced and imported product.
5. The current legislation does not promote aquaculture as an investment friendly opportunity as is the case for other sectors of the Australian business landscape. Therefore commercial confidence cannot be maintained. Added to this is the high cost of compliance, which further disadvantages Australian aquaculture in the international market place.

**Overarching solutions**

a) An Australian Aquaculture Policy and subsequent Act, to simplify regulation of aquaculture and promote aquaculture development.

b) Federal government policy to support aquaculture as a significant contributor to agriculture development, regional employment, and to food production, addressing the challenge of food security and the seafood trade imbalance.

c) Nationally harmonised framework for risk assessment, environmental approvals, and regulation of aquaculture.

## Responses to specific information requests on "Regulation of Aquaculture" listed in Section 5 of the 2016 Inquiry Issues Paper.

***INFORMATION REQUEST***

*Have any jurisdictions been able to successfully balance environmental and economic considerations and potential conflict with other resources uses? How did they achieve this success?*

No State/Territory has achieved a perfect balance in Industry's view, but some states (eg Tasmania, South Australia, and more recently Western Australia) have done better than others.

It is no accident that in those regions where the natural environment favours a particular type of aquaculture and that activity is seen as an important contributor to the regional economy relative to other interest groups, the political will usually surfaces to methodically plan for and support aquaculture development. The validity of this observation is borne out by the figures for annual GVP of aquaculture production by jurisdiction periodically published by ABARES.

***INFORMATION REQUEST***

*Are existing regulatory arrangements well-targeted and efficient means for managing aquaculture operations and addressing potential environmental impacts? Have regulatory arrangements inhibited the productivity and competitiveness of aquaculture in Australia?*

No. Existing regulatory arrangements may be well intentioned at a high political level, but in practice frequently fail to deliver outcomes which support aquaculture development. As outlined above, the main reasons are:

- Regulations mandated by too many agencies, many of which have a narrow focus on specific issues (eg: environmental protection; animal welfare; agvet chemical use; etc) and no mandate or interest in industry development. In contrast to earlier times industry *development* is no longer a government function; the focus now being on industry *regulation*.
- Regional and national governments becoming increasingly risk-averse. Devaluing science based risk assessment, regrettably in favour of adverse public opinion which is often whipped up by issue–related interest groups
- Agency staff are often ill equipped/trained to deliver on increased sustainable production and too heavily focussed on implementing overly cautious environmental constraints.

*What, if any, developments have there been in the aquaculture industry since 2004 that the Commission should specifically consider in this Inquiry?*

- Significant increase in the size and sophistication of the Tasmanian salmonid farming sector; working with Tasmanian government in regulated expansion of the industry sector; all enterprises involved have embraced the need demonstrate sustainability credentials to gain social licence.
- Significant improvement in aquafeed formulations; requiring lesser proportion as fishmeal and fishoil, resulting in reduced reliance on marine resources and reduced environmental impact.

- Advanced proposal to establish a large, integrated, prawn farming facility in northern Australia (Seadragon project); the first of its kind in Australia.
- Increase in incidence of significant new disease events in molluscan (oyster and abalone) and crustacean (prawn) culture. Highlights the need for maintaining biosecurity and aquatic animal health capability, in both industry and government institutions at a national level.
- Impacts of authorities such as GBRMPA on the sustainable development of aquaculture
- Ongoing failure to adopt the Country of Origin Labelling (CoOL) recommendations to remove the current exemption to CoOL as applied to the food service sectors (see "*2014 Senate Standing Committees on Rural and Regional Affairs and Transport - Current requirements for labelling of seafood and seafood products*"; and "*2016 Joint Select Committee on Northern Australia - Inquiry into Opportunities for Expanding Aquaculture in Northern Australia*").

*Are there factors outside the regulatory environment that have significantly limited the productivity and competitiveness of aquaculture production in Australia?*

- Access to shared water resources for aquaculture.
- Competition for access to marine fishmeal and fishoil for manufactured feeds.
- Higher standards required for seafood exported from Australia than for seafood imported into Australia.
- Non-tariff barriers to seafood exports and access to new markets.
- Paucity of social and economic data about aquaculture throughout the supply chain, required to determine and demonstrate true economic value of the industry.
- Inflexible approach to industrial relations, not taking into consideration farming nature of aquaculture operations.
- Effective reduction in government funding for aquaculture related RD&E and aquatic animal health capability.
- Industry not keeping pace with increasing community demand to demonstrate sustainability credentials – community support to operate.

*What are the major challenges and opportunities facing the aquaculture industry over the next 20 years?*

- Failure to gain/loss of community support to Operate
- Biosecurity and disease threats
- Failure to adapt to climate change

***INFORMATION REQUEST***

*Do the existing regulatory arrangements adequately recognise the different sectors and production methods used in aquaculture and their differing environmental impacts and interaction with other resources uses?*

Different production systems (eg. cage culture of finfish; pond culture of prawns or finfish, subtidal or intertidal culture of molluscs, etc) do have different typical environmental impacts and these are broadly recognised by regulatory agencies. There is a greater difference

however in how the various regional regulatory agencies rule on perceived risk and consequent regulations. Such ruling is often overwhelming risk-averse, and/or favouring other commensal users of the resource.

*Are there technological solutions to the potential environmental problems associated with aquaculture?*

Yes there are in many cases but noting that most Australian producers operate at very high environmental standards. However almost all require a greater capital outlay and higher operating costs, for small environmental benefit, resulting in higher production costs (eg. recirculating systems; off-shore cages). Except for mainly high-value export focussed products (eg. abalone; tuna; pearls) the subsequent cost of the product makes it less attractive in domestic markets and uncompetitive with imported seafood product.

*Where and how has the industry invested to develop solutions?*

Much of the aquaculture industry has invested heavily in RD&E and innovative technology on disease management, environmental management, and selective breeding programs to reduce environmental impact; as well as to improve performance and reduce costs. Much of this work has been done via industry sector co-funding arrangements with the Fisheries Research & Development Corporation; and some using direct government grants. Many sectors now have contractual RD&E partnerships with FRDC through Industry Partnership Agreements (IPA). Individual enterprises have also invested significant funding in proprietary R&D and innovative technology for their own use. Feed complies have invested significantly to reduce fish meal and fish oil use and to improve feed utilisation.

*To what extent, and under what funding arrangements, should governments be involved in developing innovative solutions?*

In simple terms, some nationally valuable R&D would not be undertaken in the absence of government underwriting. A key test for government underwriting is the "public good" component of the knowledge generated; characterised by "non-rivalry" and "non-excludability"; ie: it can be freely used by a number of users simultaneously, for the overall benefit of society.

The Blue Economy Challenge workshop hosted by CSIRO in 2015 listed a number of high-order commonalities in RD&E needs which would justify government underwriting:

- Cheap, efficient and pragmatic data collection
- Increasing connectivity
- Capability building

The National Marine Science Plan 2015-2025 lists more specific tasks which would also justify government underwriting; developing new analytical & technological approaches to:

- DNA sequencing
- remote sensing applications
- environmental sensor networks
- aquaculture feed formulation (using alternative ingredients)
- bioproducts from marine organisms, and
- marine ecosystem remediation.

Other government co-investment grants more directly targeted to industry profitability also exist. The Rural Research and Development (R&D) for Profit programme is a good example although fiercely competitive given the agriculture industry's overall needs.

### *INFORMATION REQUEST*

*Is a regulatory framework required for aquaculture in Commonwealth waters?*

The aquaculture industry's desire to have a framework in place to allow aquaculture in Commonwealth waters was first raised in 2003, and formerly brought forward to the Aquaculture Committee in 2009; with an expectation that it would take several years to put in place. Whilst interest in aquaculture in Commonwealth waters has been on the back-burner for most States & Territories, WA has been at the forefront of this push which has quickened in recent times (eg Yellowtail Kingfish, and abalone ranching).

In September 2015 the Department of Agriculture agreed to progress this issue, by seeking ministerial support for a pilot approach at the upcoming Fisheries Ministers meeting scheduled for early 2016. The aquaculture industry believes it is now urgent to progress this issue at least to a management framework.

Whilst not in Commonwealth waters, the Tasmanian salmon farming industry has been trialling "offshore farming" to the extent of one company setting up a lease at an exposed site off the East coast of Bruny Island in Tasmania. The site has already experienced (and survived) swells of some 7 metres; one of the tests which will give the industry experience and confidence to venture further off-shore perhaps into Commonwealth waters.