Queensland Government

Department of
Agriculture and Fisheries

Reference: **11089/16**

12 MAY 2016

Marine Fisheries and Aquaculture
Productivity Commission
GPO Box 1428
CANBERRA CITY ACT 2601

Dear Sir/Madam

Thank you for the opportunity to provide a response to the Productivity Commission's inquiry into Marine Fisheries and Aquaculture and in particular to the Issues Paper released 16 February 2016.

Please find attached the Queensland Government submission. The Honourable Annastacia Palaszczuk MP, Premier and Minister for the Arts, has approved this submission on behalf of the Queensland Government.

As you are aware, the Queensland Government is currently undertaking a major review of fisheries and aquaculture management arrangements. Given that both fisheries and aquaculture are currently under review, and the Queensland Government's preferred approach has not yet been published, the submission is primarily a fact-based description of fishery management arrangements.

The Queensland Government is supportive of the Productivity Commission's inquiry, and looks forward to hearing reports of the outcomes of the Productivity Commission's deliberations in relation to this matter.

If you require any further information, please contact Mr Scott Spencer, Deputy Director-General, Fisheries and Forestry

Yours sincerely

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INTRODUCTION - INDUSTRY PERFORMANCE

Queensland's fisheries are a shared resource that is highly valued across the community for its economic, social, traditional and cultural contribution to the State, and it is the responsibility of the Queensland Government to manage this resource on behalf of all Queenslanders.

Overview

Queensland's fisheries are characterised by relatively high levels of commercial fishing effort, a high degree of conflict between recreational and commercial fishing, limited recognition of traditional fishing, concerns about the impact on non-target animals from the conservation sector and issues with economic performance.

The scale of commercial fishing in Queensland is very different from Commonwealth fisheries with typically 10 times the number of licences per fishery when compared with most Commonwealth fisheries. There is also a considerable range in the nature and scale of operations, from large offshore 20 metre trawlers to small (4m or less) boats operating in rivers, estuaries and foreshores.

Queensland has by far the most number of licences compared with any other states. Unlike fisheries in southern states where a sector may be composed of a dozen or less participants, there are 1,733 licenced operations, which is comprised of 1,406 commercial fishing Boat licences and 327 Commercial Harvest Licences. Many of these licences participate in a number of different fisheries such as trawl, net, line, pot and hand collection fisheries.

There are also a range of methods and authorised operations including set and non-set nets, beach seine nets, pots, line, beam and otter trawl. Most fisheries are subject to input controls limiting the numbers, size and design of the apparatus, and the take of some species is also regulated by commercial catch quota. Fishing is further restricted by area and seasonal fishing closures as well as State and Commonwealth marine park zoning restrictions. Fishing closures are established for a range of reasons including protection of spawning stock, habitat and non-target animals and to reduce conflict between recreational and commercial fishers.

Recreational fishing also takes many forms from freshwater to marine, offshore charter game (catch and release), inshore guide-assisted fishing, private boat fishing and land based activities. A variety of input controls also apply to recreational fishing (closed areas, limits on size/type/numbers of apparatus) and possession limits.

Commercial fishing

Commercial fishing in its various forms is one of the State's oldest and most regionally diverse primary industries. Access to fresh local seafood is part of the lifestyle of many Queenslanders and an important part of the Queensland experience for the State's many visitors.

The current commercial industry comprises 1,406 commercial fishing Boat licences, each of which can access multiple commercial fisheries through the 4,012 commercial fishing endorsements issued by the Queensland Government. These comprise 498 trawl, 253 net, 1,187 line, 587 crab and 327 Harvest licences (e.g. coral, aquarium, tropical rock lobster and sea cucumber).

There are 2,376 licensed commercial fishers operating from Karumba to the Gold Coast. Holding a commercial fishing licence allows a person to fish under a commercial fishing boat licence.

Queensland's commercial fisheries generate a gross value of production of around $185 million (in 2014) each year, which is about 10% of Australia's total seafood production. Commercial fisheries take more than 18,702 tonnes of wild caught fish, prawns, crabs and scallops annually.

While a range of fishing businesses operate in Queensland including sophisticated vertically integrated ventures, many (if not most) are small family based enterprises. They operate in multiple fisheries using a variety of apparatus and targeting multiple species, usually on a seasonal basis. Production is marketed locally, interstate and is exported.

An unspecified number of processors, wholesalers and retailers service the industry with more significant land-based processors operating in a number of regional centres including Cairns, Hervey Bay, Mooloolaba and Brisbane. The industry is a relatively significant local employer in a number of these regional locations thought to employ 1,514 directly and 1,276 in onshore processors (ABARES 2015). Employment estimates also include employment associated with aquaculture activities and Commonwealth managed fisheries.

Many of the factors impacting on the industry are outside the control of both fishers and the Queensland Government. Industry is under considerable pressure from a wide range of factors including:

- rising input costs, especially fuel and labour;
- exchange rate fluctuations;
- competition from imports from low cost competitors;
- changes in resource abundance from habitat change, competition for the resource between fishers and the impacts on the stock of fishing pressure itself;
- loss of access due to the declaration of various marine reserves;
- seasonal impacts and over the longer term, climate change; and
- complex and relatively intrusive management regimes from various regulatory agencies.

All of these factors have had such an impact on the industry that most, if not all, of the State's commercial fishing sectors are facing significant long term viability issues. In short there is too much real and latent effort in the industry and without a major restructuring, the industry could face further decline.

While currently available information suggests that major fisheries resources remain ecologically sustainable, there is always a risk that changes in the industry's circumstances could lead to increases in fishing effort, to the considerable detriment of the resource itself. The Queensland Government recognises it has a responsibility to ensure this does not occur as the management of ecologically sustainable fisheries is, and will continue to be, important for accessing domestic and international markets.

While the Government has an obligation to ensure the resource is well managed, commercial fishing is recognised as a legitimate business and needs to be given the chance to improve its long term productivity.

Recreational fishing

Recreational fishing remains a very popular activity, with 642,000 Queenslanders over the age of five years old fishing in Queensland in 2013. Tourism Research Australia estimates that in 2013 and 2014, approximately 5% of interstate visitors to Queensland went fishing. Line fishing is the most popular method, and mainly occurs from shore. Recreational fishers were estimated to catch more than 12 million marine animals such as fish, crabs, prawns & yabbies, molluscs, worms and squid & cuttlefish in 2013-14.

They make a substantial contribution to regional economies from products and services such as bait and tackle, accommodation and food. Recreational fishing activities range from freshwater fishing on dams to high profile game fishing off Cairns and other major ports. Some smaller towns rely heavily on recreational (and commercial) fishing as a major part of their economy. While there are a large number of clubs and

fishing tournaments, most fishing is an individual or small group pursuit. While there are no universally agreed measures of the value of recreational fishing, the Government's Sustainable Fishing election policy estimated the economic contribution at least $400 million annually with capacity to grow.

A Stocked Impoundment Permit Scheme (SIPS), currently operating in 32 Queensland dams and based around a 'put-grow-take' fishery, generates around $1 million per annum, of which around 75% is returned to local stocking groups to purchase fingerlings. Freshwater fish stocking is delivered by the Queensland Government in partnership with community-based fish stocking groups across the state. There are currently 69 active stocking groups that release more than three million juvenile fish or fingerlings annually into 150 waterways across Queensland. Each group has a permit and operates under an agreed stocking management plan. The existing Stocked Impoundment Permit Scheme, also known as SIPS, currently covers 32 dams. SIPS provides recreational fishing opportunities in areas where they would otherwise be lacking and supports regional communities. Anglers wishing to fish at a dam in the SIPS must purchase a permit prior to fishing. A minimum of 75% of revenue raised from SIPS is used to purchase fingerlings for stocking. The remaining 25% is used to administer the Scheme.

The Government recognises the importance of the recreational sector not only as a significant component of the economy but as a vital part of the State's social fabric, health and wellbeing. It is particularly important to the future of many small coastal and inland communities, which rely on travelling fishers and their families to inject tourism dollars into their local economies. The Sustainable Fishing Policy explicitly indicates that the Government recognises tourism-related fishing as a distinct activity and that there is a need to develop its economic potential.

Management of recreational fishing activity has traditionally relied on a combination of apparatus, possession limits and fish/area specific restrictions. Generally, these measures have been accepted and adhered to by the vast majority of recreational fishers. Recreational anglers generally recognise that the resource needs to be protected for future generations and shared equitably amongst current participants.

Traditional/customary fishing

Fishing is a significant traditional and cultural activity for many Aborigines and Torres Strait Islanders living in Queensland. The strong connection between Aboriginal and Torres Strait Islanders and fishing relates to nutrition, cultural connection to country and waters, ceremonial and social events, exchange, trade and barter; and passing knowledge of cultural and traditional fishing to successive generations.

Indigenous fishing rights are recognised under the Commonwealth *Native Title Act 1993*. The *Fisheries Act 1994* contains restrictions on the use of commercial fishing apparatus for traditional fishing. A General Fisheries Permit can be issued under certain conditions to allow the use of commercial apparatus to take fish for customary community events.

To facilitate and encourage the assessment and establishment of fisheries business development projects in Indigenous communities, an Indigenous Fishing Permit is available. IFPs provide limited authority to take fisheries resources to assess business viability prior to them having to acquire full commercial licences, but in a way that encourages them to proceed to a fully commercial basis of operation within a reasonable time frame, generally three years.

THE UNIQUE QUEENSLAND SITUATION

The Great Barrier Reef

While Australian fisheries are largely considered well managed in the global context, having the world-renowned Great Barrier Reef World Heritage Area on its doorstep brings with it a higher level of international scrutiny and higher community expectations about the standards of management. The cumulative impacts of coastal development, climate change, land-based runoff, fishing and tourism have all had an impact and are continuing to do so. The Great Barrier Reef Marine Park Authority's *Outlook Report 2014* considered certain fishing activities as 'high to very high risk' to parts of the marine park's ecosystems if not managed to mitigate that risk.

Further, in 2014 the Great Barrier Reef World Heritage site was at risk of being considered by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as 'in danger'. The result of the subsequent enquiry was the Queensland and Australian Government's commitment to the *Reef 2050 Long-Term Sustainability Plan* in 2015 to ensure the long-term conservation and ecological resilience of the Reef. Reviewing the regulatory structure of fishing to demonstrate and ensure sustainability of Queensland's fisheries is an action in this plan.

Proportionally, most fishing in Queensland takes place within the Great Barrier Reef World Heritage Area. While protection of our natural assets such as the Great Barrier Reef is of critical importance, given the multiple use nature of the Great Barrier Reef Marine Park it is recognised that commercial, recreational and traditional fishing can and should continue in harmony with protection of these assets.

FISHERIES MANAGEMENT ARRANGEMENTS

Need for regulation - common property resource

The common property nature of fisheries resources means government has an obligation to ensure that the resource is protected from over-exploitation so it can be enjoyed in perpetuity, and sustain viable industries in the long term. Within these limitations there are a number of approaches that can be adopted to manage the resource on behalf of the community.

Regardless of who takes the fish, the activity of fishing causes fish stocks to be lower than they would be if there were no fishing. This means the Queensland Government has significant responsibilities for the management of the state's fishery resources and to the people who rely on those resources for a living, their leisure activities and as part of their culture. The aim is to not only protect the resource but balance its use to ensure fair and managed access for people wishing to utilise those resources.

One of the challenges for any Government is that fishers often do not realise their obligations because there is no immediate cost to them (i.e. the tragedy of the commons). This results in a number of perverse incentives such as a race to fish and low grading of product which threatens sustainability and increases the tension between sectors.

In the absence of government intervention, fishing would be a free-for-all, with ultimate consequence that stocks would be fished down to the point of collapse. The needs of the present generation have to be weighed against the responsibility to guarantee that the fishery will be there for the shared use of commercial, recreational and traditional fisheries for future generations.

Queensland's fisheries resources are managed on behalf of the community by the Queensland Government in accordance with the provision of the *Fisheries Act 1994* (the Act). The Act and the *Fisheries Regulation 2008* provide the framework for the current fisheries management program governing the conduct of commercial, recreational and Indigenous fishing in Queensland and protecting vulnerable and iconic fish species and habitats.

Fisheries legislation has become complex due in no small part to incremental changes often championed by stakeholders to address small, localised issues. As a result, there is an intricate number of legacy issues that cannot be altered without having a range of consequential effects. While non-regulatory and/or market based approaches to management have been attempted, success has been variable. A number of factors have influenced these outcomes including imperfect information, resistance from sectoral participants, the cost of implementing alternative systems including replacement of legacy "entitlements", and the cost/benefit in many small scale fisheries.

LEGISLATION

Fisheries legislation

The *Fisheries Act 1994, and Fisheries Regulation 2008* are the primary legislative mechanisms by which Queensland's fisheries are managed.

Fishing has been legislated in Queensland since the 1890s. The current form of legislation was developed in the early 1990s and at that time replaced two Acts. The *Fisheries Act 1994* has been amended on several occasions including major changes in 2006 and a significant rewrite of the *Fisheries Regulation in 2008*. The current Act runs to some 200 pages with a further 900 pages of regulations and management plans. The principal focus of the Act is the commercial sector because of its relative efficiency in harvesting fisheries resources. Contrary to some stakeholder views, the legislation also deals with and acknowledges the important role of recreational and traditional fishing.

The current legislative framework does not extend to management of the seafood marketing sector. Queensland has a food safety scheme for seafood which commenced on 1 July 2009 under the *Food Production (Safety) Regulation 2014*. The scheme implements the National Standard for Primary Production and Processing of Seafood which sets out the basic food safety requirements for the primary production and processing of all seafood.

Habitat Protection

The *Fisheries Act 1994* provides very strong protection and conservation of fish habitats. The Act provides for specific protection of declared fish habitat areas and general protection of marine plants. The maximum penalty for unauthorised disturbance of marine habitats is 3,000 penalty units in recognition of the severity of the offence. The Act also deals with the development of barriers across waterways.

However protection of fisheries habitat is not the sole ambit of fisheries legislation. Protection and conservation of fish habitats is also provided through other legislation, most notably via marine park provisions but also through general environmental protection through the *Environmental Protection Act 1994* and the *Sustainable Planning Act 2009*.

Fisheries management methods

Management methods have been developed and implemented in consultation with a range of stakeholders, including the fishing sector, fisheries management agencies, research scientists and the general public over many years. The management methods available to fisheries managers fall into two broad groups – input and output controls. Each has its own particular advantages and disadvantages, economic and social effects and impacts on the fisheries resources concerned.

Input Controls

Queensland's fisheries have traditionally been managed by 'input controls'. These are limits on the number, type and size of boats and fishing gear and the areas and seasons in which fishing is allowed. Their purpose is to indirectly restrict the ability of fishers to catch fish and thereby ensure that over fishing does not occur.

The simplest form of input control, a limit on the number of boats, results in a steady increase in fishing effort as the average size and engine power of boats increases along with their trip lengths and their ability to keep fishing in bad weather. The use of new technology also allows fishers to find fish more easily and to quickly increase their fishing capacity. This may then threaten the sustainability of the fishery and cause further restrictions to be introduced.

Input controls are quick and cheap to implement and easy to enforce, but can lead to overcapitalisation and economic inefficiency as fishers compete with each other to get the first or best access to the available fish. The effectiveness of an input control depends on how strong a relationship there is between that input and catch levels. For example in a stable rock lobster fishery, defining the inputs (i.e. the number and type of pots) may adequately limit catch levels. However, in other fisheries, such as a prawn trawl fishery, catch levels may vary widely depending on the skills of the individual operator even if all inputs, including boats and gear, are identical.

If a fishery is managed primarily by input measures there must be a mechanism for continually reducing total fishing effort, since the fishing effectiveness of each individual boat invariably improves over time and results in threats to sustainability as well as reduced economic efficiency. Usually the reduction in fishing effort is achieved by a regular tightening of input controls, which further exacerbates problems of overcapitalisation and economic inefficiency.

For these reasons input controls are progressively being replaced as the primary mechanism for fisheries management wherever this is possible.

Output Controls

Output controls place direct catch limits on those participating in the fishery. National Competition Policy favours their use in the form of Individual Transferable Quotas (ITQs) which involve a quota for each fisher and which effectively provide each with an entitlement to a known share of the fishery.

The use of ITQs removes the need for fishers to compete with one another for a limited supply of fish and thus gives them more freedom to choose their own style of operation and, in some cases, their fishing method. ITQs can be traded to allow fishers to increase or decrease their share of the fishery as their needs change and at the same time allow fisheries managers to adjust the total amount of fish that can be taken from the fishery if this becomes necessary.

Output controls in the form of property rights are considered the most economically efficient form of management, because they provide a direct incentive to fishers to behave responsibly in order to protect the future value of their asset, while removing the incentive to over-invest in fishing boats. They can,

however, encourage concentration of quota ownership resulting in changes in the nature of the industry that can have significant social and economic impacts at regional levels.

Unrecorded catch and "high grading" (where smaller fish or less valuable quota species are dumped overboard and fishing continues) can be major problems where output controls are used. A further problem with quotas in multi species fisheries is that the catch of some quota species may continue to occur until a fisher's quota for all species is exhausted, leading to increased mortality of the species most requiring protection, i.e. those for which the quota is smallest.

These problems can only be overcome if a comprehensive monitoring and compliance regime is in force. For this reason effective output control regimes are generally more expensive to administer than those based on input controls. This is even more so where the fishery is geographically extensive and a greater number of ports are available to fishers to land their catch. ITQs may be quite impractical in such circumstances.

While output systems are likely to optimise economic performance, there is increasing concern that they do not always allow social or wider community outcomes to be achieved. In small scale fisheries the cost of administration may well exceed total benefits. Queensland is continuing to review its management systems and will alter them over time with a view to delivering the best outcomes taking into account the environmental, economic and social outcomes being pursued.

Combination of input and output controls

The current approach to fisheries management in Queensland is to replace input controls, which have existed for many years and have become ever more complex, with a combination of input and output controls to ensure the best possible management of each fishery.

Where possible, the primary control mechanism is output controls in the form of ITQs, either of catch (spanner crab, coral reef line, Spanish mackerel, tropical rock lobster, stout whiting, beche de mer, trochus and coral fisheries) or of fishing effort (east coast trawl fishery) supported by relatively simple input controls that relate directly to the biology of the target species or the bycatch species with which the fishery interacts. For example, input controls such as seasonal closures are likely to be required to protect spawning fish or nursery grounds and size limits may be necessary to ensure that fish can reach a size at which they have been able to reproduce at least once before being captured.

Controls imposed by regulation on all fisheries

In addition to the limits on boat size referred to above, a number of controls are imposed by regulation on all Queensland fisheries, including those managed by limits on catch and effort.
These include requirements for the maintenance and submission of catch records, the marking of boats and fishing gear, specifications for fishing gear, the types of licences required, lists of regulated fish, prohibited activities, closed waters etc.

Controls specific to commercial fishers

Licences and particular types of permits allow fishers to catch certain marine species for trade or commerce, as long as they abide by conditions such as area restrictions, catch limits, catch reporting and gear used. To operate in a commercial fishery:

- the fisher (or another person they engage) must have a commercial fisher licence; and
- the fisher must be operating under a Queensland commercial fishing boat licence or commercial harvest fishery licence; and
- the boat licence must have the relevant fishery symbol to operate in a particular fishery or fisheries.

Commercial fisher licence
Fishers need a commercial fisher licence to use authorised equipment for catching fish species identified on their commercial fishing boat licence. They also need a licence to supervise crew members assisting in the fishing activities.

Commercial fishing boat licence
Anyone wishing to operate in a commercial fishery must first have access to a commercial fishing boat licence.

Virtually all Queensland's major commercial fisheries are limited entry with no new commercial fishing vessel licences or fisheries symbols being issued. This has been the case for a considerable period. Vessel licences and most symbols for individual fisheries are tradeable. They can also be leased and a healthy private market exists for both leasing and outright purchase.

Commercial fishery symbols
Specific fisheries are represented by a system of fishery symbols, which are marked on boat and harvest licences. These symbols indicate the fisheries the commercial fisher is authorised to fish. Each symbol denotes the species of fish targeted, the fishing method used and a particular geographical area.

In Queensland most fishing boat licences are 'multi-endorsed'. This means they carry multiple symbols to allow them to operate in a variety of fisheries. Many fisheries are also authorised to take multiple species, which adds significantly to the complexity of both the business models in the industry and to the management of the resource.

Each commercial fishing boat licence has its own unique registration index as well as one or more fishery "symbols" attached which identify the fishing activity that may be undertaken by that particular boat. For example, commercial fishing boat index FVXW may have the fishery symbols; T1, L1, C2, N1 attached. This identifies that the fishing boat with the index FVXW is authorized to participate in the; East Coast Otter Trawl Fishery, primarily for prawns and scallops (T1); may undertake limited line fishing for pelagic and demersal fish (L1); may also undertake fishing for spanner crabs (C2); and may also undertake inshore net fishing for a variety of fish species (N1).

Commercial harvest fishery licence
A commercial harvest fishery licence is required to take species that are primarily collected by hand or by using handheld implements. No new licences are issued for existing fisheries, but fishers can lease or buy a licence from an existing operator.

Carrier boat licence
Fishers must have a carrier boat licence to use a nominated boat to transport catches taken by another commercial fishing boat. Some fish carriers are exempt and some restrictions apply to specific fisheries.

Charter fishing licence
Fishers need a charter fishing licence if they run fishing trips in offshore waters (greater than 2 metres deep) and they charge a fee for the service.

Charter fishing is defined as a trip where a charter or transport operator takes paying passengers to, or across, a site in offshore waters to conduct fishing activities. It includes:
- spear fishing;
- game fishing;
- tag-and-release fishing;
- demersal (bottom) reef fishing;

- guided fishing;
- dive charters that also take fish; and
- any other fishing activity in offshore waters whenever a fee for service is charged.

Note: fishing equipment does not have to be supplied by the operator, nor does fishing have to be the main purpose of the trip, to be considered charter fishing.

Fisheries management areas
Apart from marine park zoning, which are applied for biodiversity conservation reasons, many areas are closed to commercial and/or recreational fishing for fisheries management purposes. This includes seasonal closures on particular species, primarily for the protection of spawning activity; various rivers, bays and coral reefs for habitat protection; and Dugong Protection Areas where dugong interaction with commercial apparatus is high.

Fees

All commercial fishing licences and symbols attract annual fees. There are ongoing annual fees for holding authorities. There are fees involved in permanently or temporarily transferring licences and amending them for a fisher's intended fishing operations.

INTERACTIONS WITH COMMONWEALTH LEGISLATION

The inquiry places a strong emphasis on resolving the assumed duplication of regulations by State and Commonwealth governments. Despite an apparent perception to the contrary, there is minimal obvious regulatory duplication between Queensland and the Commonwealth with respect to fisheries legislation. Where issues have been identified, processes are available and/or already underway to address them. There is therefore limited scope for harmonization.

Overlaps in fisheries management

Under existing arrangements Queensland (and all other states) generally has management jurisdiction for fisheries from the coast to 3 nautical miles seaward. However since the 1980s a series of Offshore Constitutional Settlements (OCS) arrangements have been agreed between the Commonwealth and respective states to allow for more efficient management of fisheries in waters adjacent to the jurisdiction. In Queensland this has resulted in the State managing most commercial fisheries except tuna and billfish, and all recreational fishing offshore of Queensland.

Offshore Constitutional Settlement
Management arrangements are established under the Offshore Constitutional Settlement (1995) agreement and resulting Memorandum of Understanding between the Queensland and the Northern Territory Governments and the Commonwealth Government to manage shared waters.

Queensland Fisheries Joint Authority (QFJA)
The QFJA is an administrative arrangement to allow for the management of fisheries in waters offshore of Queensland in the Gulf of Carpentaria.

Queensland also provides licensing for QFJA, which is responsible for managing certain fish stocks in the Gulf of Carpentaria under the *Fisheries Act 1994*. These include mackerels, shark and demersal fin fish. The activities of QFJA are limited to commercial fisheries. QFJA comprises the Commonwealth Minister for Agriculture, Fisheries and Forestry and the Queensland Minister for Agriculture and Fisheries.

Queensland and the Commonwealth have agreed that this arrangement adds little value to the overall outcomes for the fishery and processes are underway to end the arrangement and transfer full management responsibility to the State. The processes are a part of the regulatory reform agenda for both jurisdictions, consistent with the Northern Australia White Paper recommendations.

Torres Strait Protected Zone Joint Authority

The Torres Strait Protected Zone Joint Authority was established in 1984 and is responsible for the management of all fisheries (excluding recreational) in the Torres Strait Protected Zone (TSPZ). The TSPZ is defined in the Torres Strait Treaty, which was ratified in 1985 between Australia and Papua New Guinea, and now appears as a Schedule in the *Torres Strait Fisheries Act 1984* (Cth and Qld).

The PZJA is comprised of the Commonwealth and Queensland fisheries Ministers and the Chair of the Torres Strait Regional Authority. The PZJA is responsible for management of commercial and traditional fishing under Commonwealth law in the Australian area of the TSPZ and designated adjacent Torres Strait waters. Queensland is responsible for recreational fishing and aquaculture. The responsibility for providing licensing on behalf of the PZJA transferred from Fisheries Queensland to the Australian Fisheries Management Authority (AFMA) on 1 July 2015.

Since 1985, new commercial fishing licences have only been issued to traditional inhabitants. Traditional inhabitants can enter any Torres Strait commercial fishery, except the prawn fishery, by obtaining a traditional inhabitant fishing boat licence. Non-traditional inhabitants who want to enter a Torres Strait commercial fishery must buy one of the transferable licences from an existing operator.

Torres Strait licences expire annually (or, for a certain subset of master fisherman's licences, every 5 years). Holders of Torres Strait licences are invited to renew licences close to the licence expiry date recorded on the licence. Updated licences are supplied following successful applications to renew or amend licences.

Recreational fishing

There is only limited overlap between Queensland, New South Wales, the Northern Territory and the Commonwealth with regard to recreational fishing. Some differences do exist regarding fish size and possession limits often due to localised issues or differences in information when the restrictions were first implemented. While some harmonisation may be desirable, this issue is not raised regularly by the sector as a major impediment to fishing.

However there are some high profile issues. The most obvious example is the mud crab fishery. NSW and NT allow the take of female mud crabs and different size restrictions apply in those jurisdictions. Queensland prohibits the taking of female crabs, and tis prohibition has been in place since the late 1800's. Although there have been recent attempts to resolve this discrepancy (the most recent in 2011), there is a strong desire within the Queensland community to uphold the existing policies. This is unlikely to change in the near term.

Environmental management that impacts on fisheries management

Since 2000, the Commonwealth Government Department of the Environment (DoE) has required that all Commonwealth and state managed fisheries which export product, or interact with threatened or migratory species or cetaceans in Commonwealth waters are to be assessed and accredited under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Queensland currently has 19 fisheries accredited under the Wildlife Trade Operation (WTO) provisions of the EPBC Act. Queensland has the most number of fisheries accredited under this arrangement largely because they operate in the Great Barrier Reef World Heritage Area.

In recent times the conditions that are being applied to WTO accreditation are being increasingly more difficult for the State and by default, industry, to comply with. It is very clear that industry have limited knowledge or background regarding the entire WTO process. Compliance with various obligations is low and there is a lack of appreciation of the consequences of losing accreditation. This is despite considerable effort by the State to engage industry on the matter. On the other hand there is a perception in the industry in Queensland that the WTO arrangements are being used to unnecessarily restrict commercial fishing.

The conditions that are now being applied to WTO accreditation will, in some cases, lead to considerable impositions on either the industry or the State. Engagement with industry is being undertaken by Fisheries Queensland to better inform operators about the requirements and options for industry to ensure compliance.

OTHER MATTERS

Fishing and Marine Parks

Marine parks protect and conserve the values of the natural marine environment while allowing for its sustainable use. They protect habitats including mangrove wetlands, seagrass beds, mudflats, sandbanks, beaches, rocky outcrops and reefs. There are three State marine parks in Queensland - the Great Barrier Reef Coast Marine Park, Great Sandy Marine Park and Moreton Bay Marine Park. Commercial and recreational fishing is prohibited in some marine park zones.

Marine parks are in place to manage biodiversity. However there is no doubt marine parks impact on access to fisheries resources. The issue is not well understood by many fishers and this leads to a constant stream of complaint and commentary.

Fisheries closures (seasonal and permanent) are used in fisheries management to assist in ensuring the sustainability and viability of the fishery. Queensland has an extensive network of permanent and seasonal closures within and outside of marine parks designed to protect stocks, breeding aggregations, nursery habitats, and achieve fair access outcomes.

Both marine parks and fisheries management restrictions have their rightful place in the resource management regime. Wherever possible, efforts are made for both sets of regulation to mirror and/or harmonise with each other. However because they are for different purposes there will be times when users have to comply with both sets of management arrangements.

Fisheries data and monitoring

There is growing community interest in the sustainability of Queensland's fishing activities, including the status of the State's key fish stocks. Queensland uses several tools to monitor and assess the sustainability and impact of fisheries activities on fish stocks and the broader ecosystem including commercial fish logs, biological monitoring, performance indicators, quantitative stock assessments, and ecological risk assessments.

Collection of fishing catch and effort data from commercial fisheries commenced in 1988 with the introduction of mandatory logbooks. The logbook system relies heavily on the co-operation of commercial fishers to provide accurate and timely information. Logbooks capture information about catch and fishing effort including the species caught, locations fished and the time spent fishing. This data is one of the primary sources of information used to assess and monitor individual species and fisheries. While logbooks

have provided a rich source of information, there have been instances of mis-reporting, which makes this important data less reliable.

A Vessel Monitoring System (VMS) using satellite technology is used primarily to monitor and assess the operation of trawl vessels. The data collected from commercial fishing vessels is collected automatically and independent of the vessel operator provided the equipment is operating correctly. Independent data of this nature is accompanied by a greater level of confidence than data such as logbooks, which can be subject to a greater level of mis-reporting.

Inaccuracies in logbooks and associated catch reporting systems may relate to the nature of the process itself, such as the complexity of the reporting system and the data required. Consequently options are being explored to improve the data collection process, placing greater emphasis on electronic technology to aid both submission by fishers and management of the data once received. While logbooks are currently largely paper-based at present, Elogs are available for the trawl fleet and are being trialled in other fisheries.

The suite of catch reporting systems remains central to ensuring the integrity of our fisheries management arrangements. The aim is to ensure high quality information is received in a timely manner at minimal cost to both fishers and the government.

There is also a need to be constantly monitoring and assessing the state of key fisheries to ensure they remain sustainable. Monitoring and assessment of fisheries resources is a costly process. Monitoring of key species continues with its major priority being to provide information to meet the State's obligations to maintain well managed fisheries. Apart from commercial catch and effort data, Queensland has had a long term fisheries monitoring program in place for about 20 years. It collects biological information about key species from both commercial and recreational fishers. A rolling program of formal stock assessments is undertaken across various species and individual research projects are used to supplement scientific knowledge.

Given the importance of the recreational sector, it is also critical to have access to reliable data on recreational catch and effort. Large-scale recreational fishing surveys have also been conducted regularly in Queensland, the most recent released in 2015 covering the 2013-14 year.

Research

By its very nature, in comparison to terrestrial activities, knowledge of the marine ecosystem, fisheries and the impacts of the industry on the resource is relatively limited. Continuing research and monitoring is a vital part of improving this knowledge leading to better decision making.

Public funding of fisheries research must be targeted to priority issues which deliver optimum outcomes for the community's investment. Priorities need to be determined in conjunction with stakeholders. The approximate spend on fisheries research is $2.2 million per annum as well as a $400k per annum contribution from Queensland to the Fisheries Research and Development Corporation, the peak national fisheries research funding body.

Costs of Fisheries Management

Queensland does not have a cost recovery policy for fisheries management. In recent years the Queensland government has invested in the vicinity of $20 million per annum solely in fisheries management. The bulk of this cost has been met by the government, with less than half the cost covered by commercial licence fees (about $4.5 million per year) and the Recreational Use Fee collected as part of the recreational vessel registration fee (about $4.3 million per year).

Compared to other jurisdictions, fees for Queensland commercial authorities are relatively low. In the commercial sector, licence fees currently apply to various authorisations based on a resource rent model. This approach is generally cumbersome and to date has failed to adequately reflect the economic opportunity available to individual fishers authorised to commercially exploit the resource. Other jurisdictions face similar issues and there is a move in some areas to replace existing charging regimes with one that is based on either cost recovery or the gross value of production of various fisheries.

Queensland does not have a recreational fishing licence for marine fishing. A stocked impoundment permit system applies in some freshwater stocked impoundments However the Recreational Use Fee provides a means for boat owners to contribute to the costs of recreational fisheries management and has been in place since 1 November 1994. The fee is part of the recreational vessel registration fee collected by the Department of Transport and Main Roads. While it is recognised that not all recreational fishers own boats, and not all boat owners take part in recreational fishing, this mechanism largely captures recreational fishers who derive significant benefits from access to fisheries resources.

Compliance and Enforcement - Queensland Boating and Fisheries Patrol

Queensland Boating and Fisheries Patrol (QBFP) undertake compliance activities associated with fisheries and boating safety laws through education, surveillance and inspection. Compliance with laws is necessary to ensure both the safe use of waterways and the sustainability of our fisheries resources.

Significant challenges exist in relation to the scale of fisheries enforcement activities, with 7,000 kilometres of coastline and hundreds of inland waterways to be monitored for illegal fishing activity. Current data from inspection activity indicates that the most commercial and recreational fishers make every effort to comply with fisheries regulations. As is the case across the broader community, only a minority of fishers deliberately break the law. Consequently compliance rates in Queensland are extremely high, with more than 93% compliance (per unit inspected) with fishing rules and regulations.

Illegal and Unreported fishing is a major compliance focus in Queensland and Australia. Although by its very nature it is impossible to quantify the extent of the problem, anecdotal information suggests that it is a very significant problem worldwide and is continuing to rise.

Advances in technology should also provide significant scope to improve the efficiency of surveillance of fishing activity especially in the commercial sector. Simplification of the existing complex fisheries laws and other requirements (see above) will increase the ability of generally law-abiding fishers to remain within the law.

Consultation and engagement

Reflecting the common-property nature of fisheries resources, modern fisheries management is characterised by negotiations between stakeholders and government in deciding suitable fisheries management arrangements.

However compared with many other industries, there is a distinct lack of organised representation in the fishing industry. While bodies such as the Queensland Seafood Industry Association and the Queensland Seafood Marketers Association have state wide coverage, their membership numbers are relatively low. In these circumstances developing a single whole of industry view is difficult.

Similarly in the recreational sector, fishing clubs are reasonably well represented as are freshwater fishers, but the majority of the state's recreational fishers do not belong to fishing bodies.

It is possible for government to consult with the community in the absence of representative bodies, especially on 'one off' issues (such as the release of a Regulatory Impact Statement). However the dynamic nature of fisheries management means that access to regular and ongoing advice from stakeholders is highly desirable. Stakeholder groups have made a number of attempts to improve sectoral representation with limited success.

In other jurisdictions, governments have helped create or established advisory bodies for both the recreational and commercial sectors to provide an ongoing source of advice to Ministers and departments. These bodies normally take the form of ministerial advisory groups and tend to focus on strategic issues rather than day to day management.

Major challenges to communication are the large population, the fact that stakeholders are disparate and not well networked, and the physical size of Queensland.

AQUACULTURE

More than 154 producing aquaculture farmers produce around 8,187 tonnes of product, generating in excess of $120 million and full time employment equivalents of 449.7 in 2014-15. The main contributing sectors include prawns, barramundi, hatchery and aquarium, redclaw and oysters.

The Queensland Government supports the growth of an economically viable and environmentally responsible aquaculture industry. Aquaculture in its various forms has become an important supplier of fisheries products on a global scale. While aquaculture has a long history in Queensland, it has only relatively recently become a major source of local seafood. In gross value terms, the industry is now approaching about half of the size of the wild caught industry. Given the limited potential for expansion of the wild caught fishery, it is expected that any increases in fisheries production in Queensland will largely be sourced from aquaculture. This indicates significant potential for the industry to grow in the future.

Aquaculture is also an important source of fish for the freshwater stocking program accessed by 135,000 recreational fishers each year.

The largest producers are land-based prawn and barramundi farms near Cairns, Cardwell, Mackay and the Gold Coast. Growth of the aquaculture industry in Queensland has been stable recently with no new major entrants to the industry, and only three significant pond farm expansions being approved over the past decade. The Guthalungra prawn farm, situated near Bowen in north Queensland is expected to receive full approvals for 315 hectares shortly. In comparison with some other States, marine-based aquaculture has seen very little industry development.

The importance of, and potential opportunities for, aquaculture were recently recognised by the report of the (former) Agriculture, Resources and Environment Committee of the Queensland Parliament (AREC). AREC identified that one of the major impediments to the growth of the aquaculture sector in Queensland was the complicated process of project approvals. In considering this issue, AREC acknowledged that the requirements were not necessarily confined to state government criteria but also included the federal and local government. AREC recommended that these processes be reviewed.

Subsequently the Queensland Competition Authority undertook a review of the regulatory impediments to the growth of the aquaculture industry. The outcomes of this Review will be used to shape the future regulatory environment for the industry with the aim of streamlining processes and reducing red and green tape.

The Great Sandy Regional Marine Aquaculture Management Plan identifies 26 sites listed for commercial aquaculture development in that region. Access to these sites is via expressions of interest that are offered at suitable times. The intent of this is to reduce regulatory burden by providing a transparent and streamline process for application, including accreditation mechanisms e.g. Conservation Agreement (see below).

Overlaps in aquaculture management

The Productivity Commission conducted a review of the regulatory arrangements for aquaculture in 2004, "Assessing environmental regulatory arrangements for aquaculture". Subsequently the Australian Fisheries Management Forum's Aquaculture sub-Committee was directed by the Marine And Coastal Committee (under the Primary Industries Ministerial Council), to develop the "Best practice framework of regulatory arrangements for aquaculture in Australia" (Primary Industries Ministerial Council 2005). The Aquaculture sub-Committee, which includes aquaculture managers from Queensland's Department of Agriculture and Fisheries, continues to report against this best practice document on a regular basis.

The Conservation Agreement between Queensland and Australian Government Ministers for the Great Sandy Regional Marine Aquaculture Plan (GSRMAP) (2011) means that applications for aquaculture that comply with the GSRMAP do not require a separate assessment or approval under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*. Instead, EPBC matters are covered through the issue and conditions of the Development Approval (under the *Sustainable Planning Act 2009*) and Resource Allocation Authority under the *Fisheries Act 1994*), which are assessed against the GSRMAP.

There is an apparent disconnect in Queensland approval processes, particularly where discharges of waste water are involved either within or adjacent to the Great Barrier Reef Lagoon. If an operation discharges or proposes to discharge into a river or creek which then flows into the Lagoon then assessment and licence conditioning is through the State. If an operation discharges or proposes to discharge directly into the Lagoon then assessment and approval is mandated through the Great Barrier Reef Marine Park Authority. Waste water discharge values can also vary between species farmed, site- location and whether it is direct or indirect discharge into the Lagoon. This regime is problematic in the initial start up preparation of supporting documentation or for existing operators to maintain regulatory compliance for their water quality discharge. This is particularly evident where some prawn farms have diversified to include some marine finfish species. This means they are operating under two very different licensing approval processes.

Issues with lack of consistency in application of Commonwealth regulations

An example is the Guthalungra aquaculture development by Pacific Reef Fisheries, the impact assessment process for which lasted over 10 years and involved extremely onerous conditions (for details refer to QCA preliminary report on 'Aquaculture Regulation in Queensland'). The lengthy time frame attributed to this project was as a result of the Commonwealth Government interventions of the initial approval which was given by the Queensland Coordinator General 2008 and subsequently a number of variations by the Commonwealth to their initial approval of 2010, with the final approval granted in late 2011.

Longer processes and greater scrutiny appear to apply to consideration of EBPC approvals for marine aquaculture in Queensland compared to other states which also trigger matters of National Ecological Significance. An extensive process of negotiation (2006-2011) was required in order to accredit the GSRMAP, whereas consultation with the Commonwealth appears to not always be required for marine aquaculture planning in South Australia and Tasmania.

PROPOSED REFORMS

The previous sections provided an overview of Queensland's existing fisheries and aquaculture management arrangements. The current approach to fisheries management in Queensland is characterised by complex legislation focused primarily on commercial and recreational harvest activities. While this has resulted in improved sustainability of fisheries resources, the existing approach does not support the best use and stewardship of Queensland's fisheries. The incentives are for short term gain not long term investment.

On 6 March 2014, the then Minister for Agriculture, Fisheries and Forestry announced a review of fisheries management in Queensland. On 30 May 2014, Brisbane-based independent consultancy, MRAG Asia Pacific, was appointed to undertake the review. MRAG Asia Pacific was tasked with delivering a policy framework that outlined a path for achieving simplified, transparent, appropriate fisheries management for Queensland. Their final report, "Taking Stock: modernising fisheries management in Queensland", provided a range of recommendations and was released for public comment on 19 May 2015.

While there is not necessarily agreement as to the way fisheries should be managed, virtually all stakeholders agree there must be significant change to the current system.

The Government's 'Sustainable Fishing Policy', commits to developing strategies to obtain the maximum value from the limited fishing resource. Key commitments from this Policy are to:

(i) adopt a fisheries resource allocation policy based on maximising economic value, and

(ii) review the regulatory structure of commercial fishing to ensure the sustainability of Queensland's fisheries. The 'Sustainable Fishing Policy' specifically identifies the need to:

- manage harvest on a sustainable basis
- with enhanced co-management arrangements with industry,
- reform the extremely complex regulatory arrangements governing Queensland fisheries, and
- add value through industry development efforts and recognising economic issues in the design of fisheries management arrangements.

The Policy contains a number of specific commitments with regard net free zones, development of a charter fishing policy and a review of commercial fishing regulations. All are designed to optimise the return to the community from the use of the resource.

Three net free zones in Cairns, north of Mackay and the Yeppoon/Capricorn area were introduced in November 2015. All commercial netting is now prohibited in these areas, with the expected outcome to be increased recreational fishing activity. A monitoring program has been established to monitor the impacts of these zones on fishing activity.

It is expected the Queensland Government will shortly release a Discussion Paper outlining a comprehensive range of proposed reforms to fisheries management. This Paper will address the recommendations from the MRAG Report and outline how the Sustainable Fishing Policy will be progressed.