SUBMISSION NO. 29
Inquiry into the Role of Science for Fisheries and Aquaculture

Australian Government
Australian Fisheries Management Authority

AFMA Submission - Inquiry into the role of Science in relation to Fisheries and Aquaculture

EXECUTIVE SUMMARY

1. Through its management arrangements and in accordance with its governing legislation AFMA pursues ecologically sustainable development of Australia's commercial fisheries with industry and government sharing the costs of fishery science and management. Nationally, all jurisdictions have followed a similar path however there remain key areas where AFMA sees opportunities to improve the efficiency and cost-effectiveness of fisheries science and management. These are:

    a) *Strengthening Nationally Cohesive Science & Management* through determining resource shares between jurisdictions where there are shared fish stocks and revise offshore constitutional settlement (OCS) arrangements accordingly; and

    b) *Harmonising Fisheries and Environmental legislation* to remove the overlap between fisheries legislation and environmental legislation (across all jurisdictions State /Territory and Commonwealth).

2. AFMA is in the unique position of having its jurisdiction abut all others in Australia as well as Indonesia, France and New Zealand. It is also responsible for implementing fisheries arrangements on behalf Australia for seven international regional fisheries management bodies. The Authority's responsibility has increased considerably over its 20 year history and with limited funding is always seeking to identify more efficient and cost-effective ways of doing business.

3. Science is AFMA's single largest domestic fishery cost ($7 million pa including research and scientific monitoring) and all our science is used to inform fishery management decisions. To this are additional research funding contributions paid by industry to the Fisheries Research and Development Corporation (~$750,000 pa) which provides matching funding, along with CSIRO co-contributions. AFMA does not undertake its own science but commissions others (CSIRO, ABARES, state agencies and independent consultants) to do so, based on priorities in each Commonwealth fishery. Similarly science is a major cost in each of the State and Territory jurisdictions.

4. The current national science and management arrangements are duplicative, expensive and time consuming for an industry which has a GVP of just over $2 billion per annum (Commonwealth component approach $320Million) . AFMA's experience is that there are better ways of doing business that benefit the fishing industry, fish stocks and the Australian community. The industry can have less of a regulatory burden, fish catches can be more sustainable and Australians can have a more secure supply of locally caught seafood. Science and management underpin achieving these outcomes but the current eight jurisdiction model is failing to deliver these services in a cost effective and efficient way. AFMA has outlined below how changes to inter-jurisdictional and Commonwealth legislative measures can lead to improved outcomes at no additional cost.

BACKGROUND

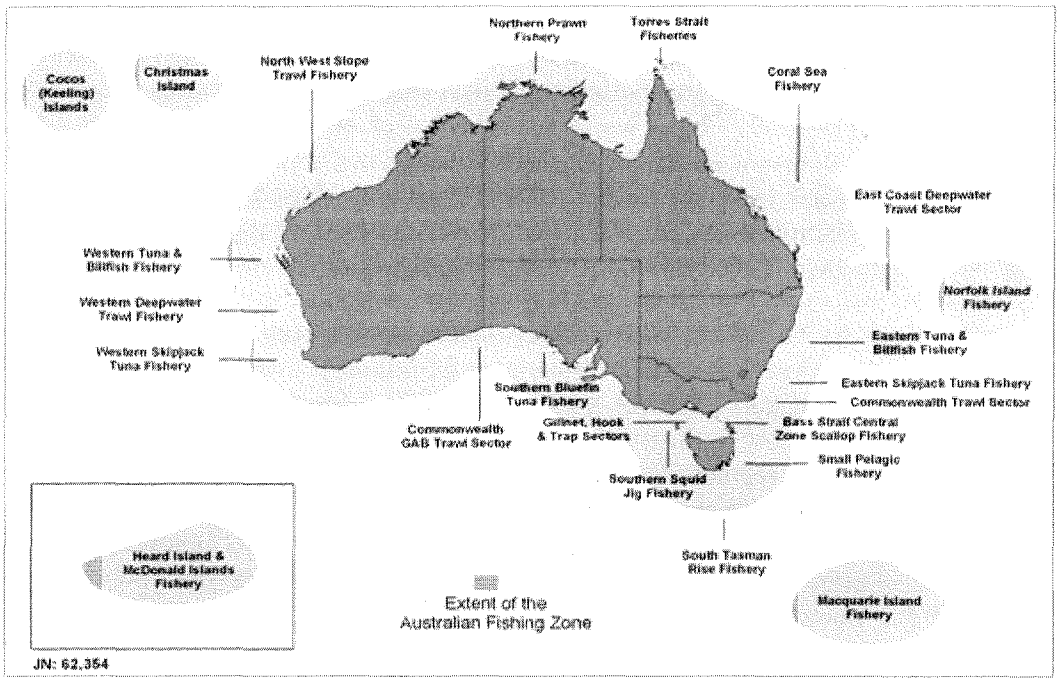
5. The Australian Fisheries Management Authority (AFMA) was established under the *Fisheries Administration Act 1991* to manage the resources of Australia's Commonwealth fisheries on behalf of the Australian community using the provisions of the *Fisheries Management Act 1991*.

6. In general, AFMA manages commercial fisheries from three nautical miles offshore to the boundary of the Australian fishing zone. State and Northern Territory (NT) governments manage fisheries within their borders and inside three nautical miles from shore. There are numerous exceptions to this general rule, which are facilitated by Offshore Constitutional Settlements (OCS) agreements between the States, NT and the Commonwealth. The OCS agreements provide management responsibility for species, species groups, fishing methods or areas of waters to better manage shared stocks. AFMA also manages Australian fishing vessels operating on the high seas.

7. Current OCS arrangements were developed between the late 1980s and late 1990s when most fisheries were managed under 'input' controls, that is, controls on the amounts and type of fishing gear that can be used. This was sometimes in association with 'spatial management', that is, areas opened and closed to commercial fishing on an on-going or seasonal basis. Since the 1990s a growing number of fisheries have been managed by 'output' controls, that is, limits on how much catch can be taken from a fish stock. In many cases this has been accompanied by an allocation of individual quotas which are often transferable.

8. The principle of stock based management is a preferred way to manage fisheries however, current OCS arrangements reflect this only in part leading to a considerable waste of resources for both government and industry. Too often a commercial fisher has to hold a fishing concession from more than one jurisdiction to fish the same fish stock.

Figure 1. Commonwealth managed fisheries



COMMENT

Strengthening Nationally Cohesive Management & Science

9. Australia has eight fishery jurisdictions. In addition there are various formal arrangements between some jurisdictions, through joint authorities[1] or other similar entities. AFMA is of the view that the current suite of OCS arrangements do not deliver efficient and cost effective management of fish stocks.

10. There are 59 OCS agreements as well as associated Memoranda of Understanding. The stock and species based agreements generally work well in assigning clear responsibility for the fishery to one jurisdiction, an example of which is for school and gummy shark in southern Australia. AFMA manages this fishery through agreement with South Australia and Victoria on the basis of catch shares. While this arrangement works well it could be improved upon through agreement with NSW and WA whose industries fish outside of the tripartite arrangements.

11. In contrast, the fishing method based OCSs work very poorly with jurisdictions according different priorities to management and research into the same fish stock, industries dispute catch shares and sources of catch and different fishing controls apply. Two good examples of this are school whiting and snapper.

12. School whiting is managed in the Commonwealth fishery[2] under output controls (a total allowable catch or TAC) and by limits on fishing gear (input controls) in NSW state waters. To ensure sustainable Commonwealth catches, before setting a TAC all other sources of fishing mortality are deducted from the TAC, including an estimate of NSW commercial catch. Over the years NSW catches have varied from around 300 tonnes to 1200 tonnes with consequential impacts on the Commonwealth TAC. This gives no security of catch (income) to the fishing industries that rely on this species. The lack of constraints on catch in NSW also undermines the Commonwealth quota system.

13. Snapper is predominantly caught by recreational fishers followed by state commercial fishers,[3] and finally Commonwealth commercial fishers. In Victorian waters where there is significant overlap with Commonwealth fisheries,[4] the Commonwealth annual catch of snapper has varied over time from around 10 tonnes to 85 tonnes. This compares with Victorian annual commercial and recreational catches estimated at around 90 tonnes and 480 tonnes respectively. Commonwealth snapper catch is usually unintended when fishing for other Commonwealth managed species. AFMA is currently seeking a catch sharing arrangement for snapper between the states and itself. However, because not all the states manage snapper in the same way this is proving difficult to progress. While it remains unresolved tensions between the various fishing sectors and jurisdictions continue over what is one of Australia's premier table fish.

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[1] For example, the Northern Shark Joint Authority is a multilateral agreement between the Commonwealth, WA, NT and Qld to manage tropical shark species across Northern Australia. Torres Strait fisheries are managed as a joint Authority between the Commonwealth and Queensland.

[2] The Southern and Eastern Scalefish and Shark Fishery, which provides a significant proportion of the fresh seafood supply for both the Sydney and Melbourne fish markets.

[3] Snapper (*Pagrus auratus*) is caught in all Southern States from central WA, through to Southern Qld.

[4] Predominantly the trawl sector of the Southern and Eastern Scalefish and Shark Fishery.

14. Given that Commonwealth waters abut all the waters of the other seven jurisdictions, the Commonwealth and its industry are particularly affected by inadequate cooperative management and coordinated research. Many Commonwealth fishers also operate in state or territory fisheries and the efficiency of their operations can be significantly impeded by the requirements of each jurisdiction. This can include different size limits for the same fish species (eg flathead), only being able to fish in one jurisdiction per trip and different fishing gear requirements, different reporting requirements and different minimum standards to meet different legislative requirements between jurisdictions.

15. These are not new challenges and there are long standing commitments within national fisheries management fora to work toward cooperative and cohesive management for straddling and migratory stocks. However, with limited resources within each jurisdiction urgent issues dominate and important inter-jurisdictional matters are well down the priority list. This outcome is unfortunate for industry and government. It is almost 25 years since the current NSW OCS arrangements were signed. The industry has changed and how we manage fisheries have changed but lack of clear responsibility for important fish stocks remains unresolved.

16. It is now essential to complete the OCS change process that began in the mid-late 1990s based around single jurisdiction management of fish stocks or, where this is not possible, agreed proportional shares of catch from the stock. This work must be completed to deliver a more cost-effective and efficient fisheries system, and one where a single jurisdiction can take the lead on science and management with cooperation from other relevant jurisdictions. Less regulation for industries and more efficient use of limited resources will be the result.

Harmonising Fisheries and Environmental legislation

17. Up until the late 1990s fisheries agencies in Australia had virtually sole responsibility for the management of fisheries resources and the impacts of fishing on the natural environment. The objectives of all fisheries legislation at that time reflected this and still does so today.

18. In 1999 the Commonwealth consolidated its environment legislation in the *Environment Protection and Biodiversity Conservation Act* (EPBC Act) and became more directly involved in the management of Australian fisheries. Since that time Australian fisheries have been managed under the legislation of the relevant fisheries management jurisdiction as well as that administered by the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC). It should also be noted that three separate approvals are required for a fishery to operate effectively under the EPBC Act.

19. The approvals processes under the EPBC Act add an additional layer of bureaucracy (and hence cost) to the Australian taxpayer. The EPBC Act however does not fill any gaps in fisheries legislation regarding objectives relating to resource sustainability. Significant improvements in the pursuit of sustainable fisheries have largely been driven by the actions of the Government as a whole through the Ministerial Direction to AFMA in 2005 and the associated 'Securing Our Fishing Future' package along with programs driven by the Department of Agriculture, Fisheries and Forestry (RUSS – Reducing Uncertainty in Stock Status) and AFMA itself. A good example of this is AFMA's Ecological Risk Assessment (ERA) – Risk Management (ERM) approach which it uses as a centre-piece of its fisheries management and science. ERA assesses the impacts a fishery has on all five ecosystem components – target species; by-product and bycatch species; protected species; habitats; and communities. An ERM framework helps to ensure a consistent process for responding to potential risks identified through the ERA.

20. Other arguments for the application of the EPBC Act to fisheries have been around transparency of process and decision making, involvement of conservation stakeholders, preventing marine species from going extinct and providing a 'level playing field' for all native species being exported from Australia. In AFMA's case in the 1990s and early 2000s there was a perception from some stakeholders that the Authority's Board was industry dominated and therefore biased in its decision making.

21. In 2008, following the Uhrig Review, AFMA moved from being a *Commonwealth Authorities and Companies Act 1997* agency to a *Financial Management and Accountability Act 1997* agency. In doing so the AFMA Board became a Commission and its membership changed to reflect these new arrangements including that industry office bearers cannot serve as Commissioners. An alternative to the fisheries related processes in the EPBC Act could have been to appoint a member with a conservation background. This would have been a more efficient means of addressing any government, stakeholder or public concerns about bias, inclusion of conservation perspectives or public accountability. Additionally enhancements to the fisheries legislation could be made with respect to dealing with Threatened, Endangered and Protected species (TEPs).

22. AFMA is aware that the Hawke Review of the EPBC Act has attempted to address some of these matters. However, the duplication of process and poor specification of the EPBC Act in relation to fisheries remains. A good example is the categorisation of TEPs under the Act and the criteria applied in determining whether a nominated species should or should not be listed. These are inappropriately used on fish stocks whose biology is different from terrestrial mammals and birds for which the criteria were originally developed. An example of this is Harrisson's Dogfish which is listed as 'critically endangered' by the international Union for the Conservation of Nature (IUCN), that is, "face an extremely high risk of extinction in the immediate future" and are categorised with the likes of the NZ Kakapo, Asiatic Lion and Siberian Tiger.

23. The Australian Government and industry have spent in excess of $2 million in science and management over the past two years on a recovery strategy for Harrisson's Dogfish despite more than 10% of its habitat already being protected from commercial fishing and this is certain to increase with the declaration of Commonwealth Marine Reserves. While AFMA agrees further protective actions may be necessary for recovery of this species, it would not have chosen to invest in research so heavily and would instead have addressed higher priority issues, such as dolphin interactions in the shark gillnet fishery. AFMA holds this view because its own ERA shows that marine mammals are at higher risk than sharks with the former having gone extinct due to human impacts where-as this is not the case for marine fish.

24. Fisheries legislation accepts that sustainable levels of mortality for marine wildlife will occur where-as the EPBC Act seeks to minimise harm and mortalities forcing a continual cost to be incurred even when very few additional individual mortalities may be prevented. An objective that provided for an acceptable level of mortality of a TEP species would enable AFMA to more efficiently direct its research and cost-effectively manage its fisheries.

CONCLUSION

25. The jurisdictional and legislative framework in which fisheries operate is complex and expensive given the value of the industry that utilises Australia's fishery resources. This is particularly so for fisheries science which is co-funded between government and industry, and is AFMA's largest single domestic fisheries management expense. Responsibility for fisheries

based on fish stocks would lead to more focussed science in each jurisdiction, reduced stakeholder conflict and more efficient management.

26. There are eight fisheries jurisdictions and two legislative drivers in each, fisheries legislation and Commonwealth environmental legislation. This results in complex and expensive science and management of Australia's fisheries resources.

27. Two tangible ways to significantly improve the cost-effectiveness and efficiency of fisheries science and management in Australia are:

    a) Strengthening nationally cohesive science and management through improvements to OCS arrangements, particularly with respect to stock based management; and

    b) Harmonising fisheries and environmental legislation.