

AFMA Background Paper

Productivity Commission Inquiry
Marine Fisheries and Aquaculture



Australian Government

Australian Fisheries Management Authority

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Scope and major elements of Commonwealth fisheries

Introduction

The Australian Fisheries Management Authority (AFMA) is the Australian Government agency responsible for the efficient management and sustainable use of Commonwealth fish resources on behalf of the Australian community.

AFMA is established as an independent regulator under the *Fisheries Administration Act 1991* (FAA) to manage Australia's Commonwealth fisheries using provisions of the *Fisheries Management Act 1991* (FMA) (collectively fisheries legislation). The fisheries legislation sets out AFMA's objectives, powers and functions, the specific responsibilities of the AFMA Commission and the Chief Executive Officer and the role of the Minister in fisheries management.

The FAA authorises the Minister, under certain circumstances, to issue directions to AFMA. The *2005 Ministerial Direction* continues to guide AFMA in its management of Commonwealth fisheries, and may be found at

http://www.agriculture.gov.au/fisheries/domestic/harvest_strategy_policy/2005_ministerial_direction_to_afma.

As a Commonwealth agency, AFMA operates in accordance with a range of Commonwealth legislation and policies. In particular, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides for the strategic assessment of Commonwealth fisheries, approvals to enable fisheries to operate and regulates interactions with protected species.

AFMA generally regulates commercial fishing in Commonwealth waters from three nautical miles from Australia's coastline to the edge of the Australian Fishing Zone. It also regulates fishing by Australian boats on the high seas. Various agreements with States and the Northern Territory, under the Offshore Constitutional Settlement, seek to rationalise fishery management between the Commonwealth and the six States and the Northern Territory.

AFMA supports the operation of the Torres Strait Protected Zone Joint Authority (PZJA) and four other joint authorities. It also supports Australia's involvement in seven regional fisheries management organisations.

Commonwealth fisheries-key information

There are 16 major Commonwealth fisheries. These vary in size, fishing methods employed, species targeted and in the extent and nature of their impact on the marine environment. There are over 90 commercial species regularly caught, while AFMA holds records of fishing interactions with over 2000 species.

The Government has a long standing preference for managing Commonwealth fisheries using statutory fishing rights (SFRs) in the form of Individual Transferable Quotas (ITQs). ITQs allow market forces to create incentives for the holder of these rights to become more efficient over time and also encourage stewardship of marine resources. SFRs have been issued in many Commonwealth fisheries, with effort managed by the setting of total allowable catches or total allowable effort controls in accordance with fishery harvest

strategies. Some fisheries operate on the basis of fishing permits issued under the FMA, with effort regulated through permit conditions. New entrants must buy existing rights to enter a fishery.

These rights provide certainty as to the proportional share of the fishing access and engender a long term interest in the health of the natural capital that underpins them. The total value of fishing rights in Commonwealth fisheries is estimated to be in the order of \$1-\$2 billion. In some fisheries, quota holdings are highly concentrated. In other fisheries where holdings are less concentrated, there is evidence of consolidation of holdings for some species including by related entities. The number of quota transactions varies between years.

There are approximately 652 rights holders across Commonwealth fisheries, and about 300 boats.

One measure of industry investment in Commonwealth fisheries, the construction and registration of new boats, shows that the average age of vessels in 2013-14 was 22.8 years. While there is significant local ownership of Commonwealth fishing rights, there is also a level of foreign investment in various Commonwealth fisheries.

The 2013-14 GVP of Commonwealth fisheries was approximately \$338 million, remaining constant since 2005-06, adjusted for inflation. Effort, as measured by number of fishing days, has decreased in the period from 2005-06 to 2013-14. It should be noted that structural adjustment occurred during this period.

Recent FRDC funded research (FRDC 2015-530-20) indicates that there is under-utilised potential in Commonwealth fisheries. AFMA's analysis of more recent catch information also supports that there is underutilised catch, although this differs between fisheries and between fishing years and can be the result of different factors, such as markets, at play in the various fisheries. Further research is planned to identify the reasons for the discrepancy between total allowable catches and actual catch.

Spatial closures exist in a number of Commonwealth fisheries and these vary markedly in size. For example, there are approximately 2.9 million sq kms of closures in the south east trawl fisheries; which vary in size, depth, duration and how they impact various fishing methods. The Bass Strait Central Zone Scallop Fishery and the Heard and Macdonald Islands Fishery and Macquarie Island Fishery also use spatial management for various purposes. Fisheries spatial management is additional to any declared marine reserves and other protected areas.

AFMA's performance as a regulator, as well as Commonwealth fisheries economic and ecological performance, is reported and assessed through public sector reporting, reporting under the EPBC Act and by stock status reports such as ABARES *Fishery Status Reports* and the national *Status of Australian Fish Stocks Report*.

Key elements of Commonwealth fisheries management

Commonwealth fisheries management is characterised by the following key features.

- statutory fishery management objectives, which require AFMA, on behalf of the Australian community, to manage fisheries for their long term sustainability and profitability and, in pursuing these objectives, to apply the precautionary principle;
- the development of an ecosystem based fisheries management approach to manage the risk posed by commercial fishing to the ecological sustainability of commercial and other species and habitat and communities;
- effective and streamlined regulatory systems;
- decisions which reflect peer reviewed science and other expert evidence;
- high levels of consultation through long-standing management and advisory committees, supplemented by advice from a range of stakeholders obtained through working groups and public consultation;
- statutory fishing rights and quota which encourage stewardship, as well as autonomous adjustment through market forces;
- risk-based compliance;
- cost recovery of direct fishery management costs, in accordance with government policy, focussing on efficient and effective fisheries management;
- increased use of technology to achieve fishery management objectives in a cost effective manner;
- ongoing monitoring through logbooks, observers, electronic monitoring and vessel monitoring services;
- the use of co management and other stewardship arrangements to facilitate cost-effective industry based management to meet fishery management objectives;
- auditing of agency and fishery performance through corporate reporting, fishery status reports and annual fishery sustainability reports.

Further details are provided below and in Attachment A.

Commercial fishing management and regulation

Main trends in management and regulation

While Commonwealth fisheries management is well developed, AFMA continues to look for opportunities to improve management to both enhance productivity and ensure the long term sustainability of Commonwealth fisheries. AFMA is pursuing a number of strategies to achieve these goals. These include: providing a quota administration system which strengthens the value of fishing rights and enables flexibility in the market place; regulatory reform; pursuing outcomes based management to set sustainable harvesting rates and minimise fishing interactions with the marine environment; pursuing strategies which provide for individual responsibility for these interactions and for the discarding of quota species and streamlining management arrangements to provide Commonwealth fisheries with flexibility to adapt to changing environmental impacts including climate change. In accordance with its objectives and the Government's cost recovery policies AFMA seeks innovative methods, such as increased use of technology, to achieve fishery management objectives in as cost effective manner as possible. In appropriate circumstances, co-management arrangements can both enable cost effective management and enhanced industry ownership and responsibility for meeting environmental and fisheries management requirements.

Strengthening quota administration

The Australian Government has a preference for managing Commonwealth fisheries using quota in the form of statutory fishing rights (SFRs) that are individual and transferable. Quota allows market forces to create incentives for fishers to become more efficient and also encourage environmental stewardship.

AFMA's Quota Administration Policy sets out five actions to improve consistency of management, promote efficiency of the quota market and reinforce the value of AFMA's quota managed fisheries <http://www.afma.gov.au/about/fisheries-management-policies/quota-administration-policy/>. Two of these actions have been implemented, and a third is currently the subject of a public discussion paper on reforms to over catch and under catch provisions <http://www.afma.gov.au/feedback-sought-undercatch-overcatch-quota-review/>.

A proposal to introduce individual responsibility for discards is discussed below. AFMA is also undertaking a project to evaluate the costs and benefits of amending its quota administration systems so that all catches of species under quota in adjacent and overlapping fisheries must be covered by quota. This is aimed at strengthening the value of statutory fishing rights.

Outcomes focussed management

Harvest Strategy Policy and Commonwealth Policy on Fisheries Bycatch

The Commonwealth Harvest Strategy Policy (HSP) and Guidelines (2007) provides an essential management framework for Commonwealth fisheries. Each Commonwealth fishery has a harvest strategy, and these strategies guide the setting of total allowable catches and other catch limits so that fishing is sustainable in the long term. While other jurisdictions also use harvest strategies, or similar, to manage commercial fishing, the Commonwealth has an explicit target of maximum economic yield. Pursuing maximum economic yield provides both greater returns to the Australian community and higher levels of environmental protection than the more usual maximum sustainable yield as it requires higher fish stock levels to be maintained. The setting of such targets can be complex, and AFMA is exploring cost effective ways of developing MEY targets for smaller fisheries and setting targets in multi-species fisheries. AFMA is currently finalising plans to collect quota price information on transfers, including leases, of statutory fishing rights in order to provide key data for the setting of economic targets.

The Commonwealth Policy on Fisheries Bycatch provides general objectives to guide management of the impact of fishing interactions with the marine environment. Unlike the HSP, the Bycatch Policy does not set operational outcomes, and this has contributed to some uncertainty in formulating specific bycatch management strategies that meet both fishery management and environmental requirements.

Both policies have been reviewed, with recommendations that will feed into new or amended policies and guidelines that will enable Commonwealth fisheries managers to implement the policies' principles in a consistent manner and lead to outcomes focussed management. Agreed operational outcomes, which could enable Commonwealth fisheries to identify and meet standards and expectations under the fisheries legislation and the

EPBC Act, will provide greater certainty in this area and enhance environmental and fisheries outcomes.

More information can be found at

http://www.agriculture.gov.au/fisheries/domestic/harvest_strategy_policy/review ;
<http://www.agriculture.gov.au/fisheries/environment/bycatch/review>.

Ecological Risk Management

To assist in meeting its economic and ecological objectives, AFMA has adopted an Ecosystem Based Fisheries Management (EBFM) approach, and as part of this, aims to manage the risk posed by commercial fishing to the ecological sustainability of commercial species, bycatch species, habitats and ecological communities.

AFMA pursues ecological sustainability for all of these ecosystem components through the implementation of:

- a. an overarching Ecological Risk Management (ERM) Framework which provides for ongoing monitoring and management of risks to ecological sustainability;
- b. a scientific risk assessment process (within the ERM framework) referred to as the Ecological Risk Assessment for the Effects of Fishing (ERAEF) to identify and quantify these risks to ecological sustainability.

Through this process, AFMA has been able to identify approximately 72 species out of 2000 different recorded species which are considered to be at high risk of being adversely affected by continued fishing. This is due to individual species' biological attributes or their susceptibility to fishing or other factors that would suggest that fishing poses a risk. In light of insufficient corroborating data, a precautionary approach is taken towards their management with a range of ecological risk management strategies in place to guide ongoing management.

AFMA is revising its ecological risk assessments and management practices to update them and to provide consistent guidance to fisheries managers. AFMA's revised ERA/ERM practices have also been designed to comply with ISO14001, an international "best practice" standard for Environmental Management Systems.

Regulatory reform

Statutory Fishery Management Plans (FMPs), when first developed, contained very specific individual fishery management objectives and very detailed procedures. Over the past 20 years, FMPs have evolved into documents which are more general and provide a "tool box" approach to facilitate the delivery of management through more detailed regulatory mechanisms such as directions, SFR conditions and fishery regulations. FMPs still contain the specific details that establish and maintain SFR allocations in each fishery.

The removal of detailed management controls in FMPs arose because of the need for AFMA to respond more quickly and efficiently in the delivery of day-to-day fisheries management than the legislated process for amending FMPs allowed. Consistency and standardization between fisheries has also been achieved through placing the ensuing common fishery rules in regulations or SFR conditions.

To understand the management goals and regulations for a fishery, it is currently necessary to refer to a number of documents in addition to the FMP. In more complex fisheries, AFMA compiles fisheries management guides which combine the relevant documents and legislative instruments to assist industry and other stakeholders to better understand the full set of requirements in a fishery. AFMA is exploring other means of consolidating fishery management rules into an easy to access format. For example, AFMA intends, under revised ecological risk management processes, to provide for a single management and reporting document.

AFMA regularly reviews its management arrangements to identify opportunities for streamlining them. It has identified a number of reforms which will reduce regulatory burden and enhance productivity. While many of these reforms can be implemented by AFMA after consultation with industry members or other stakeholders, some require discussions with States. Of the 40 identified reforms, 17 have been implemented or are in the process of being implemented. A full list may be found at <http://www.afma.gov.au/about/reducing-red-tape/>.

Boat level management

Protected species

While there are benefits to applying common management rules across a fishery or fisheries, there are occasions when boat level management may be more effective. New technologies enable the development and implementation of management strategies which provide incentives, on a boat-by-boat basis, to minimise interactions with protected species and thereby reduce overall mortality. This is illustrated by AFMA's current Dolphin Management Strategy in the Gillnet Hook and Trap fishery, where sanctions targeted at boats with high rates of dolphin interactions have encouraged operators to modifying their fishing practices while allowing boats without interactions to keep fishing.

Reducing discards of commercial species

AFMA monitors catches for the purpose of deducting quota when fish are landed at port, when accurate weights of fish are recorded in AFMA catch disposal records. However the weight of fish discarded at sea is generally only estimated and is not recorded against quota. Typically estimated discards are then incorporated into stock assessments by subtracting the previous year's estimates before calculating potential total allowable catch (TAC) levels. This can socialise the impact of discarding as all quota holders receive a reduction (to account for discarded fish) in the TAC, regardless of their own level of discarding.

AFMA is considering operating trials in some fisheries to evaluate systems for accounting for discards of quota species from the individual operator's quota holding. This is designed to provide direct incentives to change fishing practices to reduce discarding of quota species.

Streamlining regulation

Many fisheries boundaries and other management arrangements reflect historically defined combinations of target species, fishing methods and fishing areas, which overlap within and between fisheries. AFMA has taken steps to achieve consistency in

management to increase its overall effectiveness and fishery performance. However significant opportunities remain to improve cost-efficient and effective management and provide flexibility for Commonwealth fisheries in order to reflect changing business environments and to deal with environmental impacts including climate change.

Moving further toward a system which places stock or species based catch controls at the centre of management for key commercial species, and allows fishers to flexibly chose any approved fishing method, would significantly improve cost effective management and therefore improve net economic returns in the future. Under this approach, environmental impacts could be more effectively managed by placing tailored conditions on fishing methods, rather than having to manage those impacts across different fisheries by placing conditions on multiple fishing methods and fishing concessions. Such a system has been successfully used in New Zealand for many years.

The discrete rights based systems defined by the current FMPs create impediments to the changes required to implement a harmonised rights-based system for key commercial species. Instead of holding different access rights for the same species, when caught by different methods and/or in adjoining fisheries, all commercial users of the resource could hold the same form of access rights. Any changes to the total level of catch would affect all fishing access rights holders equally. There may also be benefits to extending this approach across current jurisdictional boundaries for some key species.

The system described above would also better recognise changing operating environment for the fishing industry and AFMA as a regulator. Changes in practices have seen more non-fishing quota owners that lease to fishers than owner/operators, as was the case when SFRs were originally granted. Adopting New Zealand's 'two-part' system for administration of ITQs, or a similar approach, may provide for greater business certainty regarding rights and responsibilities to both the fishers and quota owners.

The costs and benefits of such an approach, including any impact on existing rights, would have to be carefully considered and discussed with industry and others.

Cost effective management

AFMA recovers the cost of direct fisheries management by imposing annual levies under the *Fishing Levy Act 1991*, in accordance with the Government's cost recovery policies and AFMA's 2010 Cost Recovery Impact Statement (CRIS). AFMA also recovers costs on a fee for service arrangement for some services that it provides. The Government's revised cost recovery framework indicates that regulatory agencies should recover the costs of activities from those that create the need for those activities.

Approximately one third of AFMA's budget is cost recovered, with major items being fisheries management, observers and research. Despite inflation, AFMA's cost recovered budgets for fisheries management have remained relatively consistent since 2005. Since 2005 AFMA has outperformed the cumulative CPI by more than \$27 million, that is, industry has paid \$27 million less than it would have done if CPI increases have been applied each year.

Costs have been contained through creating efficiencies across AFMA, the use of technology based solutions and by identifying and implementing initiatives to reduce

regulatory burden. Further information on AFMA's budget and cost recovery policies can be found at <http://www.afma.gov.au/about/corporate-publications/>.

E business

During the last 10 years AFMA has developed and implemented a number of digital business solutions to reduce costs to industry and improve the quality of data that is used to manage fisheries. Examples include the electronic licensing tool Go Fish, electronic logbooks, vessel monitoring systems and electronic monitoring. Each of these programmes has required significant initial Government investment, part of which has been recovered from industry. Consideration is now being given to the future direction of e-business solutions.

Market testing of services

AFMA periodically tests the market to determine whether services it provides can be delivered by the private sector as effectively and at a lower cost. Logbook services are provided by a third party, as are services related to electronic monitoring. AFMA is currently engaged in market testing its observer services. AFMA contracts out its research through a competitive annual call for research. Activity based costing, to meet aspects of the Government's revised cost recovery framework, may identify other services that could be market tested.

Co-management

AFMA was formed as a consultative agency and has worked closely with stakeholders in its decision-making. In recent years, AFMA has extended the consultative model to embrace collaboration and now works with the fishing industry through formal co-management arrangements and, including with other key stakeholders, less formal collaborative approaches. The FAA and FMA have been amended to facilitate more formal co-management arrangements, including in some cases the delegation of functions and powers.

AFMA has been exploring co-management with the fishing industry since 2008 and undertook a three-year project, in partnership with the Fisheries Research and Development Corporation (FRDC), trialling co-management with three different fishing industry groups –the Northern Prawn Fishery Industry Pty Ltd (NPF), the Great Australian Bight Industry Association (GABIA) and the Port of Lakes Entrance involving the Lakes Entrance Fishermen's Cooperative Limited (LEFCOL) and around 20 individual fishers in the port. The final report '*Co-management in Commonwealth Fisheries*' is published and can be found on the FRDC website. AFMA has continued to undertake and expand co-management arrangements with NPF and, to a lesser extent, with GABIA. Co-management arrangements did not continue to any significant extent in Lakes Entrance immediately following the project, but a new arrangement with the South East Trawl Fishing Industry Association (SETFIA) is in development. The work with NPF is the most advanced and comprehensive co-management arrangement presently in place in Commonwealth fisheries.

Through the trial project and subsequently working with various fishing industry bodies, a number of important elements about co-management have become clear. These elements

include a clear willingness on both sides to engage in co-management, identification of mutual benefits from co-management activities, an identifiable group with which to work, a high level of representation by the group of the fishery participants it covers, evidence of a good governance structure within the group and evidence of capacity to undertake fisheries management services.

There are clear benefits emerging from the co-management arrangements with the NPF, in particular. The NPF for the past seven years has had responsibility for managing the collection, storage, dissemination and quality control of NPF catch and effort information. Part of this program also involved moving the industry to electronic reporting. While AFMA receives all raw data, this is sent directly to NPF for their management. NPF has significantly improved the quality of the data held for this fishery and has shown that industry can improve management outcomes where it has appropriate ownership.

Co management arrangements also exist with GABIA, in the Great Australian Bight Trawl Fishery. Again benefits have emerged from these arrangements, for example, the development of a research, monitoring and assessment strategy which has allowed the fishery to reduce its costs while still meeting the objectives of the fishery's harvest strategy.

Working with industry bodies has also identified barriers to participating in and/or maximising benefits of, co-management. In particular, industry bodies could increase cost savings from co-management activities if the industry self-funded those activities and thereby were able to minimise AFMA's involvement in the activity and associated costs. Industry bodies however find it hard to collect funds voluntarily from all fishery participants. Equally, AFMA finds it difficult to reduce overhead costs in program areas where only one industry body undertakes the service on behalf of its members because one fishery may only represent a small part of the overall programme.

While there are benefits and hurdles, AFMA is working with industry to increase co-management activity where potential mutual benefit is identified.

Strong industry associations

Even in the absence of formal co-management arrangements, it is AFMA's experience that fisheries with strong industry associations are more effective and more successful in reducing management costs than fisheries without such associations. For example, industry associations have been able to develop accredited training courses to ensure their members understand and adhere to fishery and other regulatory requirements. Others have entered into arrangements with AFMA to manage the opening and closing of fishing seasons and entry into designated fishing areas. Other industry members have been able to directly commission cost effective research to support stock assessments.

Compliance

Compliance with fisheries management rules is essential to effective fisheries management rules and maintaining the value of fishing rights (i.e. the marine ecosystem is the natural 'capital' that sustains fishing businesses). While compliance levels are thought

to be generally high in Commonwealth fisheries, there remain significant challenges in some fisheries and some regions.

AFMA seeks to provide a cost-effective compliance program that ensures all fishing undertaken in the Australian Fishing Zone, under Commonwealth jurisdiction, is conducted in a manner which maintains the integrity of Commonwealth fisheries management arrangements. AFMA seeks to achieve a level of compliance such that industry and the community at large can be confident that fishers are operating within the rules of each fishery management regime. Fishing concession holders are granted access to a community-owned resource and are expected to comply with fisheries law and regulation. Further community expectations dictate that when non-compliant fishing activity is detected, expedient and forceful sanctions are applied to ensure non-compliant behavior ceases and the deterrent effect influences future behaviour of those within the industry.

The current domestic fisheries penalty regime under the fisheries legislation consists of predominately low-level “on the spot fines” or, at the extreme, involve fines requiring a successful criminal prosecution. Forfeiture of vessels, catch and fishing equipment can also apply, however forfeitures are contingent on both a successful prosecution and then an order by a court to forfeit. Because of these thresholds they have rarely been applied.

The polarised nature of existing penalty provisions creates significant constraints on AFMA’s ability to impose penalties commensurate with the offences and/or deal effectively with repeat offenders. In this situation, the penalties either have low deterrence effect or may lead to unduly heavy consequences, such as a criminal conviction. Further, in the latter case, the result or outcomes achieved can result in relatively low penalties being imposed by the judiciary and can involve a significant lapse in time from the initial detection, which in itself fails to achieve timely changes in non-compliant behaviour.

AFMA considers that incorporating alternative compliance approaches to broaden the suite of measures available to it, such as civil and administrative penalty provisions including suspensions, enforceable undertakings and injunctions, along with the strengthening of existing penalty provisions, would lead to the more efficient and cost effective delivery of timely enforcement.

Since 2015, AFMA has been working with the Department of Agriculture and Water Resources and others to progress legislative proposals that will strengthen the current regimes as well as introduce new more flexible civil remedies. It will also provide adequate powers for dealing with breaches of the fisheries legislation that may occur on land, such as catch quota fraud where landing documents are “doctored” to hide the real catch.

While opportunities for shared services exist in a range of compliance areas, these opportunities primarily relate to technical and administrative services rather than the more traditional “on the ground” field inspection services. AFMA continues to work with other State and Commonwealth jurisdictions on a range of technical shared services, such as the administration of Vessel Monitoring Systems (VMS) and the provision and exchange of data. AFMA also utilises the resources of State jurisdictions, on a fee for service basis, to assist with operational activities where required, in addition to conducting a range of joint operations. However dedicated provision of “on the ground” compliance services (State to

Commonwealth) ceased in 2009 following an Australian National Audit Office (ANAO) audit which demonstrated that those types of service arrangements did not generally provide effective outcomes and/or value for money.

With regard to the illegal foreign fishing programme, Australia has applied a multipronged strategy which includes “on the water” enforcement, “in country” prevention measures and international cooperation. Apprehensions in Australia’s northern waters have plummeted from a peak of 367 in 2005-06 to an average of 13 per year in the past five years. There are no foreign fishing vessels currently engaged in Illegal, Unreported and Unregulated (IUU) fishing in the Southern Ocean compared to around 30 boats twenty years ago. Despite this, the threat of illegal fishing remains with large numbers of vessels operating in waters beyond but close to the outer limits of the Australian Fishing Zone in the north. There is also the threat of foreign vessels engaged in IUU activities in the Pacific and Indian oceans targeting fish stocks which Australia has an interest in. Consequently, it is important to maintain an appropriate level of a surveillance and response capacity along with a sufficient level of resources to engage effectively at the international level to mitigate these risks.

Harmonised management

General

Individual fisheries in Australia are currently defined by a combination of species caught, area fished and method/s used. There are often overlaps between different fisheries on one or more of these components (e.g. the same species may be caught in multiple fisheries and/or many fisheries may operate in the same area using different methods). This occurs both within and between jurisdictions.

Rights held by Commonwealth-managed fishers can be adversely affected by increasing catches in a wide range of species that are also taken in State-managed fisheries. In many cases increased catches of key Commonwealth managed species by State-managed commercial or recreational fishers directly reduce the total allowable catch limits that will be established by AFMA for commercial fishers in Commonwealth managed fisheries. This problem is a two way street. Increasing catches of some key State-managed species by Commonwealth managed fishers (in the absence of direct limits on catch) can undermine the rights held in State-managed fisheries. Harmonising the science and management processes that underpin the various fisheries utilising shared stocks will significantly improve outcomes for industry, the environment and the Australian community.

Offshore Constitutional Settlement

Achieving such consistency and effectiveness was an objective of the arrangements established between jurisdictions under the Offshore Constitutional Settlement (OCS) and associated memoranda of understanding. However, the reality has fallen short of the original objectives in some cases and there have been significant changes in the operating environment for both fishers and regulators since many of these arrangements were originally established. Many of the arrangements are difficult to understand and capable of being easily misunderstood. Others have not always achieved the goals for which they were established. For those industry operators who have authorisations to fish the same

species in both State and Commonwealth jurisdictions, a variety of practical issues arise in meeting different regulations.

To date, the Commonwealth Government has chosen to pursue negotiations on identified OCS arrangements. For AFMA, there are three areas which, if resolved, would improve consistent management of key species, resolve long outstanding issues and rationalise management. These are:

- The rationalisation of the management of trawl fisheries off the coast of New South Wales south of Barrenjoey Head. This would result in the common management of important commercial species such as flathead and, remove duplicative regulation and reduce management costs. There is support from both the affected NSW and Commonwealth fishing industry and agency agreement, however negotiations have yet to be concluded.
- Discussions with South Australia centre on the catch of a number of species that are principally managed by AFMA and targeted by Commonwealth fishers but were either inadvertently allocated to South Australia under OCS arrangements or may be taken by SA fishers as bycatch species.
- Discussions are close to finalisation with Western Australia clarifying boundaries between two Commonwealth fisheries and a State fishery where the OCS arrangement between the Commonwealth and Western Australia does not always closely align to the actual 200 metre depth contour.

The principles under which OCS arrangements were developed are over 20 years old. There may be some value in reviewing these principles to determine whether they meet current circumstances. Any review, however, would have to be conscious of the reliance that both the Commonwealth and State industry place on existing arrangements to manage their businesses as well as any rights created under the current arrangements.

Joint authorities

AFMA participates in four Joint Authority (JA) arrangements for managing a number of fisheries with Queensland (Qld), Northern Territory (NT) and Western Australia (WA) and all of the fisheries in the Torres Strait.

The Protected Zone Joint Authority is formed out of legislation established to implement the fisheries elements of the Torres Strait Treaty between Papua New Guinea and Australia. Each of the other three Joint Authorities was established under the FMA and through OCS arrangements. The three State/NT JAs were established because of identified fishery management needs at the time, particularly to cover wide ranging species that overlapped jurisdictions, including the Commonwealth. Formation of the PZJA recognised the complexity of Treaty obligations, particularly the need to protect the traditional way of life and livelihood of traditional inhabitants.

All of these arrangements have been in place for more than two decades (more than three for the PZJA). It has become evident that multiple jurisdiction management is complex and inefficient. The Australian Government has recognised this and has supported there being a shift from the JAs in WA, NT and Qld to single jurisdiction management so that decision-making is more timely and less complex, particularly as it affects stakeholders. The

agencies involved in these JAs also recognise the benefits of single jurisdiction and are taking steps to towards it. Successful transition will rely, however, on the level of priority afforded it by the State and NT Governments.

The PZJA is by far the most complex JA and decision making is slow and often made more complex by multiple objectives, some of which are not related to the sustainability of fish stocks. The difficulty of administering fisheries through three jurisdictions has been recognised by the PZJA, which in 2006, asked the agencies to review the governance arrangements for Torres Strait fisheries. Mr Richard Stevens OAM undertook the review and developed a high level discussion paper; *Torres Strait Protected Zone Joint Authority Fisheries Administration Arrangements 2009*. The paper presented ten recommendations for the PZJA to consider, some of which have since been implemented. AFMA now provides the secretariat service and is the primary delegate for day to day management of the fisheries, except for domestic compliance, which presently remains with Queensland (this arrangement is also under negotiation for transition to AFMA). AFMA has also taken on coordination of membership on and operation of all PZJA consultative forums. Decision making however remains complex and slow under the multiple jurisdiction model.

Coordinated management

It is possible to aim for coordinated management across jurisdictions even though there are no formal arrangements in place. There are currently three different jurisdictions responsible for the management of scallops in Bass Strait: the Commonwealth, Tasmania and Victoria. Various formal arrangements have been proposed, such as joint authorities, the transfer of jurisdiction under an OCS arrangement and the delegation of powers from one jurisdiction to another. None of these have eventuated, but jurisdictions have cooperated in commissioning common research and attending each jurisdiction's advisory meetings.

Common management standards and guidelines

Over the past 5 years, work has been done to develop nationally applicable guidelines for harvest strategies and the science which underpins fisheries management. Research is underway to develop common fishery management standards, which eventually will be tested in Commonwealth and some State fisheries. Guidelines to compliment the Commonwealth Government's proposed harvest strategy and bycatch policies are to be developed over the next two years. While directly applicable to Commonwealth fisheries, they may also be able to assist in the management of State fisheries.

Shared Services

Shared services between jurisdictions have the capacity to reduce costs to industry and help fisheries management agencies meet their objectives. This is particularly the case where one jurisdiction has expertise not shared by other jurisdictions or has previously developed a service, and duplicating that expertise may be more costly than entering into an arrangement to share it. Shared service arrangements have previously existed between jurisdictions, however, in 2014 Ministers agreed to take forward this concept and asked jurisdictions to develop a more comprehensive program. Current shared services include

- Queensland providing logbook services to the Commonwealth for the aquarium sector in the Coral Sea fishery;
- AFMA providing vessel monitoring system services for data and compliance purposes for Queensland;
- AFMA providing vessel monitoring system services for data and compliance purposes for Victoria;
- AFMA providing vessel monitoring system services for data and compliance purposes for South Australia;
- AFMA providing observer services for a New South Wales fishery;
- AFMA providing vessel monitoring for the Department of Environment with respect to existing marine reserves.

Although considerable integration exists already between jurisdictions in research planning and the delivery of key research projects, there are research gaps which may require cooperative funding and effort to address. Data management is not as well integrated leading to inefficiencies for ongoing fisheries management. An FRDC funded project to develop standards/guidelines for scientific and other expert information used to support fisheries management will help promote consistency in this area.

Recreational fishing

Recreational and charter fisheries are managed day to day by the States and the Northern Territory, although AFMA retains a residual capacity to directly manage recreational fishing impacts in certain circumstances. This arrangement was formalised through the Coolangatta Communique 2002 and the 2004 Memorandum of Understanding from the then Natural Resource Ministers Ministerial Council.

At that time most recreational fishing was confined to State and Territory waters, although game fishing did take place in offshore waters. However, technological advancements in navigation and safety and fish finding equipment have made offshore fisheries resources more accessible to recreational anglers and increased competition between the sectors.

Southern Bluefin Tuna, striped marlin, albacore, yellowfin tuna and gummy shark are species common to both the recreational and Commonwealth commercial fishing sectors. Other species, like mackerels, play a role in supporting certain recreational species. Some species, such as snapper in Victoria, are caught primarily by the recreational sector, with the Commonwealth commercial sector having only an incidental catch of this species.

Data on recreational fishing participation and total catch is limited. The last national recreational fishing survey was released in 2003 (using data from 1999-2000). Since then, States and Territories have undertaken recreational fishing surveys at different times and scales to suit their fishery management purposes. A recent ABARES study, *A framework for regular national recreational fishing surveys, 2015*, discusses the issues that arise from the lack of regular surveys for managing species that cross jurisdictional boundaries. It provides options for developing more regular national surveys and making data from those surveys more accessible.

Lack of data, in the long term, can pose risks to the sustainability of species of interest to both recreational and commercial fishing sectors. In the case of Commonwealth commercial fishing, the Commonwealth Harvest Strategy Policy requires total allowable catches to be set, taking into account all known mortalities, so as to enable the fishery to meet target reference points designed to ensure long term sustainability. Without data on recreational catches there is an increasing likelihood that total allowable catches will be set inappropriately, with the risk that the fishery in the long term will be unsustainable.

It is also important for Australia, as a member of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), to have by 2018 a process to account for all sources of mortality for SBT, including commercial catches, discards of commercial catches and recreational catch. This is part of agreed international measures to rebuild this stock.

Although AFMA does not explicitly manage recreational and charter fishing, it does seek to incorporate recreational and charter catches, when known, into its processes in setting total allowable catch and effort limits. It encourages voluntary arrangements between the Commonwealth commercial sector and the recreational/charter sector, and on occasion has managed commercial fishing so as to minimise its impact on the recreational/charter sector.

AFMA engages with the recreational fishing sector through its twice yearly Recreational Fisheries Forum meetings and by encouraging the recreational fishing sector to participate in Resource Assessment Groups and Management Advisory Committees for fisheries where there is significant interactions between recreational and Commonwealth commercial fishing. Recreational fishing interests also attend the Stakeholder Forum in the Small Pelagic fishery. Experience with recreational fishing sector participation in these groups has been mixed. Some fisheries, such as the Small Pelagic Fishery and the Southern Bluefin Tuna Fishery have longstanding recreational fishing participation in AFMA advisory committees. In other Commonwealth fisheries, the interests of the recreational fishing sector are not as well defined and recreational fishing participation in these committees is relatively recent.

Arguments have been raised for more expressly recognising recreational fishing within the FMA and within FMPs and other management documents, such as harvest strategies. Given the existing Ministerial Council agreement, explicit recognition of recreational fishing in the FMA would require careful consideration and agreement between Governments.

Indigenous fishing

AFMA is responsible for the day to day management of Torres Strait Protected Zone fisheries on behalf of the Protected Zone Joint Authority. Torres Strait fisheries are managed in accordance with the *Torres Strait Fisheries Management Act 1984* (the Act) which gives effect in law to Australia's commitments under the Torres Strait Treaty. The principle purpose of the Treaty is to acknowledge and protect the traditional way of life and livelihood of Traditional Inhabitants including their traditional fishing and free movement.

Consistent with the Act, PZJA management and licencing arrangements are generally designed to minimise barriers to Traditional Inhabitant participation in Torres Strait

Fisheries. Access is not limited, all expansion is restricted to Traditional Inhabitants, licencing fees are minimised, and management costs are not cost-recovered. Government funded reallocations have occurred to increase ownership by Traditional Inhabitants and regulations exists to promote employment of Traditional Inhabitants. The PZJA has acknowledged and supported the aspirations of 100 per cent ownership of Torres Strait fisheries by Torres Strait Islander and Aboriginal Traditional Owners and also acknowledged and recognised the rights of existing non-traditional fishers in the Torres Strait.

The PZJA consults and engages with Traditional Inhabitants through a range of forums. The Chairperson of the Torres Strait Regional Authority (TSRA) is a member of the PZJA. The TSRA is established in the *Aboriginal and Torres Strait Islander Act 2005* and represents the interests of Traditional Inhabitants on the PZJA. The PZJA has a formal advisory framework comprising several committees with Traditional Inhabitant, government and scientific members. The PZJA also undertakes native title notification in accordance with the *Native Title Act 1993*.

Several studies exploring factors limiting fishery participation by the Traditional Inhabitant sector have been undertaken. The key findings of the most recent report (van Putten et al. 2013) were generally in line with those of prior publications, finding that there are three key types of fishers (casual, part-time, and full time) and that factors affecting participation vary between groups. This study identified that the availability of Government economic assistance is likely to affect the participation level of part-time Tropical Rock Lobster fishers. Logistics and infrastructure availability, capacity building (improved business knowledge) and improved social capital (availability and visibility of leaders in the communities) were identified as likely to have equally strong impacts on fishery participation.

While current regulation is an unlikely barrier to broad based participation in Torres Strait fisheries by Traditional Inhabitants, aspects of existing regulation and policies may be less optimal for supporting full time Traditional Inhabitant fishing businesses. Consistent with the Act the PZJA assesses management decisions against all of its objectives including managing commercial fisheries for optimum utilisation. AFMA and the PZJA continue to work with stakeholders to develop management options to meet its legislative objectives and are consistent with the aspirations of Traditional Inhabitants.

Relationship between the EPBC Act and fisheries legislation

AFMA's current management arrangements for Commonwealth fisheries meet, and often exceed, environmental management conditions imposed under the EPBC Act.

However, the overlap between fisheries management (Commonwealth, as well as State and Territory) legislation and the EPBC Act creates considerable inefficiency and uncertainty for governments and fisheries stakeholders. The 2009 *Independent Review of the Environment Protection and Biodiversity Conservation Act 1999* (the Hawke Review) and the 2012 *Review of Commonwealth Fisheries: Legislation, Policy and Management* (the Borthwick Review) have both acknowledged the important role of the EPBC Act in promoting strong environmental management of Australia's fisheries. Each also

recommended changes to environmental and fisheries legislation to reduce the current duplication of approvals and processes while ensuring that appropriate environmental management standards remain in place.

For example, all Commonwealth-managed fisheries are covered by separate assessments and approvals under Part 10, Part 13 and Part 13A of the EPBC Act. All of these consider the effect of fisheries on the marine environment, protected species and communities and the ability of fisheries management to minimise the risk of unacceptable impacts. Further, despite these approvals, individual species within those fisheries can be separately assessed if nominated as a threatened species, or a principal fishing method can be assessed if nominated as a Key Threatening Process. There are significant impacts for a fishery if a species is listed as a threatened species or a principal fishing method is listed as a key threatening process.

Another example illustrates the impact of international listings on domestic fisheries management. Recently Australia lodged a reservation to the listing under the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) of a number of commercially and recreationally harvested marine species (three species of thresher sharks and the two species of hammerhead sharks). This has highlighted a difficulty with the EPBC Act which has previously been raised following the listing of three shark species (long-finned and short-finned makos and porbeagles) in January 2010. Under s209(3) of the EPBC Act the list of migratory species must include all migratory species that are (i) native species and (ii) from time to time included in the appendices to the Bonn Convention. There are two possibilities for listing species under the Bonn Convention, either (a) Appendix I, which means strict protection; or (b) Appendix II, which means international co-operation would benefit the species.

When this provision of the EPBC Act was introduced it was intended to automatically pick up migratory species as they were listed under the Bonn Convention and provide the appropriate level of protection for them depending on the Appendix they were listed. However as the result of the wording of the EPBC Act, species listed under Appendix II are given the same level of protection under the EPBC Act as those listed under Appendix I and cannot be traded or sold, notwithstanding that the fishery has been accredited under Part 13. There are a number of ways of dealing with this anomaly, including legislative amendment to require only native species included in Appendix I of the Bonn Convention to be included on the list of migratory species under the EPBC Act.

The current requirement to list both Appendix I and II species as migratory species under the EPBC Act was an issue identified as requiring attention by the 2009 Hawke Review. The then Australian Government agreed to amend the process for listing of migratory species. However, that process has not progressed further at this stage.

Following the 2009 Hawke Review, some changes to processes under the EPBC Act have been made, for example aspects of the listing process were clarified. However, a long outstanding matter, the development of assessment criteria to guide the nomination of marine fish as threatened endangered and protected species, has not occurred in the 16 years since the EPBC Act came into force. These criteria should be developed and

implemented to ensure the appropriate, effective and efficient application of the listing process for these species.

Various options exist to better integrate the EPBC Act with fisheries legislation. The Hawke Review recommended a single strategic assessment framework for Commonwealth and State and Territory managed fisheries to deliver a single assessment and approval process. The Borthwick Review, with respect to Commonwealth fisheries, suggested a legislative structure that would enable AFMA's fishery management processes, as a whole, to be accredited and subject to performance review.

In 2014, the Government released its Industry Innovation and Competitiveness Agenda which provides that if a system, service or product has been approved under a trusted international standard or risk assessment, domestic regulators should not impose any additional requirements for approval unless it can be demonstrated that there is a good reason to do so. Several Commonwealth and State fisheries have been accredited by the Marine Stewardship Council under its internationally accepted third party accreditation scheme. It may be possible therefore for MSC certified fisheries to be recognised under the EPBC Act, and not have to go through additional approval processes.

The Department of the Environment is in the process of moving low risk fisheries to a ten-year approval cycle based on the use of a Rapid Assessment Decision Tool for fisheries currently on the List of Exempt Native Specimens (LENS) to provide for ten-year export approvals. The Department of the Environment is currently preparing assessments of a number of AFMA-managed fisheries using the Rapid Assessment Decision Tool. It is unclear, however, how that approval will relate to other provisions of the EPBC Act or to ongoing fisheries management.

The Department of the Environment's proposal may address some of the issues arising from the relationship between fisheries management and environmental legislation, however a more comprehensive approach may still be worthy of consideration. AFMA's preferred approach is the accreditation of AFMA's management system rather than assessment of individual fisheries management arrangements. AFMA considers the strategic assessment of the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) approval process to be a useful model for streamlining assessments of AFMA's management systems. To that end AFMA is developing a revised Ecological Risk Management (ERM) framework which is being designed to comply with ISO14001, an international "best practice" standard for Environmental Management Systems (EMS).

Moving to a one step, five-yearly accreditation of AFMA and state/territory management systems under the EPBC Act would remove the current inefficiency, inconsistency and uncertainty for Australia's fisheries stakeholders and reduce cost and red tape for both government and stakeholders. The development and implementation of national marine environmental standards and national fisheries assessment criteria will ensure adequate environmental protection is being provided under the EPBC Act and fisheries legislation. These policies should specify the practical environmental outcomes sought under the EPBC Act and set common timeframes for achievement of actions/outcomes and reporting

in all jurisdictions. This approach may allow the Department of the Environment to shift its focus away from fishery specific management to more of an auditing role.